APOPKA CITY COUNCIL AGENDA

February 11, 2025 6:15 PM
Apopka City Hall Council Chambers

APOPKA CITY COUNCIL MEETING WILL BE LIVE-STREAMED ON YOUTUBE. TO WATCH, PLEASE VISIT:
https://www.youtube.com/CityofApopkaFL

CALL TO ORDER

OPENING AND INVOCATION

PRESENTATION

1. Second Presentation on the proposed re-write of the Comprehensive Plan
   Presented by: Bobby Howell, Planning Manager

PUBLIC INPUT PERIOD

ADJOURNMENT

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Planning Commission with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Any opening invocation that is offered before the official start of the Planning Commission meeting shall be the voluntary offering of a private person, to and for the benefit of the Planning Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Planning Commission or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the Planning Commission meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

City of Apopka
CITY COUNCIL STAFF REPORT

Section: PRESENTATION
Item #: 1.
Meeting Date: February 11, 2025
Department: Community Development

SUBJECT:
Second Presentation on the proposed re-write of the Comprehensive Plan

REQUEST:
Review the proposed re-write of the City of Apopka Comprehensive Plan.

SUMMARY:
A joint workshop between the City Council and Planning Commission regarding the rewrite of the Comprehensive Plan was held on September 10, 2024 for the first time. On January 15, 2025, Commissioner Velazquez requested a second workshop to allow for more public input. A link to the video of the first workshop can be found at the following location: 1st workshop video

Following the first workshop, Kimley-Horn reviewed the first draft of the Rewrite of the Comprehensive Plan to offer an outside experts perspective, and to determine how the draft would apply to daily practice. A copy of their findings is attached.

The updated policies have been reviewed by relevant City departments such as Police, Fire, Public Services, and Recreation.

Staff put together an initial public input survey that was available online through November 2024. A copy of those responses is provided as an attachment. In addition, a second survey has been posted through various media sources such as the Apopka Proud newsletter, the City's website, and the City's various social media feeds. This survey runs through February 28, 2025.

The Comprehensive Plan is like a big map for our city's future growth and helps us make better decisions about how we grow. It’s important to note that while the Comprehensive Plan outlines the long-term visions and goals, it is different from a Land Development Code, that provides specific rules for development like building and lot sizes. It is a policy document related to future visions and goals for future growth of the City. The Comprehensive Plan is the main policy document that provides the policy foundation for local planning and land use decisions. All jurisdictions in the State of Florida are required to have a Comprehensive Plan per Florida Statute.

City staff and East Central Florida Regional Planning Council (ECFRPC) staff will present the updated draft of the re-write of the Comprehensive Plan and will seek input and direction from the Planning Commission and City Council related to this document. Following this presentation, staff will seek direction from the Planning Commission and City Council as to whether they want to bring the draft forward to public hearings for consideration and whether they have items they wish to add and/or delete from the draft.

FUNDING SOURCE:
N/A

RECOMMENDED MOTION:

Planning Commission and City Council to provide direction to staff as to whether they want to bring the draft forward to public hearings for consideration.

ATTACHMENTS:

1. 1-1 Future Land Use Element proposed draft
2. 2-1 Housing Element proposed draft
3. 4-1 Infrastructure Element GOP proposed draft
4. 5-1 Conservation Element proposed draft
5. 6-1 Recreation and Open Space Element proposed draft
6. 7-1 Capital Improvements Element proposed draft
7. 8-1 Intergovernmental Coordination Element proposed draft
8. 9-1 Resilience and Sustainability Element proposed draft
9. Existing Apopka Comprehensive Plan
10. News Article_ Apopka City Council Discusses Comprehensive Plan
11. Kimley Horn Peer Review Memo Draft
12. First Survey Results 1-15-2025

FUTURE LAND USE ELEMENT

Land uses for a vibrant community

FUTURE LAND USE ELEMENT

GOAL 1

Ensure that land use patterns preserve urban/recreational open space, foster a vibrant community, and protect the health, safety, and welfare of Apopka residents. Urban/recreational open space refers to publicly accessible areas in cities, such as parks and sports fields, designed to provide opportunities for recreation, social interaction, and environmental benefits.

OBJECTIVE 1.1

Infill development, redevelopment, and new development proposals shall work in harmony with and be appropriate to the topography, soil conditions, and the availability of facilities and services.

Policy 1.1.1

New development or redevelopment must meet the adopted levels of service for public facilities as established by the Apopka Comprehensive Plan.

Policy 1.1.2

The City shall encourage the timely development of necessary public facilities, such as recreation areas, medical centers, and urban open spaces, in coordination with developers, to support future growth and enhance quality of life of residents.

Policy 1.1.3

Private or public electric utilities needed to support the future land use categories may be permitted by right or as a special exception in all land use designations.

Policy 1.1.4

Development shall be encouraged to be located in areas with excess capacities for public facilities.

Policy 1.1.5

Public facilities and utilities shall be strategically located to maximize efficiency by serving the highest number of users per mile, improving accessibility, promoting equity, reducing costs, and enhancing quality of life.

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Policy 1.1.6
The City shall require property which is within the Utility Service Area, adjacent to the city limits and receiving city sewer, and/or water, to annex, and properties which will receive said services but which are not adjacent to the city limits, but within the Utility Service Area, shall file a deed of encumbrance to annex when the property becomes contiguous to the city limits.

Policy 1.1.7
The City shall require all development which receives city water or sewer services to annex immediately following the time at which the property becomes contiguous to the Apopka City limits.

Policy 1.1.8
The City shall continue to implement flood water management requirements through the Land Development Code to compensate for floodwater displaced by development and ensure appropriate development and engineering strategies within the 100-year flood plain.

Policy 1.1.9
Commercial and Multi-Family developments shall coordinate to have cross access agreements to promote a more walkable and connected community.

Policy 1.1.10
An assessment shall be made at the time of any and all Comprehensive Plan land use amendments of the soil conditions and topography of the subject property and the ability of the soils and topography to support the proposed density/intensity and land uses.

Policy 1.1.11
The City shall coordinate existing and future land use water supply planning with all applicable governmental agencies, including municipal, county and regional plans, St. Johns River Water Management District, and the Florida Department of Environmental Protection.

OBJECTIVE 1.2
The City shall promote infill redevelopment in locations as designated by the Apopka City Council and defined by Florida Statutes.

Policy 1.2.1
The City shall work with Orange County towards extending the CRA for an additional time period to be determined.

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Policy 1.2.2
The City will continuously seek federal and state brownfields grants to assess and revitalize properties, in accordance with the Intergovernmental Coordination Element.

Policy 1.2.3
The City's Redevelopment Plan shall be utilized and updated every five to eight years during the budgetary process.

Policy 1.2.4
The City shall encourage building preservation and development of vacant or underutilized properties in the Mixed-Use Downtown District based on the traditional character of the area and enforcement of the City of Apopka Development Design Guidelines.

Policy 1.2.5
The City shall utilize regional drainage facilities where available which can provide off-site retention for development and redevelopment in the Mixed-Use Downtown District and CRA area and promote the use of low impact development and green infrastructure onsite and in rights of way to assist in capture of rainwater and provide of increased character and quality of life.

Policy 1.2.6
The City's Redevelopment Plan for the Community Redevelopment Area shall promote the mixture of uses necessary for a vibrant downtown character and function of the area.

Policy 1.2.7
The City shall promote and support the new development and redevelopment of properties within the Mixed-Use Downtown District to foster economic growth, enhance urban vitality, and create a vibrant, integrated community that serves both residential and commercial needs.

OBJECTIVE 1.3
The City shall implement the Future Land Use Map and discourage the proliferation of urban sprawl by promotion of land uses which are consistent with its character. Also, the City will encourage flexible adjustments to density in response to population growth and areas of concentrated development, ensuring that community needs are addressed and sustainable growth is supported.

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Table 1.3. Future Land Use Classifications

Future Land Use			
Future Land Use Categories	**Maximum Density/Intensity**	**FLUM Acreage**	**Percent of Total Lands**
Agriculture	1 DU / 5 A	852	3.3%
Agriculture Estate	1 DU / 2 A	246	0.9%
Agriculture Homestead	1 DU / 10 A	504	1.9%
Residential		14,640	56.1%
Rural Settlement	1 DUA*	*3,404*	*13.0%*
Estate	1 DUA	*840*	*3.2%*
Very Low Suburban	2 DUA	*1,249*	*4.8%*
Low Suburban	3.5 DUA	*3,404*	*13.0%*
Low	5 DUA	*4,423*	*16.9%*
Medium Low	7.5 DUA	*579*	*2.2%*
Medium	10 DUA	*491*	*1.9%*
High Density	15 DUA	*250*	*1.0%*
Mixed-Use	15 DUA / 2.0 FAR*	3,064	11.7%
Office	0.30 FAR	192	0.7%
Commercial	0.25 FAR	1,038	4.0%
Industrial	0.60 FAR	2,167	8.3%
Institutional/Public Use	0.50 FAR	1,027	3.9%
Sub-Total		**23,729**	**90.9%**
Parks/Recreation	0.20 FAR	1,002	3.8%
Conservation	Not Developable	332	1.3%
Other (ROW & Water)	Not Developable	1,032	4.0%
Total		**26,096**	**100.0%**

* DUA: Dwelling Unit per Acre
** FAR: Floor Area Ratio

Sources: City of Apopka, ECFRPC
Date Retrieved: Jan 2022

Policy 1.3.1

Each Future Land Use Map classification shall have a permitted primary use or uses and special exceptions in accordance with the LDC.

Policy 1.3.1.a Agriculture Estate

The primary designation of this land use category shall be single-family dwelling units not to exceed one unit per two acres (1du/2ac) designed to facilitate a definite agriculture component, supporting infrastructure and public facilities sites of less than two acres.

Policy 1.3.1.b Residential Estate

The primary use shall be single family dwelling units up to 1 dwelling unit per acre, supporting infrastructure and/or public facilities of less than two acres.

Policy 1.3.1.c Very Low Density Suburban Residential

The primary use shall be residential dwelling units up to 2 dwelling units per acre, supporting infrastructure of less than two acres, neighborhood parks.

Policy 1.3.1.d Low Density Suburban Residential

The primary use shall be residential dwelling units up to 3.5 dwelling units per acre, supporting infrastructure of less than two acres, neighborhood parks.

Policy 1.3.1.e Low Density Residential

The primary use shall be residential dwelling units up to 5 dwelling units per acre, supporting infrastructure of less than two acres, neighborhood parks.

Policy 1.3.1.f Low-Medium Density Residential

The primary use shall be residential dwelling units up to 7.5 dwelling units per acre, supporting infrastructure of less than five acres, neighborhoods.

Policy 1.3.1.g Medium Density Residential

The primary use shall be residential dwelling units up to 10 dwelling units per acre, supporting infrastructure of less than five acres.

Policy 1.3.1.h High Density Residential -15 (HDR 15)

The primary use shall be residential dwelling units up to 15 dwelling unit per acre; supporting infrastructure of less than five acres.

Policy 1.3.1.i Commercial

Primary uses shall be for business, commerce, and convenience shopping which may be neighborhood or community oriented. The maximum floor area ratio shall be 0.5 gross floor area. Institutional land uses of less than five acres; and public facilities or utilities of less than five acres.

Nursing homes, assisted living facilities, and independent living facilities to be consistent with a maximum intensity of up to 1.0 FAR-Floor Area Ratio, based on compatibility with the surrounding area, and shall be the primary use and a stand-alone development.

Live/work uses within the Commercial Future Land Use designation shall be allowed only in areas directly adjacent to Residential Future Land Use designations. Live/work uses shall not be allowed for exclusively residential purposes. The density of live/work uses shall strictly conform to the standards established by the applicable zoning

designation, in accordance with the Land Development Code.

Policy 1.3.1.j Office

Primary uses shall be for business and professional offices or institutional land uses with a maximum floor area ratio of 0.5 gross floor area. Public facilities or utilities of less than five acres shall also be primary uses.

Live/work uses within the Office Future Land Use designation shall be allowed only in areas directly adjacent to Residential Future Land Use designations. Live/work uses shall not be allowed for exclusively residential purposes. The density of live/work uses shall strictly conform to the standards established by the applicable zoning designation, in accordance with the Land Development Code.

Policy 1.3.1.k Industrial

The primary use shall be industrial, intensive commercial, agricultural and business/research parks. Also allowed are public facilities and supporting infrastructure. The maximum floor area ratio shall be 1.0.

Policy 1.3.1.l Agricultural

The primary designation of this land use category is any agricultural land use and, particularly, horticultural nurseries or greenhouses and residential dwelling units not to exceed one unit per five acres.

Policy 1.3.1.m Parks/Recreation

Public and private recreation sites are the primary land use in this category. Public recreation sites shall be permitted by right or by special exception in all future land use categories. Commercial recreation shall be permitted in the commercial land use category. The maximum floor area ratio shall be 0.20.

Policy 1.3.1.n Conservation

Conservation land uses are designated on the Future Land Use Map, and shall serve as a conceptual indicator of conservation areas, including wetlands. If the area or a portion of an area designated as Conservation on the map is determined not to be a wetland based on actual wetland delineation by the City, the Future Land Use Map designation shall be consistent with the remainder of the parcel. A formal Future Land Use Map amendment shall not be required to change the Future Land Use Map designation under the above circumstances. Residential land uses will be permitted at a density of one dwelling unit per twenty acres in any conservation area.

Policy 1.3.1.o Institutional/Public Use

Institutional land uses shall include public buildings and facilities. Existing public buildings and facilities and public education sites may be designated as institutional on the Future Land Use Map.

The maximum floor area ratio allowed in the Institutional/Public Use category shall be 0.50.

Policy 1.3.1.p Community Redevelopment Area Overlay District

The primary intent of the Community Redevelopment Area Overlay District shall be to encourage the development of residential, business, and commerce uses consistent with the City's Community Redevelopment Plan as adopted and administered by the City's Community Redevelopment Agency. Allowable uses shall include those permitted through the underlying land use and zoning designations. The maximum floor area ratio for non-residential uses shall be twice that permitted through the underlying land use designation. Residential densities shall be consistent with those of the underlying land use designation.

Policy 1.3.1.q Mixed-Use

The primary intent of the Mixed-Use land use category is to discourage low-density residential development and allow for a combination of residential, office, commercial, industrial, recreational, institutional, and public facility uses to serve the residential and non-residential needs of special areas of the City. This mix of land uses may occur on a single parcel or multiple parcels, either as a permitted single use, a vertical combination of different permitted uses, or a horizontal mix of different permitted uses.

The intensity of development within the Mixed-Use land use category will vary based on location and surrounding uses. To support pedestrian-friendly mixed-use areas, transit-oriented design elements shall be incorporated to enhance walkability and connectivity.

The Land Development Code will establish zoning districts and/or zoning overlay areas with standards that define the appropriate location for various intensities/densities. The following maximum gross intensity/density standards shall not be exceeded. The maximum floor area ratio of 1.0 is permitted for non-residential development and a maximum density of 15 dwelling units unless approved through comprehensive land use change for the Kelly Park Interchange Form-Based Code.

Policy 1.3.1.r Rural Settlement (Tier Density Max. 1 du/ac)

This land use designation is intended to apply within that area defined as the "Northern Area" in the Joint Planning Area Agreement between the City of Apopka and Orange County adopted on October 26, 2004 (or subsequent amendments), and other areas of the Wekiva Study Area as may be appropriate.

The district is designed to facilitate development of single-family dwelling units and associated infrastructure which maximize the preservation of open space and promote the clustering of developments to both preserve and enhance the natural environment.

This land use designation shall also include an agricultural component. Intensity of development within this land use category will vary depending upon the following framework:

a. Agricultural, not to exceed one residential unit per five acres (1 du/5 ac).
b. One residential unit per five acres (1 du/5 ac) with clustering required, with a minimum open space requirement of 25%.
c. Densities greater than one residential unit per five acres (1 du/5 ac) and less than one residential unit per one acre (1 du/1 ac) with clustering encouraged but not required, with a minimum open space requirement of 35%.
d. One residential unit per one acre (1 du/1 ac) in a development with an overall size of less than 25 acres, with clustering encouraged but not required, with a minimum open space requirement of 35%.
e. One residential unit per one acre (1 du/1 ac) in a development with an overall size of between 25 acres and 100 acres, provided the development is Planned Development (PD), with clustering required and a minimum open space requirement of 45%.
f. One residential unit per one acre (1 du/1 ac) in a development greater than 100 acres provided the development is greater than 100 acres and is a Planned Development (PD) with clustering required, with a minimum open space requirement of 50%.

Policy 1.3.1.s Agricultural Homestead

This land use category is intended to accommodate any agricultural or agricultural support use, particularly, farming operations, horticultural nurseries, greenhouses, agribusinesses, and residential dwelling units not to exceed one unit per ten acres (1 du/10 acres).

Policy 1.3.1.t Planned Unit Development

A Planned Development (PD) is not a category of Future Land Use, but rather a type of zoning district that can be applied to any Future Land Use category.

Policy 1.3.2

Development and redevelopment shall be integrated with the adjacent land uses through:
(1) the creation of like uses; or
(2) the creation of complementary uses; and
(3) mitigation of adverse impacts including noise, visual, odor, and vibration.

Policy 1.3.3

Established neighborhoods and emerging neighborhood units shall be protected by ensuring adequate public notice prior to land use designation and rezoning approvals of adjacent properties.

Policy 1.3.4

Residential development north of Ponkan Road and west of Rock Springs Road (Park

Avenue) will be restricted to no more than two dwelling units per acre, unless otherwise authorized through the adopted Kelly Park Interchange Form-Based Code.

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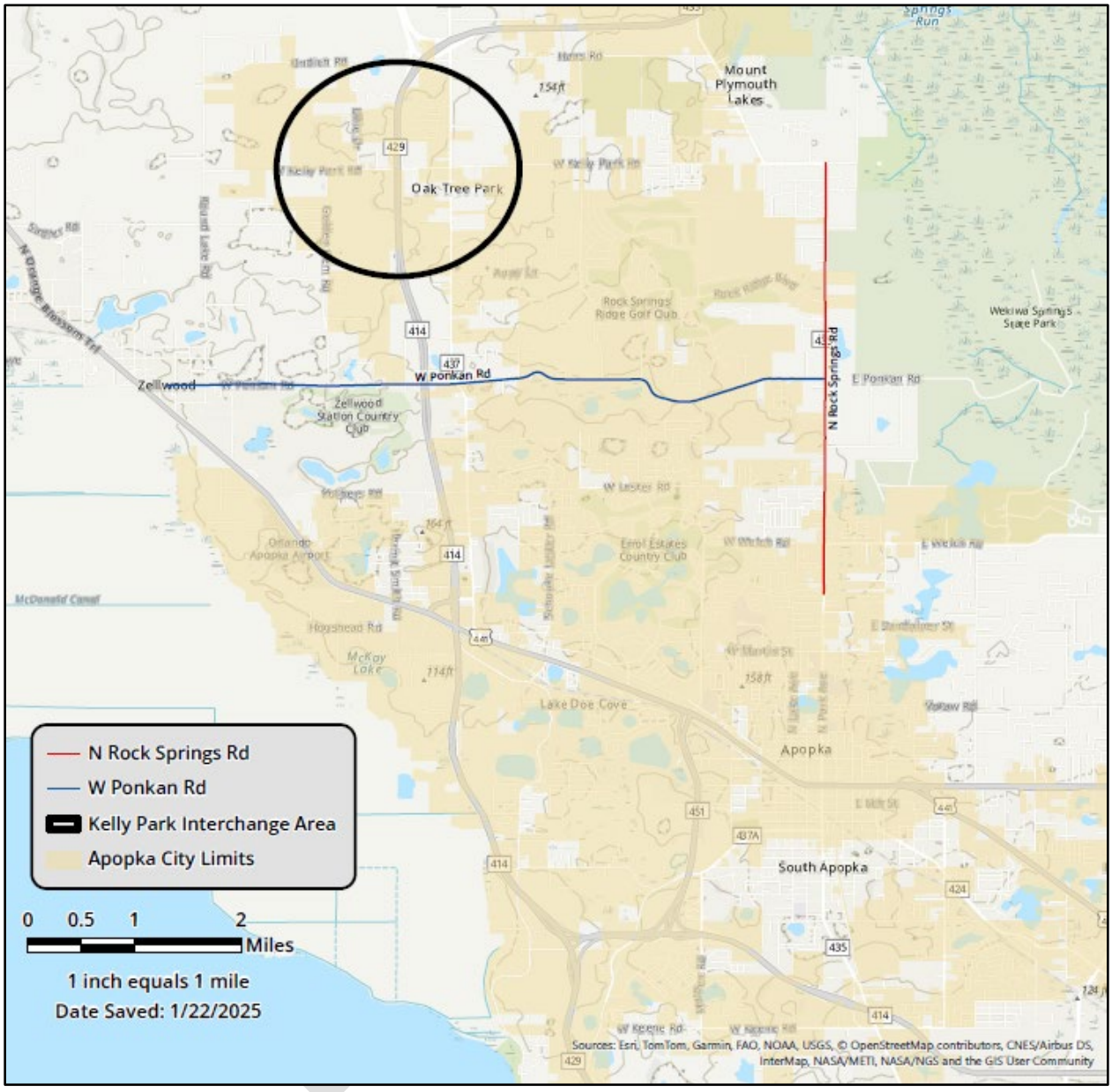
Map 1.3.4: Density Restricted Area (2 DU/A)
- North of Ponkan Rd & West of Rock Springs Rd (Park Avenue) –



Policy 1.3.5

Upon annexation, properties north of Sebastian Springs Lane and east of Rock Springs Road shall be designated agricultural or rural settlement with a minimum of one dwelling unit per acre or the same density as indicated by Orange County's Future Land Use Element.

Policy 1.3.6
The City shall consider the following when evaluating land use amendments, especially changes from very low density categories to higher density categories and voluntary annexation requests:

- whether the amendment demonstrates a functional relationship of the proposed amendment to other more densely or intensely designated or development lands;
- the availability of public facilities and water supplies to service a more dense or intense land use;
- multi-modal transportation linkages between proposed residential use and neighborhood; and
- compatibility with surrounding land uses.

OBJECTIVE 1.4
The City shall protect and expand vegetative resources, including native and Florida-Friendly Landscaping™, preserve heritage trees, implement tree mitigation, and enhance urban forestry to combat the urban heat island effect, support local species, and improve stormwater management.

Policy 1.4.1
The City shall provide for the protection of native trees as detailed in the tree canopy retention standards of the Land Development Code.

Policy 1.4.2
The City shall protect surface water quality through implementation of its Land Development Code.

Policy 1.4.3
The City shall protect the habitats of endangered, threatened, or species of special concern~~,~~ in the City through preservation, mitigation, or relocation through enforcement of the Land Development Code.

Policy 1.4.4
The City shall require in its Land Development Code that stormwater treatment facilities be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use, in accordance with the classifications established by local, state, and/or federal regulations.

Policy 1.4.5
The City shall seek opportunities to protect open space and natural resources through parks, stormwater management systems, and preservation of natural habitats.

OBJECTIVE 1.5

The City recognizes its historic character and cultural resources and shall protect these for future generations.

Policy 1.5.1

The City shall utilize the Apopka Historical Society and the Museum of the Apopkans as a resource for protecting and preserving historic and cultural resources.

Policy 1.5.2

The study of land uses appropriate to the historic nature of the Mixed-Use Downtown District and the Community Redevelopment Area shall include recommendations based on incentives to reuse existing historic buildings where feasible.

Policy 1.5.3

The City shall continue to promote preservation of historical sites throughout Apopka by use of the Apopka Historical Properties Survey, the National Register of Historic Places (HRHP), and the Florida Master Site File.

OBJECTIVE 1.6

The City shall provide the most efficient use of public facilities and services by eliminating enclaves and providing consistent land uses for a cohesive community.

Policy 1.6.1

The City will continue to work towards eliminating enclaves.

Policy 1.6.2

The City shall work with Orange County to create an Interlocal Service Boundary Agreement (ISBA) to provide guidance for annexations and elimination of enclaves.

OBJECTIVE 1.7

The City shall ensure the availability of suitable land for utility and public facility use necessary to support proposed development through acquisition or dedication during the development process.

Policy 1.7.1

The provision and programming of needed public facilities shall consider the needs of the existing and developing urban and suburban areas.

OBJECTIVE 1.8

Planned Developments (PDs) shall be used to provide for innovative land development as set forth in the criteria and guidelines in the Land Development Code.

Policy 1.8.1
Planned Developments (PDs) shall provide effective integration methods to maximize mixed uses such as multimodal transportation corridors, open space areas, consistent architectural guidelines and/or materials, and consistent landscape guidelines.

Policy 1.8.2
Development proposals shall include effective multi-modal transportation systems which may include provisions for carpooling, van pooling, mass transit, bicycling, and walking.

OBJECTIVE 1.9
The City shall protect the State-established Wekiva River Protection Area in conformance with Florida Statutes.

Policy 1.9.1
Setbacks within the Wekiva River Protection Area shall be protected in accordance with Florida Statutes.

Policy 1.9.2
The highest density/intensity of any development on property adjacent to the waterways or wetlands of the Wekiva River System shall be located farthest from those waterways, wetlands, or public land.

OBJECTIVE 1.10
The City shall coordinate with the Orange County School Board on school site selection.

Policy 1.10.1
The City shall collaborate with the Orange County School District and encourage siting provisions within the Land Development Code which encourage the siting and co-location of public schools and other public facilities such as parks, libraries and community centers compatible with surrounding development.

Policy 1.10.2
The City shall seek to co-locate public facilities, such as parks and recreation, community centers, and Orange County branch libraries, with schools to the greatest extent possible. In collocating facilities, the City shall use the following guidelines:

- Elementary Schools. Playgrounds may be co-located with elementary schools. In areas with densities high enough to support them, a neighborhood park with facilities for the elderly, a neighborhood recreation center, and a library sub-branch may be included.
- Middle Schools. Community parks and athletic fields are appropriate to be co-located with middle schools. A community center and a library sub-branch or

branch may be included depending on the school's location and the population served.

- High School. Community parks with a community center and athletic fields may be co-located with high schools. A main branch library is also appropriate. If justified by the population to be served, a district park could be co-located with the school.
- School site combinations. Combinations of adjacent elementary, middle school, and high school sites may co-locate playgrounds, community parks, athletic fields, community centers and a library sub-branch if justified by the location and the population to be served. Appropriate land uses should be considered to each combination.

OBJECTIVE 1.11

To ensure the protection of sensitive environmental resources, the City shall manage development in the Wekiva Study Area by utilizing the best available data and Best Management Practices from the St. Johns River Water Management District, the Florida Fish and Wildlife Conservation Commission, the Department of Environmental Protection and other agencies to review and amend land uses and design standards.

Policy 1.11.1

The City shall review all Future Land Use Map amendments which propose to increase densities/intensities in the Wekiva Study Area shall: optimize open space, and promote a pattern of development that adequately protects the natural resources, most effective recharge areas, karst features, and sensitive natural habitats of the area.

Policy 1.11.2

The City shall review all plans for development which have identified sensitive resources to ensure it will be protected through approaches which may include coordinated greenway plans, dedication of conservation easements, acquisition of property, clustering of residential development, density credits (as in Policy 1.3.1.r - Rural Settlement), and densities of two or fewer dwelling units per acre (2 du/ac).

Policy 1.11.3

Stormwater facilities may be counted toward meeting the required open space standards as defined in the Land Development Code.

Policy 1.11.4

All development of 10 acres or more shall abide by Article 6 - Environmental Standards in the Land Development Code.

Policy 1.11.5

Open space is defined as the land area that remains undeveloped or minimally developed,

such as trails and boardwalks, as part of a natural resource preserve or passive recreation area and shall include land preserved for conservation purposes. Open space excludes water bodies, street rights-of-ways, parking lots, and impervious surfaces. Open space areas may include stormwater management areas in accordance with the Land Development Code.

Policy 1.11.6

Priority for preservation and dedication of open space shall be given to the following resources: most effective recharge areas, wetlands, springs, spring runs, sinkholes, surface and subsurface caves, karst features, karst features with a direct connection to the aquifer and sensitive natural habitats including Long Leaf Pine, Sand Hill, Xeric Oak Scrub and Sand Pine scrub vegetative communities.

Policy 1.11.7

The following maps are included in the Appendix and are hereby incorporated into the Future Land Use Map series as overlays: the Wekiva Study Area Boundary Map, the Recharge Range Map, the Karst Topography Features Map, and the Xeric Oak Scrub, Sand Pine Scrub, and Sandhill (Longleaf Pine Habitat) Map. These overlay maps also serve to delineate the most effective recharge areas, karst features, and sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. The overlay map series are based on the best available data and analysis.

OBJECTIVE 1.12

Site plans, subdivisions or their functional equivalent, such as Planned Developments, within the Wekiva Study Area shall meet the design standards as set forth in the following policies.

Policy 1.12.1

Conservation subdivisions or their functional equivalent, such as Planned Developments, shall include:

1) Clustering of units on small lots;
2) Establishment of open space, which shall be connected whenever possible, in recordable easements, plat or other recordable instrument. Open spaces percentages shall be as provided for in Policy 1.3.1.r - Rural Settlement;
3) Central water and sewer treatment facilities connected to the regional system; and
4) Minimal site disturbance.

Policy 1.12.2

Development shall be buffered from springs, spring runs, sinkholes, caves and other karst features as shown below. The minimum buffer area shall consist of a setback that retains all-natural vegetation within the buffer area.

Minimum Buffer From Springs, Sinkholes, Caves, and Karst Features	
Feature	**Minimum Buffer**
Springs	300 feet
Spring runs	150 feet
Sinkholes, with a direct connection to the aquifer	200 feet, measured from the drainage divide
Other sinkholes	100 feet, measured from the drainage divide
Caves	One-half mile, measured on the surface from the centerline of the cave system
Other karst features with a direct connection to the aquifer (swallet or stream to sink)	200 feet, measured from the drainage divide

Policy 1.12.3
Where a lot of record is too small to accommodate development in compliance with the buffers set forth in Policy 1.12.2, an allowable use may be established provided that the building and associated paved areas are located the maximum distance possible from the karst features, and further provided that a swale and berm are located between the development and the karst feature. The swale and berm shall be designed to direct drainage away from the karst feature.

Policy 1.12.4
Development shall use joint or shared access to the maximum extent feasible in order to minimize impervious surfaces and minimize roadway access points.

Policy 1.12.5
The City shall promote Low Impact Design (LID) parking lot design to mitigate stormwater, improve surface and ground water quality, and reduce heat island effect.

Policy 1.12.6
Design of the built environment and other impervious surfaces shall minimize connections between impervious surfaces through Green Infrastructure (GI) and LID techniques shown on a site plan such as:

- Directing flows from roof drains to vegetated areas and downspout planters or to rain barrels or cisterns for reuse of the water;
- Directing flows from impervious surfaces so that they drain to vegetated buffers such as rain gardens, bioswales, natural areas, and open space; and
- Breaking up flow directions from large paved surfaces.

Policy 1.12.7
Permeable pavement materials, pervious concrete, and pervious asphalt shall be used

to minimize the amount of impervious surface with new development and redevelopment.

Policy 1.12.8

Commercial and industrial development shall be designed to minimize site disturbance by limiting clearing to the minimum area necessary to accomplish development, as follows:

- Avoid or minimize the removal of existing trees and vegetation;
- Minimize soil compaction by delineating the smallest disturbance area feasible; and
- Maximize disconnection of impervious surfaces to reduce water runoff flows and increase opportunities for infiltration.

Policy 1.12.9

Proposed amendments to the Future Land Use Map within the Wekiva Study Area shall demonstrate that the proposed land use category is the least intensive category that will meet a demonstrated need of the use; and All proposed land use amendments for properties over 10 acres in size will include an analysis to determine appropriate specific onsite Best Management Practices and compensatory treatment for nitrate/nitrogen reduction, both on-site and off-site, including, if necessary, through connection to central sanitary sewer. The analysis must demonstrate, when all factors are taken into account, that there is no increase in nitrate/nitrogen loading to groundwater and surface water.

OBJECTIVE 1.13

New development and redevelopment in the City shall incorporate walkable, mixed-use projects to create housing and transportation choices that lower household costs, reduce vehicle miles travelled, minimize emission of greenhouse gases, and discourage urban sprawl.

Policy 1.13.1

Development in the mixed-use categories, and where appropriate in other land use categories, shall provide pedestrian-friendly and complete street design to help facilitate walkability.

Policy 1.13.2

New development, as well as infill development where feasible, shall limit block sizes and provide interconnected street grid networks to disperse traffic and promote walkability.

Developments may include a hierarchy of narrow streets, boulevards, and alleys; high-quality pedestrian networks; designs that encourage greater use of bicycles and walking as daily transportation; and a land use mix that reduces external trips by encouraging internal trips.

High-speed and high-volume traffic shall be discouraged to prioritize safer, more sustainable mobility.

Policy 1.13.3
The City shall promote new infill development that includes both horizontal and vertical mixed-uses.

OBJECTIVE 1.14
Ensure development within the City of Apopka surrounding the SR 429/Kelly Park Road Interchange will occur in a predictable, yet flexible manner consistent with the intent of the Wekiva Parkway and Protection Act, the community vision, and the City's economic development goals, and which will provide balanced land use that can accommodate economic and residential growth in the context of the environmental concerns identified within the Wekiva Parkway and Protection Act, and that can serve as the primary targeted area for greenfield development within the Wekiva Study Area.

Policy 1.14.1
The Kelly Park Interchange (KPI) Form-Based Code Area is generally comprised of a one-mile radius emanating from the interchange of SR 429 and Kelly Park Road. The exact configuration is based upon a logical, parcel-specific boundary consistent with the intent of capturing a one-mile radius as shown in *Map FLUE – Kelly Park Interchange*.

Policy 1.14.2
Properties outside the KPI shall not be included in the KPI original site unless they were consolidated or combined with the internal KPI site prior to March 2019.

Furthermore, additions to an existing development within the KPI that lay outside the KPI development shall not exceed two dwelling units per acre (2 du/ac) in compliance with the Wekiva River Protection Area (Objective 74 and associated policies).

Policy 1.14.3
The Kelly Park Form-Based Code identifies the approximate location of the character districts necessary to support the anticipated development program within the Form-Based Code Area. The location and/or boundaries of the character district are illustrative only, and it is the intent of the City that locations and boundaries can be refined through an administrative review, except where other review and approval procedures are specified, in either the Comprehensive Plan or the Kelly Park Interchange Form-Based Code. The specific boundaries and locations of character districts will be established through the approval of development plans, as established through the Kelly Park Interchange Form-Based Code procedures.

Policy 1.14.4

The Kelly Park Interchange Form-Based Code shall include the following community design elements:

- An interconnected network of streets and paths designed to encourage pedestrian and bicycle travel, with traffic calming where appropriate;
- A complementary mix of land uses, including residential, employment, educational, governmental and medical facilities, recreational, and civic/public;
- Appropriate densities and intensities of land uses within walking distance of transit stops; and
- Daily activities within walking distance of residences, public uses, streets and open spaces that are safe, comfortable and attractive for the pedestrian, with adjoining buildings open to the street and parking designed so as not to interfere with pedestrian and bicycle travel.

Policy 1.14.5

Within the Kelly Park Interchange Form-Based Code Area, land uses shall be physically and functionally integrated, including a connected and continuous system of pedestrian facilities.

Policy 1.14.6

Development within the Kelly Park Interchange Form-Based Code Area shall be assigned a Mixed-Use Interchange future land use designation.

Policy 1.14.7

The City shall ensure that areas of greatest density and intensity within the Kelly Park Interchange Form-Based Code Area are located at and between the two major intersection nodes at Kelly Park Road/Golden Gem Road and Kelly Park Road/Plymouth-Sorrento Road, but not upon areas of Karst formations. Development at the outer edges of the mixed-use area shall maintain compatibility with the lands adjacent to the Wekiva Interchange Plan Area by reducing density and intensity or by providing substantial buffers, landscaping, height, and lighting controls.

The City shall consider the transfer of development rights as a potential mechanism to maintain 20 percent open space within the overall Study Area. This would be subject to the preservation of conservation lands on a case-by-case basis and contingent upon City Council approval and the applicant providing an appropriate tracking mechanism for the City.

Densities and intensities allowed within the Kelly Park Interchange Form-Based Code Area character districts shall be as shown in the table below.

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Table FLUE - 1 Kelly Park Interchange Form-Based Code Character District Standards

Kelly Park Interchange Form-Based Code Character District Standards				
Character District/ Purpose	**Uses**	**Minimum/ Maximum Acreage***	**Density (Units per Acre)**	**Open Space (min.)**
Village Center (VC) Safe, vibrant and pedestrian oriented village center that can support a variety of residential, retail, commercial, office and entertainment uses.	Residential, retail, commercial, office and entertainment uses. Horizontal mixed- uses shall be allowed, but vertically mixed-uses are preferred	**Min:** 200 **Max**: 380 (40 acres max. of VC Core in each village)	**Min:** 7.5 **Max:** 20 (25 with bonus*) **Zone Average:** 12	10% minimum in the form of public plazas and small park spaces that are urban in character
Neighborhood Provide a transition between medium density residential in the Transition zone and adjoining lower density neighborhoods outside the study area.	Single-family homes, small-scale residential support uses (schools, day care facilities, churches), no more than twenty percent (20%) may be occupied by age-restricted communities.	**Min:** 2,360 **Max:** 3,060	**Min:** 1 **Max:** 5	20% minimum in the form of neighborhood parks, playgrounds, green space, and public squares
Interchange Promote economic development while providing a transition between the pedestrian- oriented Village Center and the fast-moving traffic on the highway.	Highway-oriented uses, such as gas stations and drive-through facilities	**Min:** 175 **Max:** 380	**Min:** 0 **Max:** 10 (15 with bonus*)	15% minimum in the form of green space

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Kelly Park Interchange Form-Based Code Character District Standards				
Character District/ Purpose	**Uses**	**Minimum/ Maximum Acreage***	**Density (Units per Acre)**	**Open Space (min.)**
Employment The primary intent of this zone is to promote economic development and diversification while ensuring the protection of Karst geologic features. The character zone allows development in a campus- like environment for a variety of office, industrial (clean industry), and large institutional uses (hospitals, educational facilities), which would provide much needed jobs in the area. Limited residential uses are also allowed in this zone.	Office, hospitality, clean industry, large institutional uses (hospitals, educational facilities), and large scale residential	**Min:** 190 **Max:** 380	**Min:** 0 **Max:** 5 (7.5 with bonus*)	20% minimum in the form of large parks, squares, plazas, and green space
MEdTech Campus Overlay The primary intent of the MEdTech – Medical, Education & Technology Campus Overlay District is for the development of major educational, governmental and medical facilities and other complementary and supporting uses such as office developments.	Educational, governmental and medical facilities and other complementary and supporting uses such as office developments.	**Min:** 40 **Max:** 100	**Min:** 0 **Max:** 10	20% minimum in the form of large parks, squares, plazas, and green space

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Kelly Park Interchange Form-Based Code Character District Standards				
Character District/ Purpose	**Uses**	**Minimum/ Maximum Acreage***	**Density (Units per Acre)**	**Open Space (min.)**
Transition	-	**Min:** 380 **Max:** 770	**Min:** 5 **Max:** 10 (15 with bonus*)	15% minimum in the form of green space, squares, plazas, and playgrounds

* The acreages listed represent all land (incorporated and unincorporated) bounded by Ondich/Haas, Foliage Way, Appy Lane, Round Lake (see Wekiva Parkway Interchange Vision Map), not just the 1-mile radius.

Policy 1.14.8

Maximum allowable development within the Kelly Park Interchange Form-Based Code Area shall be allocated among land uses as follows:

- Single Family: 7,500 units
- Multi Family: 8,500 units
- Commercial/Services: 22 million square feet.

Policy 1.14.9

The character district regulations included in the Form-Based Code shall ensure densities and intensities are allocated as noted in Table FLUE - *1* (see Policy 1.14.7). The transfer of development rights system will allow increased densities in the Core area (noted as bonus density on the table). The average density/intensity for individual districts and the entire mixed-use area shall not exceed the average allowed.

Policy 1.14.10

Development within the Kelly Park Interchange Form-Based Code Area shall be planned in a manner that maximizes internal circulation and does not cause the Florida Strategic Intermodal System (SIS) to exceed its adopted Level of Service Standard without appropriate mitigation.

Policy 1.14.11

The City shall incorporate transportation demand management strategies into the transportation planning process to alleviate congestion in the Kelly Park Interchange Form Based Code Area. A range of techniques will be considered, such as vanpool/ridesharing programs, parking management and pricing, transit vouchers, telecommuting, flextime, and/or other appropriate trip reduction strategies.

Policy 1.14.12

Proposed development within the Kelly Park Interchange Form-Based Code Area shall contribute to providing a safe, convenient, comfortable, and aesthetically pleasing transportation environment that promotes walking, cycling, and transit use.

Policy 1.14.13
Developments within the Kelly Park Interchange Form-Based Code Area shall provide direct bicycle and pedestrian connections within and between residential areas and supporting community facilities and services, such as shopping areas, employment centers, transit stops, neighborhood parks, and schools.

Policy 1.14.14
Streets located within the Kelly Park Form Based-Code Area shall equitably serve the needs of the pedestrian, the bicycle, public transit, and the automobile based on a grid network system of roadways as described in Appendix A – Mixed-Use Kelly Park Interchange (MU-KPI) Form-Based Code, P. Street Standards, of the Land Development Code. The City shall support a multi-modal transportation environment that allows for various transit options.

Policy 1.14.15
Properties assigned the Mixed-Use Interchange future land use designation shall be rezoned to the Kelly Park Interchange Mixed-Use Zoning District.

Policy 1.14.16
Large developments with 50,000 gross square feet or more and are adjacent to a major street, which is or may be used as a transit route, shall provide access for on-site public transit. The public transit stop shall include a bus pullout and shelter or alternate design as approved by the Development Review Committee.

Policy 1.14.17
Sites within the Kelly Park Interchange Form-Based Code Area, as well as right-of-way areas, shall be subject to the vegetation protection and water conservation landscaping policies contained in the City Comprehensive Plan.

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HOUSING ELEMENT

Ensure safe, quality housing for all Apopkans

HOUSING ELEMENT

GOAL 1

The City shall strive to foster an equitable provision of healthy, safe, and quality housing at an attainable cost for all income levels for present and future residents.

OBJECTIVE 1.1

The City shall designate in the Future Land Use Element adequate amounts of land to accommodate a necessary number of new single-family and multifamily units.

Policy 1.1.1

The City shall analyze and amend its Land Development Code (LDC) as needed to eliminate barriers for residential redevelopment proposals and support the development of a variety of new housing types that better accommodate a wide range of incomes.

Policy 1.1.2

Review and amend City policies as needed to enable redevelopment proposals that increase residential density and prioritize:

- Mixed-use development that incorporates mixed-income housing
- Increased housing supply in desired, targeted areas of the City
- Redevelopments that propose higher density development
- Complete Streets and Transit-Oriented Development

Policy 1.1.3

Create and retain strategies and policies to enhance housing affordability and encourage the development of housing types typically not provided by the market, such as accessory dwelling units (ADU). The City shall explore more affordable and diverse housing options that fit within existing neighborhoods without overwhelming infrastructure or altering community character.

Policy 1.1.4

Identify environmental and socioeconomic issues that disproportionately affect specific populations and disinvested areas (i.e., heat, flooding, housing displacement) to better address those issues and recognize solutions.

Policy 1.1.5

Implement new and existing housing rehabilitation programs through the City's Community Redevelopment Agency (CRA) in order to prevent the loss of housing,

rehabilitate aging housing supply, and enable housing renovations that make units more accessible to disabled and senior residents.

Policy 1.1.6

Assess and identify City properties that are ideal for higher residential densities and mixed-use development for the possibility of affordable housing development. With the surplus land inventory, implement best practices in managing surplus lands, such as ensuring long-term affordability of new affordable units and establishing effective criteria for the receipt of land.

OBJECTIVE 1.2

The City of Apopka shall encourage and assist in the provision of safe, attainable housing for households earning a moderate income or less.

Policy 1.2.1

The City shall coordinate with private and non-profit developers to ensure that all means of meeting the need for additional attainable housing units accessible to households earning 120% or less of Area Median Income (AMI) are met.

Policy 1.2.2

The City shall coordinate with agencies like the Orange County Housing Finance Authority, as well as, local housing providers, nonprofits, and community groups to pursue all available federal, state, and local funding opportunities.

Policy 1.2.3

The City of Apopka shall coordinate with the Orange County Housing and Community Development Division in facilitating its housing programs, such as the HOME Investment Partnership Program (HOME) and the Emergency Solutions Grant (ESG) Program.

Policy 1.2.4

Strive to coordinate with housing developers and nonprofits, such as Habitat for Humanity and Homes in Partnership, to support residential development that leverages the development of affordable housing units.

Policy 1.2.5

Support and engage in local and regional housing initiatives that help create new affordable housing units in the City, such as community land trusts or housing task forces.

Policy 1.2.6

Assess and implement regulatory, administrative, or financial incentives as redevelopment opportunities present themselves to better encourage the participation of

the private sector in the development of affordable housing units. Refer to Live Local Act for examples of potential incentives.

Policy 1.2.7

The City LDC shall encourage that affordable housing units are located in close proximity to a collector roadway or higher, and provide access to the following facilities and services through an interconnected system of sidewalks, bicycle lanes and transit stops and amenities:

- Employment centers
- Convenient neighborhood amenities and retail offering household goods and services
- Medical or health services
- Public parks, recreational facilities, and trails.

Policy 1.2.8

Encourage and standardize the act of requesting technical assistance from state and regional agencies to support the implementation of new affordable housing policies, programs, and development projects as needed.

OBJECTIVE 1.3

The City's existing housing stock shall be conserved through the effective implementation of regulatory programs directed toward preserving neighborhood quality. This includes the conservation of native and natural resources, maintenance and replacement of community facilities as needed, and implementation of effective code enforcement.

Policy 1.3.1

The City will inform and impose code enforcement requirements as a means to ensure the maintenance of high-quality housing standards, consistent with Florida Statutes, and the mitigation of substandard residential units.

Policy 1.3.2

The City will identify dilapidated or substandard dwelling units that are not suitable for continued occupancy. The City will utilize Code Enforcement to require the buildings and sites to be brought up to the standard or the structure will be recommended for demolition.

Policy 1.3.3

Encourage the rehabilitation of existing housing and seek federal and state funds to rehabilitate or demolish housing for which rehabilitation is not economically feasible.

Policy 1.3.4
The City shall minimize potential blight within residential or mixed-use areas by prioritizing the use of best management practices in community planning, public outreach, and urban design, in development review processes.

Policy 1.3.5
In order to continuously facilitate residential and community facility enhancements needed within the City, the City shall continue to enable its existing housing assistance programs through the CRA, and coordinate with Orange County's Community Development Department on the implementation of their CDBG, HOME programs, and other programs as they become available.

Policy 1.3.6
Identify and assess all funding opportunities that support the creation, revitalization, or mitigation of substandard local housing to enhance local communities and create a more resilient housing stock.

Policy 1.3.7
The City shall continue its process of reviewing development proposals to ensure adequate secondary or emergency access; buffer higher intensity uses in developments adjacent to residential areas; ensure access to adequate recreational and open spaces; ensure safe and adequate pedestrian access, multimodal access, etc.

Policy 1.3.8
Empower and support the development of collaborative groups, such as neighborhood task forces and working groups that seek to address local housing issues, to enable communication between communities facing similar challenges.

Policy 1.3.9
Employ brownfield programming, such as the Florida Department of Environmental Protection's Brownfields Program, to enable residential infill development and rehabilitation that eliminates dilapidated structures and neighborhood blight.

Policy 1.3.10
Consistently monitor the number of substandard residences in the City to better address units with increased risks of exposure to lead, mold, extreme heat or cold, poor ventilation or sunlight, or pests.

Policy 1.3.11
The City will minimize the adverse effects of noise, air, and water pollution by land development regulations that meet or exceed local, state, and federal environmental quality standards.

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OBJECTIVE 1.4

The City will continuously support the preservation of historically significant City residences by supporting nominations to the National Register of Historic Places of all eligible housing units.

Policy 1.4.1

Provide support to owners of historically significant housing in applying for and utilizing state and federal assistance programs.

Policy 1.4.2

The City shall utilize the Apopka Historical Society and the Museum of the Apopkans as resources for historic preservation opportunities.

Policy 1.4.3

Consistently encourage private investment in historically significant housing by providing information, technical assistance and program services as available.

Policy 1.4.4

Take advantage of all opportunities to preserve local historically significant residential properties to better respect the historic fabric of the City of Apopka, including identifying properties, supporting placemaking activities, and conducting public outreach.

Policy 1.4.5

Promote the rehabilitation and preservation of well-designed residential units that have a significant connection to the community, underscore existing neighborhood character and charm, and can potentially support local tourism.

OBJECTIVE 1.5

Encourage resident involvement in community improvement initiatives for neighborhoods experiencing high levels of crime, neighborhood instability, and negative quality of life conditions that are connected to housing issues.

Policy 1.5.1

Identify and assess available funding and partnership opportunities that will support the creation of a City program that will facilitate the development of neighborhood improvement plans and public outreach activities.

Policy 1.5.2

Methods of funding, such as Community Development Block Grant Programs, shall be investigated and sought after to help facilitate neighborhood improvements where they are needed.

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Policy 1.5.3
Identify and monitor disinvested or rapidly changing residential areas of the City to better address inequities in the distribution and supply of adequate local housing.

Policy 1.5.4
The City shall review development proposals for community residential facilities, such as group homes and assisted living facilities, to ensure that adequate infrastructure and services are available to help support improved quality of life.

Policy 1.5.5
Provide opportunities for residents to voice their concerns and ensure that redevelopment better reflects the desires of the affected community.

Policy 1.5.6
Utilize research, partnerships, and professional growth opportunities in order to stay abreast of the latest public engagement strategies that the City can employ to improve public participation in the City.

Policy 1.5.7
Monitor data provided by the American Community Survey (ACS) to assess and address issues such as changes in the number of substandard housing units, overcrowding, and housing lacking utilities.

Policy 1.5.8
Support the provision of public educational opportunities and materials in the City to help residents better understand the value of having a diverse range of housing options and the social and economic benefits it provides.

Policy 1.5.9
Assess and identify strategies from the newly revised State Housing Strategy that can support the City's long-term housing goals.

OBJECTIVE 1.6
Prioritize healthy, resilient housing and improved pathways to homeownership to increase neighborhood quality and stability.

Policy 1.6.1
Strive to apply a "health lens" to the City's development review process to foster an equitable provision of safe, quality housing for all residents regardless of age, physical ability, ethnicity, or socioeconomic status in Apopka.

Policy 1.6.2
Support the following types of development near residential uses to stabilize neighborhoods and deliver better community-serving infrastructure and services:

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- Mixed-use development with health-promoting commercial uses
- Housing diversity such as “Missing Middle” concept
- Parks and trails
- Safe Routes to School or Safe Routes to Parks

Policy 1.6.3
The City of Apopka shall continue to permit Accessory Dwelling Units (ADUs) as outlined in the Land Development Code and will assess and consider extending the permissibility of ADUs in denser residential zoning districts where feasible.

Policy 1.6.4
Identify and implement policies and programs that help preserve housing affordability, housing education and counseling, rental assistance, and down payment assistance programs.

Policy 1.6.5
Support the implementation of initiatives that increase housing resilience in the City by participating in resilience projects with neighboring local governments, staying abreast of related funding opportunities, and developing or distributing existing educational materials to City residents.

Policy 1.6.6
Encourage the assessment of housing needs for marginalized populations, such as seniors, disabled persons, and those aging out of foster care, in order to better house those groups.

Policy 1.6.7
Consider implementing strategies that improve the housing stability of renters to help buffer the impacts of rising rents on an increasingly housing cost-burdened population, such as eviction prevention programs that educate renters on credit, household budgets, or the eviction process.

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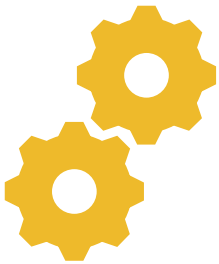
INFRASTRUCTURE ELEMENT

Providing safe, dependable public services to meet existing and future needs

INFRASTRUCTURE ELEMENT



GENERAL PUBLIC INFRASTSRUCTURE

GOAL 1

To provide adequate public infrastructure to support new growth and maintain existing development in a timely and fiscally responsible manner.

OBJECTIVE 1.1

The City shall continue to coordinate the orderly provision of public infrastructure with public and private development activities in a manner that is environmentally sound and is compatible with the fiscal resources of the City.

Policy 1.1.1

The City will ensure that the necessary facilities and services that deliver the adopted level of services for potable water, wastewater, reclaimed water, stormwater, and solid waste shall be in place at the same time a development order is issued and/or included in the City's Capital Improvements Budget.

Policy 1.1.2

Public facilities and utilities shall be located to:

- Maximize the efficiency of services provided;
- Minimize their cost;
- Minimize their impacts upon the natural and historical environments; and
- Minimize social and neighborhood disruptions.

Policy 1.1.3

The City shall pursue the development of appropriate incentives for the dedication or improvement of public infrastructure.

Policy 1.1.4

The extension of public facilities and utilities into areas of the City which are underserved or without service shall be guided by the City's Capital Improvements Element, to ensure adequate capacity and land is available for public infrastructure to support new development, and the use of land in the City shall be managed by approving development proposals only if the public infrastructure provided is concurrent with the impacts of development.

Policy 1.1.5

To stay consistent with State Statutes, public health and safety, all sanitary sewer, solid waste, drainage, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance of a certificate of occupancy.

Policy 1.1.6

The City shall coordinate growth consistent with the adopted master plans for potable water, wastewater, reclaimed water, and stormwater. These plans will be updated at minimum of every five years.

Policy 1.1.7

The City shall, at a minimum, establish and maintain a current five-year schedule of capital improvements for the improvement, extension, and/or increase in capacity of the potable water, reclaimed water, and stormwater facilities.

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POTABLE WATER SUB-ELEMENT

GOAL 2

To provide and conserve a safe, dependable, efficient, and cost-effective water supply that follows local, state and federal regulations, and that will be sufficient to meet the existing and future needs

OBJECTIVE 2.1

The City shall operate, monitor, and maintain existing and future potable water supply, treatment, and distribution facilities in accordance with local, state, and federal regulations to satisfy the existing and projected demand in a safe and dependable manner.

Policy 2.1.1

The City shall sufficiently fund the cost of operations and maintenance to sustain the adopted potable water system level of service (LOS) standards.

Policy 2.1.2

The City shall drill all future water production wells into the Lower Floridan aquifer and shall expand well production capacity as needed to serve projected maximum daily demands for potable water with in the utility service area and as allowed by the current SJRWMD CUP.

Policy 2.1.3

The City's potable water supply, treatment and distribution facilities shall be operated and maintained under the supervision of state certified operators and in accordance with all permits issued by local, state and federal regulatory agencies.

Policy 2.1.4

The City shall inspect all potable water facilities and conduct at minimum an annual evaluation of the performance of each water treatment plant. Deficiencies identified through this inspection shall be evaluated and corrective actions shall be prioritized and implemented according to the objectives and policies of the Capital Improvements Element.

Policy 2.1.5

The City shall continue its valve exercise and pipe flushing program on as needed basis.

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Policy 2.1.6

The City shall evaluate pressure complaints at least annually. Improvements needed to correct areas with deficient levels of service shall be identified.

Policy 2.1.7

The City shall seek cost-effective methods to correct any deficiencies and incorporate these projects into the Capital Improvement Element for implementation.

Policy 2.1.8

The City, shall protect its potable water service by enforcing a wellhead protection zone, consisting of a 200' radius from the wellhead, in which potentially high-risk land uses (i.e.: industrial and manufacturing which use or store hazardous materials as defined by the U.S. Resource Conservation and Recovery Act and implemented by EPA are prohibited) and development activities as defined by the Land Development Code are prohibited.

Policy 2.1.9

The City shall conduct periodic (at minimum of every three years per the CUP) potable water audits in an effort to maintain and unaccountable water loss of 10 percent or less of the total water pumped into the distribution system. These audits allow the City to detect and correct any deficiency in the system that might be causing a greater water loss.

Policy 2.1.10

The City shall utilize and outside contractor to annually verify the calibration of the well and distribution flow meters at the water treatment plants. These meters will be repaired or replaced based on the contractor's recommendation.

Policy 2.1.11

The City shall continue the practice of meter replacement for large scale water users on an as needed basis.

Policy 2.1.12

The City shall continue its meter testing and exchange program for all potable water meters. Meters shall be replaced on a zero-reading report.

OBJECTIVE 2.2

The City shall provide the following minimum levels of service to meet existing and future potable water system needs.

Policy 2.2.1

The minimum level of service for the potable water system expressed as a per capita flow to be supplied, treated and distributed shall be 135 gallons per capita per day as listed in the 2019 Potable Water System Master Plan. This level of service is an average daily flow

based on the population served by the system and the system wide flows generated within the utility service area. The per capita rate of gallons per day includes water demands for commercial, residential and unaccounted-for water.

Policy 2.2.2

The minimum level of service for system pressure, under normal operating conditions, shall be 30 pounds per square inch (psi), as measured in the water main. During emergency conditions, power failures and/or fire flow conditions, water pressure shall be maintained at a minimum level of 20 psi or greater.

Policy 2.2.3

The City shall provide sufficient water storage facilities to store a fire volume equal to four hours of fire flow, plus necessary operational storage requirements outlined by Florida Department of Environmental Protection (FDEP).

Policy 2.2.4

Expansion of the design capacity of the Water Treatment Plant(s) will be consistent with the goals, objectives, and policies of the Comprehensive Plan and multi-jurisdictional water planning efforts in northwest Orange County.

OBJECTIVE 2.3

The City shall appropriately plan for and expand the City's Potable Water Facilities and supply sources to address current and future demands in accordance with the Capital Improvements Element. This expansion will serve projected new development and/or redevelopment with LOS that meet or exceed those levels adopted by the City.

Policy 2.3.1

The City will identify, evaluate, and select the most cost-effective means of ensuring an adequate quality potable water supply, maximize the use of reclaimed water to reduce groundwater well augmentation for irrigation, enforce measures for potable reduction and conservation, through system integrations, public outreach, and education.

Policy 2.3.2

The City shall ensure that all public water facilities and extensions to the potable water system are planned in a consistent manner with the City's Comprehensive Plan, the latest Potable Water System Master Plan update, the latest hydraulic models, and in accordance with local, state, and federal regulations.

Policy 2.3.3

The City shall ensure the Water Facilities are planned with the actions defined in the Regional Water Supply Plan prepared by the Central Florida Water Initiative (CFWI) and any CUP permits that have been issued for named facilities.

Policy 2.3.4

The internal potable water facilities within future developments and/or redevelopments shall be the responsibility of the applicant seeking a development permit and shall be designed and constructed in accordance with the most current edition of the Land Development Code.

Policy 2.3.5

The City shall review the Land Development Code annually for sufficiency of the potable water guidelines and be updated at least every three years to reflect advancements in engineering, products and materials, construction, and other innovations.

Policy 2.3.6

All amendments to the Future Land Use Element map shall demonstrate that adequate potable and non-potable water supplies and related facilities and sanitary sewer capacity are available to meet projected growth demands associated with the amendment.

OBJECTIVE 2.4

The City shall conserve water resources by using appropriate water conservation techniques and implementing the Water Conservation Plan submitted to SJRWMD.

Policy 2.4.1

The City shall continue to enforce the Florida Building Codes and the City's Land Development Code requiring the use of low volume plumbing fixtures for construction and/or redevelopment projects.

Policy 2.4.2

The City shall provide incentives for incorporating green building features that support water conservation and water quality (e.g., green roofs, rain gardens, street-side swales, pervious pavement) as defined in the Land Development Code.

Policy 2.4.3

The City of Apopka shall continue to participate in water conservation projects or programs that will demonstrate to the public the use of drought tolerant landscape materials to achieve water conservation.

Policy 2.4.4

The City shall require the use of Water-Wise irrigation and vegetation standards in required landscaping areas as defined in the Land Development Code.

Policy 2.4.5

The City shall educate residents on conservation practices, water quality, and the importance of water as a resource through one or more of the following outreach methods:

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- Presentations,
- Displays,
- Handouts,
- City utility billing system,
- City website and social media,
- Webinars,
- City newsletters, and
- St. Johns River Water Management District conservation materials.

Policy 2.4.6

The City will continue its use of the potable water conservation rate structure which is updated on an annual basis and to utilize the mid-month high consumption notice program listed in the water conservation plan submitted to SJRWMD. Notices are sent to potable water customers half way through their billing cycle that have a usage which at the present trend will put them into the highest conservation rate structure.

Policy 2.4.7

The City will continue to utilize the City's Automatic Meter Reading (AMR) system to assist customers with indoor and outdoor leak detection. The AMR provides customers and city staff with the ability to monitor usage tracking, real time consumption reading, and leak detection, through the water consumption portal website and app for the smart phone.

Policy 2.4.8

The City shall continue to implement the Water Conservation Plan Incentive Program that provides incentives for both commercial and residential water customers to retrofit existing inefficient and high use irrigation systems to be more effective and efficient. Incentives may include financial assistance, equipment, services, or other mechanisms to promote the reduction in the use of water and the protection of the environment and natural resources as detailed in the Land Development Code.

OBJECTIVE 2.5

The City shall provide cost-effective fire protection using the potable water system to protect the lives and property of the citizens living within the utility service area.

Policy 2.5.1

The potable water system shall be an integral part of the City's fire safety program. Fire flow standards shall be identified by the Fire Chief based on ISO recommendations and incorporated into the Potable Water System Master Plan.

Policy 2.5.2

The City shall continue the practice of testing fire hydrants in accordance with National Fire Protection Association Standards.

OBJECTIVE 2.6

The City shall identify any sources of water that can be used to meet existing and future needs identified in the Water Supply Facilities Work Plan.

Policy 2.6.1

The City shall update the Water Supply Facilities Work Plan within 18 months of updates to the Regional Water Supply Plan that affects the City. The City's Comprehensive Plan will be amended as necessary to incorporate changes to the background information and the adopted goals, objectives, policies, maps, and capital improvement schedules relative to the work plan update.

Policy 2.6.2

In conjunction with the SJRWMD and other local governments, the City shall seek the development of efficient, cost- effective and technically feasible water sources that will supplement future demands without causing adverse impacts to water quality, wetlands and aquatic systems. These sources may include, but are not limited to, surface water, reclaimed water, and brackish groundwater.

Policy 2.6.3

The water Supply Facilities Work Plan shall be used to set priorities and coordinate the expansion and upgrade of the facilities used to withdraw, transmit, treat, store, and distribute potable and non-potable water to meet future demands.

Policy 2.6.4

The City shall maximize the use of existing potable facilities through research on best management practices and the implementation of management techniques that can enhance a source of supply, sustain water resources, and related natural systems and/or optimize water supply yield. These techniques may include, but are not limited to, surface water, reclaimed water, system interconnects, and water conservation.

Policy 2.6.5

The City's annual water consumption shall be equal to or less than the amount allocated under the SJRWMD-issued consumptive use permit.

Policy 2.6.6

The City shall, through the use of a concurrency evaluation, asses the availability of an adequate water supply and related facilities to serve the proposed development by the date of issue of the certificate of occupancy, development order, or other milestone or functional equivalent, in advance of occupancy as determined by the City.

DRAFT

SANITARY SEWER SUB-ELEMENT

GOAL 3

To provide for the reliable collection, treatment, and beneficial reuse of wastewater in an environmentally safe and cost-effective manner that also protects public health and safety and will sufficiently meet the existing and future needs of the citizens residing in the utility service area.

OBJECTIVE 3.1

The City shall operate, monitor, and maintain existing and future wastewater collection, treatment, and reclamation distribution facilities in accordance with local, state and federal regulations to satisfy existing and projected demand in a safe and dependable manner.

Policy 3.1.1

The City shall sufficiently fund the cost of operations and maintenance sustain the adopted wastewater and reclaimed water systems level of service (LOS) standards.

Policy 3.1.2

The City's wastewater collection, treatment, reclamation, and distribution facilities shall be operated and maintained under the supervision of state certified operators and in accordance with all permits issued by local, state and federal regulatory agencies.

Policy 3.1.3

Industrial discharges to the City's collection system shall receive adequate pretreatment in accordance with city code so that such industrial discharges do not adversely affect the operations of the City's wastewater treatment nor cause any violation of the permits issued by local, state and federal regulatory agencies.

Policy 3.1.4

The City shall continue to implement a comprehensive preventative maintenance program for all equipment in the wastewater system.

Policy 3.1.5

The City shall inspect all wastewater and water reclamation facilities including collection and distribution elements as minimum of once a year to evaluate condition and performance. Deficiencies identified in these or other evaluations shall be investigated

and corrective actions shall be prioritized and implemented according to the objectives and policies of the Capital Improvements Element.

Policy 3.1.6

The City shall conduct annual reclaimed water audits calculating unaccountable water loss to be reported to FDEP and SJRWMD. These audits allow the City to track reclaimed water sources and destinations as well as the detection and corrections of any deficiencies in the system that may be causing water loss.

Policy 3.1.7

The City shall continue to annually inspect all lift stations for the integrity of structures and equipment and shall conduct evaluations of lift station operating conditions.

Policy 3.1.8

The City shall as part of ongoing quality assurance, continue to evaluate and inspect sewer systems which are suspected to be contributing infiltration and inflow using video inspection techniques.

Policy 3.1.9

The City shall update the wastewater collection system master plan every five years at a minimum.

OBJECTIVE 3.2

The City's existing and future wastewater collection and treatment system shall provide the following minimum levels of service (LOS) in the 2019 Wastewater System Master Plan update.

Policy 3.2.1

The minimum level of service for the City's wastewater system, expressed as a per capita flow to be collected, treated, and reclaimed shall be 100 gallons per capita per day. This level of service is an average daily flow based on the population served by the system and the system wide flows generated within the utility service area.

Policy 3.2.2

Peak design flows for the wastewater collection facilities shall range from 1.29 to 1.5 times the average daily flow per the 2019 Wastewater System Master Plan Update. These criteria shall be included in the Land Development Code. Peak hydraulic design flows for wastewater treatment facilities shall be based off the peak hourly flows (PHF) from the master plan update, and shall range from 2.5 to 4.0 PHF as calculated using the minimum level of service stated in Policy 3.2.1.

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OBJECTIVE 3.3

The City shall assign the highest priority to cost- effective, beneficial uses of reclaimed water when developing future effluent disposal plans.

Policy 3.3.1

All future wastewater treatment facilities shall incorporate the necessary levels of treatment that will produce a cost-effective, reclaimed water that is acceptable to local, state and federal regulatory agencies for irrigation on areas which are accessible to the public.

Policy 3.3.2

The City shall continue to require the construction of dual water systems in future developments located within the reclaimed water service area which have access or are anticipated to have access to reclaimed water.

Policy 3.3.3

Where available, the owner of every lot or parcel of land within the City utility service area developed for residential, public, commercial office, industrial, warehousing, or multifamily use shall connect the premises or cause the premises to be connected with the reclaimed water distribution system. The connection charge for reclaimed water service will consist of the tap fee and the fee for installing a backflow prevention device on each potable water service present on the site. A meter fee shall be required for metered connections.

Policy 3.3.4

Within areas not already served by reclaimed water, the City of Apopka shall identify large potential users (i.e., golf courses, parks, recreational areas) and implement sustainable irrigation practices where practicable and financially feasible. Potential sites shall be evaluated independently on a case-by-case basis based on actual conditions.

Policy 3.3.5

The City shall continue to require that new development reuse distribution points be connected to the reclaim water system.

Policy 3.3.6

The City will continue to use the reclaim water conservation rate structure that is reassessed annually.

Policy 3.3.7

The City shall continue to actively promote the use of reclaimed water by educating the public through use of the social media, educational programs at schools and civic organizations, and through other appropriate means.

DRAFT

OBJECTIVE 3.4

The City shall discourage urban sprawl by ensuring that wastewater facilities are in place to accommodate new development, redevelopment, and population growth within the utility service area and maintaining the levels of service that have been adopted by the City.

Policy 3.4.1

The City shall monitor development and will determine improvement needed to provide wastewater service to new development or redevelopment area. Extensions to the wastewater collection and reclaimed water distribution systems shall be conducted in accordance with the appropriate master plan and the Capital Improvements Element.

Policy 3.4.2

The wastewater collection, treatment, and reclamation facilities shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with the impacts of development as required in the City's Concurrency Management System.

Policy 3.4.3

The internal wastewater facilities within future developments and/or redevelopments shall continue to be the responsibility of the applicant seeking a development permit and shall be designed and constructed in accordance with the most current edition of the Land Development Code.

Policy 3.4.4

Development within the City shall connect to the City's wastewater collection system with the special exception of residential properties identified in the Land Development Code.

Policy 3.4.5

The Apopka Land Development Code shall be reviewed annually for sufficiency of the wastewater guidelines and be updated at least every three years to reflect advancements in engineering, products and materials, construction, and other innovations.

Policy 3.4.6

The City will not issue building permits for any new development or redevelopment using septic tanks within the City limits except on an interim basis, not to exceed five years, at the sole discretion of the City.

Policy 3.4.7

Package plants shall not be permitted for any development within the City.

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Policy 3.4.8

Where onsite sewage treatment and disposal systems are permitted, protection of the environment shall be ensured through Florida Department of Health in Orange County standards for onsite sewage treatment and disposal systems; Sec. 381.0065, F.S., and Chapter 64E-6, F.A.C..

DRAFT

STORMWATER MANAGEMENT SUB-ELEMENT

GOAL 4

To manage stormwater through a cost-effective program which will minimize degradation of surface and ground water, preserve natural drainage and wetlands, and prevent flooding.

OBJECTIVE 4.1

The City's existing and future stormwater management facilities shall be provided consistent with the adopted level of service standards in the Land Development Code.

Policy 4.1.1

All new and redevelopment, private and public, shall provide for retention and/or detention of stormwater runoff as set forth in the Land Development Code.

Policy 4.1.2

The level of service standard for flood protection within the City shall be 100-year - 24-hour storm event. The City shall continue to require the finished floor of all habitable structures be constructed at least two feet above the 100-year - 24-hour storm elevation.

Policy 4.1.3

The level of service standard for primary stormwater management facilities within the City shall be the 25-year, 24-hour storm event.

Policy 4.1.4

The level of service standard for storm sewer systems within the City shall be the 10-year storm event.

Policy 4.1.5

The Land Development Code shall provide that no subdivision shall be platted, nor shall construction commence for any multifamily, commercial, industrial, or institutional project until the drainage design providing for the retention and/or detention of stormwater runoff for such project has been approved by the city engineering division.

DRAFT

The design shall meet or exceed design standards and the policies and procedures established by the SJRWMD, FDEP, FDOT, and the design criteria contained therein.

OBJECTIVE 4.2

The City shall restrict development within the 100-year flood plain to those uses that will not adversely affect the capacity of the flood plain to store water.

Policy 4.2.1

The City shall continue to require compensating storage for all flood water displaced by development below the elevation of the 100-year Base Flood Elevation (BFE) flood plain as set by the Federal Emergency Management Agency (FEMA).

Policy 4.2.2

The City shall continue to require the finished floor of all inhabitable structures be located one-foot above the 100-year BFE flood plain as set by the FEMA.

Policy 4.2.3

The City shall require where feasible the use of flood plain as conservation, open space and recreation in order to preserve the natural flood plain and vegetation.

Policy 4.2.4

The City shall promote the conservation and implementation of natural vegetation, especially of native and filtering plants, in flood plain areas for the purpose of storing stormwater runoff.

OBJECTIVE 4.3

The City shall properly operate and maintain drainage facilities within the City in accordance with local, state, and federal regulations.

Policy 4.3.1

The City shall sufficiently fund the cost of operations and maintenance necessary to operate and maintain drainage facilities.

Policy 4.3.2

The City shall maintain neglected private stormwater management facilities and the City's cost of maintenance shall be recovered from the private owner and/or operator of the facilities.

Policy 4.3.3

As a permitee of the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, the City shall continue to conduct annual inspections of public and private stormwater systems, as well as, provide adequate maintenance on publicly maintained stormwater systems.

OBJECTIVE 4.4

The City shall require erosion control practices to protect waterbodies and wetlands from siltation resulting from land that has been cleared for construction.

Policy 4.4.1

The City shall require developers to protect with an adequate barrier, lands that are not to be disturbed. Natural vegetation shall be retained and protected from damage.

Policy 4.4.2

The City shall require that erosion and sediment control practices be used to protect water bodies, water courses, and wetlands from siltation due to runoff from construction activities and/or from lands that have been cleared for construction. All sediment shall be retained on the site of construction.

Policy 4.4.3

The City shall continue its street sweeping program to control the transport of sediments and any other materials by stormwater.

Policy 4.4.4

The City shall maintain waterbody and wetlands protection guidelines found within the Land Development Code.

Policy 4.4.5

The City shall research and utilize best management practices, such as silt fences and sediment basins, to retain sediment on site.

OBJECTIVE 4.5

The City shall expand the beneficial uses of stormwater management areas as parks and other recreational uses per the Land Development Code.

Policy 4.5.1

The City shall encourage innovative planning of stormwater retention/detention areas to include facilities for parks and recreation.

Policy 4.5.2

The City shall encourage the use of wetlands and other unique natural areas in stormwater management plans to ensure their viability and preservation.

OBJECTIVE 4.6

The City shall implement the stormwater facilities projects identified in the Capital Improvements Element.

DRAFT

Policy 4.6.1

The City shall conduct annual inspections in accordance with the NPDES MS4 permit. Any deficiencies identified shall be corrected or corrective measures incorporated into the Capital Improvement Element.

OBJECTIVE 4.7

The City shall expand stormwater management facilities to serve projected new developments and/or redevelopments that meet the levels of service established in the Land Development Code.

Policy 4.7.1

Stormwater management facilities shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with the impacts of development as required in the concurrency management system.

Policy 4.7.2

The internal stormwater management facilities within future developments and/or redevelopments shall be the responsibility of the applicant seeking a development permit and shall be designed and constructed in accordance with the most recent edition of the Land Development Code.

Policy 4.7.3

The City shall not permit the construction of drainage wells for future projects.

Policy 4.7.4

The City shall review the Apopka Land Development Code annually for sufficiency of the stormwater guidelines and be updated at least every three years to reflect advancements in engineering, products and materials, construction, and other innovations.

Policy 4.7.5

The City shall evaluate improvements to its maintenance programs based on the information presented in the Master Stormwater Management Plan, any periodic updates to this plan, and familiarity with this program.

OBJECTIVE 4.8

The City shall create a source of revenue to fund necessary capital improvements to solve existing drainage problems, operations and maintenance costs attributed to the drainage system, and other appropriate costs.

Policy 4.8.1

The City shall continue to use the stormwater utility as authorized by the City Council using the non-ad valorem fee collection method as provided in Section 403.0893, F.S., as the source to fund the capital improvement projects.

DRAFT

Policy 4.8.2

The City shall continue a dedicated funding source, such as the stormwater utility fee, that can be used for planning, implementation and operations and maintenance of projects within the Wekiva Study Area. Additionally, the City will seek alternative funding sources (i.e., grants) and joint partnerships that will result in more efficient construction or an improved level of service.

OBJECTIVE 4.9

The City shall educate the citizens of Apopka on the environmental effects of stormwater runoff, the stormwater management needs of the community, and ways in which the public can help in managing stormwater runoff.

Policy 4.9.1

The City shall continue the public education program on stormwater management through use of the educational programs at schools and civic organizations, utility billing statement, social media, webinars, and newsletters.

OBJECTIVE 4.10

The City recognizes that stormwater management issues transcend corporate and jurisdictional boundaries and that coordination with other local governments may be necessary to provide the required level of service and protection.

Policy 4.10.1

The City shall coordinate with adjoining local governments to address stormwater issues of mutual concern.

DRAFT

NATURAL GROUNDWATER AQUIFER RECHARGE SUB-ELEMENT

GOAL 5

To ensure sufficient quantity and quality of that potable water supply now and in the future, by recharging, maintaining, and protecting the Floridan and surficial aquifers groundwater supply.

OBJECTIVE 5.1

The City shall continue to protect the aquifer by updating and enforcing the Land Development Code and any other State or Local regulations related to aquifer recharge.

Policy 5.1.1

The City shall continue to enforce the Land Development Code's regulations in regards to runoff in new developments unless, it is demonstrated that that post development recharge is equal to or greater than per development recharge per F.A.C..

Policy 5.1.2

The City shall, within 18 months of SJRWMD updating the Regional Water Supply Plan, (or every five years, whichever is shorter), update the Land Development Code with regards to aquifer recharge areas and the groundwater basin.

Policy 5.1.3

The City shall direct incompatible land use away from high recharge areas, including mining as well as industrial and commercial uses with extensive impervious surfaces.

Policy 5.1.4

The City shall use best management practices and performance standards to maximize open space, limit impervious surfaces and turf grass areas, promote protection of natural vegetation, promote the use of pervious parking areas, and treat stormwater to protect water quality.

DRAFT

OBJECTIVE 5.2

The City shall coordinate with other governmental entities regarding groundwater pollution through the establishment or continuation of programs and technical assistance.

Policy 5.2.1

The City shall cooperate with the SJRWMD to prepare a Groundwater Basin Resource Availability Inventory.

Policy 5.2.2

The City shall continue working together in an ongoing effort with SJRWMD to eliminate potential sources of pollution to the aquifers (i.e., improperly installed or malfunctioning septic tanks) by requiring property owners who fail to correct system deficiencies to connect to the wastewater system in a timely manner.

Policy 5.2.3

The City shall only allow the use of new septic tanks within City limits for residential users that meet the requirements listed in the City's Land Development Code. All other uses of septic tanks are prohibited.

Policy 5.2.4

The use of septic tanks within environmentally sensitive lands shall be prohibited.

Policy 5.2.5

The approval for and conditions for the use of septic tanks on an interim basis shall be at the sole discretion of the City as defined in the Land Development Code.

Policy 5.2.6

The City shall require all underground storage tanks to be installed per the City's Land Development Code and Chapters 489 and 376, F.S. so that they are "either elevated or situated upon an impermeable surface, or which is located in an accessible underground area and either elevated or situated upon an impermeable surface therein, in such manner that any leak in such container may be readily detected."

Policy 5.2.7

In order to protect groundwater resources, all new development shall be required to demonstrate that pre- and post-development aquifer recharge shall be at minimum equal, or that post-development recharge shall be greater.

OBJECTIVE 5.3

The quality of the City's groundwater resources shall be maintained at or above state standards.

DRAFT

Policy 5.3.1

The City hereby adopts the FDEP water quality standards and shall cooperate with the FDEP and SJRWMD to monitor groundwater quality and levels on time frames set by those entities.

OBJECTIVE 5.4

The City shall protect the functions of ground water recharge areas through the enforcement of the Land Development Code.

Policy 5.4.1

New development will be required to maintain surface and groundwater flow rates and volumes at pre-development levels so that the natural function of groundwater recharge areas is maintained.

Policy 5.4.2

Substantial redevelopment projects shall comply with the standards for stormwater runoff that apply to new development as defined in the Land Development Code.

Policy 5.4.3

Best management practices (BMPs) shall be used in combination as part of a BMP treatment train to protect water quality and minimize flooding. BMPs shall be researched and the Land Development Code updated to implement recent BMPs.

DRAFT

SOLID WASTE SUB-ELEMENT

GOAL 6

To provide safe and efficient solid waste collection services to accommodate existing and future demands while protecting the natural environment and public health.

OBJECTIVE 6.1

The City shall provide adequate and cost-effective solid waste collection routes, equipment, and manpower to accommodate existing and future demands.

Policy 6.1.1

The City shall maintain a rate structure that is fair to the consumer and which covers the cost of operating the solid waste collection and disposal system. Funds shall be provided by means of user fees and available county, state, and federal funds.

Policy 6.1.2

The City shall use a level of service standard of four pounds per capita per day for residential and 13.7 pounds per capita per day for 1,000 square feet of commercial development to determine the availability of facility capacity for solid waste disposal services (this total includes residential and non-residential generation).

Policy 6.1.3

The City shall coordinate with Orange County to ensure adequate transfer station facilities are provided to accommodate northwest Orange County needs in an efficient and cost-effective manner.

Policy 6.1.4

The City shall provide equipment and manpower necessary to accommodate the collection standard of curbside collection, twice per week, for residential class customers and as needed, available one to seven days per week, to commercial class customers.

OBJECTIVE 6.2

The City shall maintain a recycling rate consistent with the requirements of the Florida State Solid Waste Management Act through the development of cost-effective measures that reduce the amount of waste requiring disposal. Such measures will aim to increase recycling programs and participation.

DRAFT

Policy 6.2.1

The City shall expand the current voluntary residential recycling program and educate residents on recycling benefits and practices through outreach methods such as utility billing statement, social media, webinars, and newsletters.

Policy 6.2.2

The City will continue to cooperate with Orange County and other local municipalities and organizations to develop new recycling programs and to pursue new technologies for collecting and processing recycled material.

OBJECTIVE 6.3

The City shall protect the health, safety, and welfare of the public from the harmful effects of hazardous wastes for both humans and the environment, by instituting a robust education program and by being in full cooperation with the Florida Department of Environmental Protection (FDEP) and the Orange County Environmental Protection Departments (OCEPD) on the regulation and disposal of hazardous wastes.

Policy 6.3.1

The City will continue to coordinate with the City's Fire Department and Orange County, utilizing their emergency response plans, to handle any accidents involving hazardous wastes.

Policy 6.3.2

The City shall continue to coordinate with OCEPD to hold household hazardous waste round up programs in the Apopka area and to educate our citizens in where they can dispose of these items between events.

Policy 6.3.3

The City shall distribute educational material to City solid waste customers regarding the proper disposal and recycling of hazardous wastes. Education will follow FDEP guidelines and be accomplished through outreach methods including City website, utility billing statement, social media, webinars, and newsletters.

Policy 6.3.4

The Land Development Code shall require evidence of compliance with Orange County Small Quantity Generator Notification Program prior to issuance of an occupational license.

DRAFT

CONSERVATION ELEMENT

Conserving and protecting natural resources for future generations

CONSERVATION ELEMENT

GOAL 1

Conserve and protect the City of Apopka's natural resources, ensure quality water resources, and minimize threat to wetlands.

OBJECTIVE 1.1

The City shall conserve potable water resources and ensure the quality of surface water and ground water meet the state standards as detailed in Florida Administrative Code (F.A.C.).

Policy 1.1.1

The City shall continue to require that stormwater treatment facilities be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use in accordance with the classifications established in F.A.C.

Policy 1.1.2

Any clearing operation shall be required to ensure surface water quality will not be degraded by such actions and obtain a permit from the City. Each applicant adjacent to water bodies must address and submit a plan pursuant to requirements established in the City's Land Development Code.

Policy 1.1.3

Development within the City shall connect to the City's wastewater collection system except for residential lots meeting the conditions regulated in the Land Development Code where a septic tank is permissible. Development in environmentally sensitive areas shall be required to connect to the City's sanitary sewer system.

Policy 1.1.4

The City shall cooperate with the St. Johns River Water Management District (SJRWMD) to educate and notify City water customers of water restrictions imposed during SJRWMD declared water shortages. The City shall notify SJRWMD of any known violations of water restrictions.

Policy 1.1.5
The City shall continue to incorporate development restrictions directed toward preserving natural systems from the harmful impacts of hazardous waste. The City shall continue to work with appropriate state, regional, and county agencies in developing an improved areawide solid waste management program which includes more innovative solid and hazardous waste management technologies to effectively manage hazardous waste.

Policy 1.1.6
The City shall conserve water resources as detailed in the Potable Water Sub-Element by using appropriate water conservation techniques, implementing the Emergency Water Conservation Plan submitted to SJRWMD, and educating residents in water conservation practices.

OBJECTIVE 1.2
The City shall protect its natural resources including wetlands, upland buffers, floodplain storage, and identified threatened and endangered species and species of special concern.

Policy 1.2.1
The City shall protect habitat for semi-aquatic or water-dependent terrestrial species of wildlife through the maintenance of native upland vegetation consistent with SJRWMD policy.

Policy 1.2.2
Activities that degrade wetlands must be mitigated within the same watershed by creating or preserving wetlands of equal or greater value, following SJRWMD and FDEP regulations. The City encourages balanced solutions that protect wetlands while supporting sustainable development and may require on-site protection or deny proposals that cause significant harm to wetlands.

Policy 1.2.3
The City shall work with developers to prioritize and protect wetlands and their functionality and environmentally sensitive areas within and adjacent to the site during the development process.

Policy 1.2.4
Except as expressly provided by this Plan, no development activity shall be undertaken in or directly adjacent to any environmentally sensitive areas. Wetland and shoreline setbacks shall continue to be regulated in the Land Development Code.

Policy 1.2.5

The City shall continue to require confirmation from state agencies of stated wetland boundaries, as well as any authorization of any proposed encroachment prior to authorization of construction for any approved development plan.

Policy 1.2.6

The City shall continue to adopt regulations which protect and conserve wetlands consistent with state law. Such regulations shall include criteria for identifying the significance of wetlands. The regulations shall also identify to what extent the conservation area is allowed to be altered and the mitigation requirements for unavoidable loss. Environmentally sensitive lands shall mean Class I Conservation Areas where Conservation Areas are classified within three (3) classes:

> Class I Conservation Areas – Wetland and surface waters that have a hydrological connection to natural surface water bodies; or a lake littoral zone; or are large isolated uninterrupted wetlands 40 acres or larger; or provide critical habitat for federal and/or state listed threatened or endangered species.
>
> Class II Conservation Areas – Isolated or formerly isolated wetlands and surface waters which by way of man's activities have been directly connected to other surface water drainage, and are greater than or equal to 5 acres; and do not otherwise qualify as Class I conservation areas.
>
> Class III Conservation Areas – Isolated wetlands and surface waters less than 5 acres which do not otherwise qualify as Class I or Class II conservation areas.

Policy 1.2.7

Conservation areas as defined by Policy 1.2.6 and their functions shall be protected and conserved by restricting direct and indirect development impacts as regulated in the Land Development Code.

Policy 1.2.8

Upland buffers are considered an integral component of a functioning wetland and shall be afforded the same types and levels of protection as the wetland itself as regulated in the Land Development Code.

Policy 1.2.9

Exceptions to Policies 1.2.7 and 1.2.8 above involving buffers and isolated wetlands require an environmental assessment as regulated in the Land Development Code.

Policy 1.2.10

The City shall protect identified wetland areas and existing wildlife habitat through the

control and maintenance of invasive non-native (exotic) plants on City-owned environmentally sensitive lands.

Policy 1.2.11

The City shall continue to seek innovative partnerships and opportunities to preserve and conserve its natural resources that ensure multiple and compatible uses of land while providing just compensation to the landowner.

Policy 1.2.12

The City shall revise, adopt, and implement land development codes to require site plan review as recommended by the development review committee where a development project is directly contiguous to wetlands and involves disturbances of wetlands so as to ensure that no wetland is disturbed except in accordance with the following standards:

a. No wetland may be disturbed unless the City Council makes a finding (supported by the site plan application and documentation) that no reasonable alternative (such as clustering development on upland portions of the site) is available to avoid a taking, and that the nature and degree of disturbance is the minimum possible to achieve development that is otherwise compliant with the goals, objectives, and policies of the Comprehensive Plan.

b. Compensating storage with requirements from the City Engineer may be required.

c. All rules of the FDEP and SJRWMD for jurisdictional wetlands shall be met.

d. Pre-development/pre-disturbance water flow and quality shall be maintained or improved on site.

Policy 1.2.13

The City shall cooperate with the FDEP, SJRWMD, East Central Florida Regional Planning Council, and Army Corps of Engineers to comply with federal and state dredge and fill permitting process.

Policy 1.2.14

The City will prohibit stormwater discharge from development from discharging into wetlands, sinkholes, bays or rivers without prior treatment that will protect existing water quality.

Policy 1.2.15

The City shall use the best available data to identify and protect recharge areas and sensitive upland habitats, including wetlands, Longleaf Pine, Sand Hill, Sand Pine, Xeric

Oak Scrub, Hardwood Forested Uplands, Mixed Hardwood-Coniferous, and Brushland habitats. These provisions shall apply to all land use amendments.

Policy 1.2.16
The City shall prohibit new development in wetlands to protect natural resources.

OBJECTIVE 1.3
Where listed species are found, the City shall maintain necessary habitat for the protection of such species, either through preservation, mitigation or relocation.

Policy 1.3.1
Development habitat studies based on the evaluation criteria regulated in the Land Development Code shall be required for all developments of more than 10 acres.

Policy 1.3.2
If the habitat survey indicates the presence of listed species, the Florida Fish & Wildlife Conservation Commission (FWC) will be notified and allowed 30 days to submit comments or recommendations.

Policy 1.3.3
The City shall coordinate with the FWC on an as needed basis for technical assistance to ensure protection regulations for listed species and habitats are concurrent with updated laws.

Policy 1.3.4
The City shall require development which destroys native trees to replace cleared trees with similar species and maturity levels on a one-to-one ratio within practical limitations, for all areas of the City.

Policy 1.3.5
The City shall require development to preserve native vegetation and retain tree canopy coverage as regulated in the Land Development Code.

OBJECTIVE 1.4
The natural functions of the 100-year floodplain will be protected in order to ensure the natural flood storage and carrying capacity.

Policy 1.4.1
The City shall continue to require compensating storage for all flood water displaced by development below the elevation of the base 100-year flood.

Policy 1.4.2
The City shall require where feasible the use of floodplains as conservation, open space and recreation in order to preserve the natural flood plain and vegetation.

Policy 1.4.3
The City shall prohibit the clearing of native vegetation within the 100-year floodplain in accordance with the Land Development Code.

OBJECTIVE 1.5
The City shall encourage practices that improve air quality which meet or exceed minimum air quality standards as set forth in the Clean Air Act and Title 40 of the Code of Federal Regulation.

Policy 1.5.1
The City shall require the planting of native species of trees and vegetation to help reduce the amount of carbon dioxide in the air.

Policy 1.5.2
The City shall maintain requirements within the Land Development Code that promote innovative multi-modal transportation systems and new vehicle technologies to reduce vehicle emissions.

Policy 1.5.3
The City shall encourage citizens and local businesses to utilize green building standards and practices that support sustainability and resiliency through Leadership in Energy and Environmental Design (LEED) certification or a comparable green building rating system.

OBJECTIVE 1.6
The City shall regulate the operation, maintenance, and reclamation of mining facilities to ensure protection of natural resources.

Policy 1.6.1
Mining shall be defined as the removal of resources from their location, so as to make them more suitable for commercial, industrial, or construction use, but not including excavation for the sole purpose of aiding on-site farming or on-site construction, or the process of prospecting or investigating for resources. Mining shall be permitted, when complete reclamation is ensured, subject to regulation by the Florida Department of Environmental Protection (DEP) and the Land Development Code.

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Policy 1.6.2
Peat mining shall be permitted only if it is shown that there are quantifiable benefits to the lake or wetland ecosystem subject to regulation by the FDEP and Land Development Code.

Policy 1.6.3
Any party wishing to extract mineral resources shall be required to submit a reclamation plan and proof of financial responsibility. Reclamation plans must be determined to be consistent with the reclamation standards outlined in the Florida Administrative Code (F.A.C.) and by FDEP

OBJECTIVE 1.7
The City shall maintain the Wekiva River Hydrologic Basin standards and design criteria as detailed in F.A.C within the Wekiva River Protection Area.

Policy 1.7.1
The alteration or filling of wetlands within the Wekiva River Protection Area shall be prohibited.

Policy 1.7.2
The City shall permit clustering of residential development within the Wekiva River Protection Area if it promotes protection of environmentally sensitive areas.

Policy 1.7.3
The subdivisions of land which interfere with the required setbacks of protection zones pursuant to Section 373.415, F.S. shall be prohibited.

Policy 1.7.4
Lands within the Wekiva River Protection Area shall be evaluated for transfer of development right eligibility as needed to preserve and prevent development in these environmentally sensitive lands.

Policy 1.7.5
Septic tanks shall be prohibited within the Wekiva River Protection Area.

Policy 1.7.6
The density and intensity of permitted development shall be clustered or concentrated on those portions of the parcel or parcels which are furthest from the surface waters and wetlands of the Wekiva River system.

Policy 1.7.7
The clearing of native vegetation within the 100-year flood plain shall be prohibited within the Wekiva River Protection Area.

Policy 1.7.8
The City shall ensure the preservation of sufficient habitat for feeding, nesting, roosting, and resting so as to maintain viable populations of species designated pursuant to rules 39-27.003, 39-27.004, and 39-27.005, Florida Administrative Code, within the Wekiva River Protection Area.

OBJECTIVE 1.8
The City shall protect the most sensitive resources within high recharge areas and establish programs to educate the public about how to protect them.

Policy 1.8.1
The City will utilize, when possible, acquisition funding programs such as the Florida Forever Program, Florida Community Trust, Rural and Family Lands Protection Program and others to acquire fee simple or less-than-fee ownership through conservation easements on land within the delineated high recharge area that has been identified as a critical or sensitive resource.

Policy 1.8.2
The City will utilize, when feasible, innovative approaches to protect sensitive resources, such as the transfer of development rights, performance zoning, open space zoning, on-site density transfer and other techniques to maximize the establishment of open space areas.

Policy 1.8.3
All new development proposals which are 10 acres or greater in site area shall be required to include a habitat analysis on the sensitive natural habitats that include Longleaf Pine, Sand Hill, Sand Pine, and Xeric Oak Scrub.

Policy 1.8.4
The City shall conserve and protect Florida's ground and surface waters and natural resources by implementing guidelines for managing existing and future lawns and landscapes at all City facilities following the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Florida-Friendly Landscaping, FDEP, and SJRWMD principles and Best Management Practices.

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Policy 1.8.5

The City shall require that all golf courses implement FDEP Best Management Practices (BMPs) for the Enhancement of Environmental Quality on Golf Courses for management, maintenance, and environmental monitoring. All new golf courses shall follow FDEP BMPs for the Enhancement of Environmental Quality on Golf Courses for siting, design, and construction.

Policy 1.8.6

The City shall coordinate with the SJRWMD, Orange County, and other appropriate agencies to develop and maintain programs to educate and encourage homeowners and private land owners to use best management practices to protect natural habitat and to protect water quality, especially on land within the mapped recharge areas of first magnitude springs.

Policy 1.8.7

The City shall make available to local residential, agricultural, and commercial land owners and developers, information related to Best Management Practices that reduce erosion and minimize the use of water, fertilizers, herbicides and pesticides.

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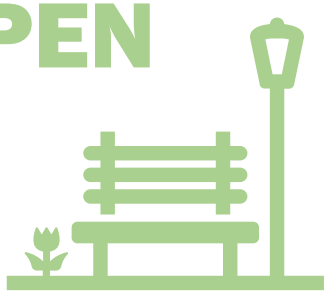
RECREATION AND OPEN SPACE ELEMENT

Providing and preserving quality, innovative parks

RECREATION AND OPEN SPACE ELEMENT



GOAL 1

To provide and maintain sufficient parks, recreational facilities and open space areas to meet the needs of existing and projected populations of the City of Apopka.

OBJECTIVE 1.1

The City shall adopt and maintain level of service standards to ensure that a comprehensive system of parks, recreation, and open space areas are available and accessible for all residents.

Open space refers to accessible areas designed for active or passive use, enhancing the aesthetic and recreational value of a development.

The City shall require open space that prioritize usability for residents and the public.

- Buffers are required but do not count toward the open space requirement. Stormwater management areas may count toward the requirement if amenitized, based on the standards in the Land Development Code.

Policy 1.1.1

The City hereby adopts the following level of service standard for park land: residential areas greater than XXX units per acres are within a 10-minute walk of a park. .

Policy 1.1.2

To ensure access to all City parks, recreation facilities, and open space areas for all residents, including disabled residents, the City will periodically review the inventory of recreational facilities, as needed, for their accessibility and connectivity with the public, specifically residential land uses.

Policy 1.1.3

The City shall coordinate with appropriate state and regional land acquisition and wildlife agencies to identify natural area greenways and wildlife corridors that will link existing public parks and preserves areas for the purposes of aquifer recharge, conservation and habitat preservation.

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Policy 1.1.4
Neighborhood advisory committees and citizen groups will be engaged as needed to help inform decisions for acquisition of park land and the development of recreation facilities.

Policy 1.1.5
Strive to provide non-motorized access at all City-owned facilities that are on or near a lake shore within Apopka to ensure that public fresh water resources are accessible to all residents.

Policy 1.1.6
Regularly review park land and recreational facility needs to meet current, as well as, future resident recreational needs by including an analysis of population growth projections in the review process.

Policy 1.1.7
Modify land development regulations as needed to ensure that recreation impact fees for developers are based on the latest level of service standard.

Policy 1.1.8
Residential developments around public lakes are required to provide public streets, sidewalks, accessible parks and open spaces around those lakes.

Policy 1.1.9
The City will strive to explore possibilities to link existing recreational facilities to future parks through the development of pedestrian and bicycle facilities.

OBJECTIVE 1.2
to the City shall plan and finance capital improvements for parks, recreation facilities, and open spaces to maintain the adopted level of service standard and to employ new, innovative park redevelopment strategies.

Policy 1.2.1
Develop a schedule of capital improvements for City parks via the City's annual budget in order to maintain existing recreational facilities. This will include the repair and replacement of park facilities when necessary.

Policy 1.2.2
Through the City's annual budget, develop a schedule of capital improvements to construct new parks and recreational facilities as they are needed.

Policy 1.2.3
Identify and monitor all potential funding opportunities, both public and private, as well as partnerships that can facilitate park improvements or new developments.

Policy 1.2.4
Strive to maintain or develop new partnerships that can help facilitate new park improvements, developments, or open spaces.

Policy 1.2.5
Strive to assess and implement new planning and design strategies for City park and recreational spaces, such as those related to:

- Resilience: green infrastructure or low-impact development to enhance stormwater management and reduce risks to flooding
- Social Equity: Park amenities that promote community engagement, support social gathering, and help combat inequitable exposure to heat
- Safety: Consider implementing best practices observed in principles such as Crime Prevention Through Environmental Design (CPTED) and Safe Routes to School (SRTS).

Policy 1.2.6
The City shall consider developing a Recreation Master Plan by 2030 that will address the connection between existing and proposed park, as well as, between existing parks and residential neighborhoods, workplaces, and centers of commerce; address recreational needs of existing and proposed parks; and address safety concerns at parks and potential design solutions through CPTED.

OBJECTIVE 1.3
Identify and preserve current and potential park land, open space, and natural reservation areas.

Policy 1.3.1
As part of its regular process for designating conservation areas on the City's Future Land Use Map, the City will identify all potential parkland and open spaces that can be used for future recreational use.

Policy 1.3.2
Maintain a list of potential park and open space opportunities in the City, as they arise.

Policy 1.3.3
To ensure the equitable provision of green and open spaces, the City will strive to preserve and maintain, through effective landscaping practices, these spaces in all proposed development plans.

Policy 1.3.4
To ensure that current and future residents have the ability to enjoy and appreciate local natural resources, the City will assess and employ effective landscaping and

sustainability practices to preserve and enhance the aesthetic, accessibility, and safety of public open spaces and green spaces.

Policy 1.3.5

The City shall require developers to provide a proportionate share of open space to meet resident needs and protect environmentally sensitive areas. Planned developments, mixed-use developments, and residential projects must ensure adequate vehicular, pedestrian, and bicycle access to on-site and adjacent park spaces, and, where applicable, connect to nearby trails and greenways.

OBJECTIVE 1.4

Coordinate with external government agencies and private sector agencies as needed to provide and preserve an equitable supply of open space and recreation facilities.

Policy 1.4.1

The City will continue to work jointly with Orange County to coordinate the planning, management and optimal use of recreation and open space areas within the urban planning area.

Policy 1.4.2

The City will continue to coordinate the provision of recreational facilities by the private sector by including an inventory or accessible, private facilities in the analysis of needed facilities.

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CAPITAL IMPROVEMENTS ELEMENT

Ensuring adequate public facilities and services to meet future development demands

CAPITAL IMPROVEMENTS ELEMENT

GOAL 1

Ensure adequate public facilities and services are provided within the City jurisdiction, in keeping with the goals, objectives and policies contained within the plan, in a timely and efficient manner and appropriate locations as necessary to correct existing deficiencies in level of service for potable water, sanitary sewer, solid waste, multimodal facilities, public safety, and parks and recreation and to meet future development demands.

OBJECTIVE 1.1

The City shall schedule and provide capital improvements to alleviate existing deficiencies, accommodate desired future growth, and update outdated or failing facilities to ensure that adopted level of service standards for public facilities will be achieved and maintained for a minimum 5-year period.

Policy 1.1.1

Capital projects included in the Five-Year Schedule of Capital Improvements (Capital Improvements Program- CIP) shall be consistent with goals, objectives and policies in each element of the comprehensive plan and with other plans applicable to City facilities that are necessary to maintain adopted LOS standards, including increasing the capacity or efficiency of existing facilities and/or replacing failing facilities.

Policy 1.1.2

The City shall prepare an annual Capital Improvements Program (CIP), comprised of physical improvements with a minimum cost of $50,000 and minimum useful life of five years, to guide the timing and location of capital expenditures.

Policy 1.1.3

In order to maintain adopted LOS standards, the City of Apopka shall coordinate land use decisions and available or projected fiscal resources through the annual adoption of a Five-Year Schedule of Capital Improvements. The capital improvement program shall be adopted and incorporated into the annual City budget and utilized to monitor the implementation of the Capital Improvements Element (CIE).

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Policy 1.1.4

The Capital Improvement Program (CIP) will be prepared and reviewed annually by a committee consisting of at least one staff representative from the following departments: Public Services, Community Development, Police, Fire and Finance. The CIP shall be reviewed and adopted by the City Council by ordinance. The CIP shall be transmitted annually to the Florida Department of Economic Opportunity through ordinance.

Policy 1.1.5

The City shall evaluate all new capital facility proposals based on the following criteria in the order shown below and using the internal scoring processes depending upon funding availability and mechanisms:

1. an immediate hazard to public health or safety,
2. correction of deficiencies not previously identified,
3. consistency with the adopted Comprehensive Plan,
4. financial feasibility and local budget impact,
5. support of community redevelopment area,
6. support of new development within the corporate City limits or the utility service area as depicted on Potable Water and Sewer Service Area Maps of the Infrastructure Element,
7. consistency with plans of state agencies and surrounding jurisdictions, and
8. promotes the sustainability goals of City to reduce municipal carbon footprint/Greenhouse Gas Emissions.

Policy 1.1.6

The City shall plan and schedule the correction of any existing deficiencies within one year of identification of the problem through CIP updates.

Policy 1.1.7

Revenue sources identified in the CIE shall provide for capital improvement expenditures and efforts shall be made to secure grants to offset these expenses.

Policy 1.1.8

The City shall plan and maintain all its assets at a level adequate to protect the city's capital investment, to minimize future maintenance and replacement costs, and to reduce future climate vulnerabilities.

Policy 1.1.9

The City shall meet or exceed the following public safety level of service standards:

Police Level of Service (LOS): The City will maintain a level of service consistent with the state average for police departments, while taking into account the City's crime rate, geographic size, population growth, and other factors that may

influence the department's ability to provide effective and efficient service to our community.

Fire LOS: Achieve 1.8 fire fighters per thousand residents with a benchmark of 2 fire fighters per thousand residents. The City will stay consistent with National Fire Protection Association (NFPA) level of service standards with an annual review of factors including response time, population, number of fire stations, apparatus, and infrastructure.

OBJECTIVE 1.2

The City will at least annually establish financial indicators in order to ensure the ability to fund the City's share of needed improvements is within acceptable limits.

Policy 1.2.1

In no case shall the City incur debt for those capital facilities which exceed the capacity to issue bonds or other financial mechanisms as determined in part by the indicators described below, which shall be monitored

1. The ratio of total debt service to total revenue shall not exceed 1:5.23.
2. The ratio of total capital indebtedness to property tax shall not exceed 1:250.

Policy 1.2.2

The City's adopted Five-Year Schedule of Capital Improvements (CIP) is included as *Appendix CIE* of this element, which will be updated on an annual basis.

Policy 1.2.3

The City adopts, by reference, the Metroplan Orlando 2022-2026 Transportation Improvement Program (TIP) adopted annually by MetroPlan Orlando that identifies funding for county and state roads and multi-modal transportation projects to address present or expected deficiencies.

Policy 1.2.4

The City adopts by reference the Five-Year Facilities Work Plan FY 2021-2022 and the Ten-Year Facilities Work Plan FY 2021-2022 as formally adopted by Orange County Public Schools.

Policy 1.2.5

The City will seek and apply for federal, state, county, or private funding opportunities or joint funding opportunities with other jurisdictions to support capital and operational programs as applicable.

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OBJECTIVE 1.3

The City shall maintain the development permit concurrency management system which ensures that minimum levels of service standards are maintained.

Policy 1.3.1

Adhere to the adopted level of service standards established in the following elements and sub-elements:

- Transportation Element - Ensure consistency with Table TE-7 and TE-8.
- Potable Water Sub-Element - Ensure consistency with Policies 2.2.1 and 2.2.2.
- Sanitary Sewer Sub-Element - Ensure consistency with Policy 3.2.1.
- Stormwater Sub-Element - Ensure consistency with Policies 4.1.2,4.1.3, and 4.1.4.
- Solid Waste Sub-Element - Ensure consistency with Policy 6.1.2.
- Recreation and Open Space Element - Ensure consistency with Policy 1.1.1

Policy 1.3.2

The City of Apopka will continue to implement the concurrency management system which includes a determination of compliance with the level of service standards prior to the initiation of the permitting process.

1. For potable water supplies and facilities, sewer, solid waste, and drainage, at a minimum, the following standards will satisfy the concurrency requirements:
   a) The necessary facilities and services are in place at the time a development permit is issued; or
   b) A development permit is issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or
   c) The necessary facilities are under construction at the time a permit is issued; or
   d) The necessary facilities and services are guaranteed in an enforceable development agreement that may include, but is not limited to, development agreements pursuant to Section 163.3220, F.S., or an agreement or development order issued pursuant to Chapter 380, F.S.. The agreement must guarantee that the necessary facilities and services will be in place when the impacts of the development occur.

2. With respect to potable water, the Concurrency Management System will also require consultation with all applicable water suppliers, including internal coordination within the City, prior to approval of a building permit, to determine if adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy or functional equivalent.

3. For parks and recreation, the concurrency requirement shall be met by complying

with the above standards, or by ensuring that the following standards will be met:

a) At the time the development permit is issued, the necessary facilities and services are the subject of a binding executed contract which provides for the commencement of the actual construction of the required facilities or the provision of services within one year of the issuance of the development permit; or
b) The necessary facilities and services are guaranteed in an enforceable development agreement which requires the commencement of the actual construction of the facilities or the provision of services within one year of the issuance of the applicable development permit. An enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, Florida Statutes, or an agreement or development order issued pursuant to Chapter 380, Florida Statutes.

Policy 1.3.3

Concurrency determination shall be made prior to issuance of a final development order which shall be defined as the last order or approval in the City's development permit process as defined or as otherwise required by State Statutes, the interlocal agreement or policies of the City's comprehensive plan. The City shall deny any development proposals in which concurrency does not exist to support the development; and agreements cannot be made to mitigate these impacts.

Policy 1.3.4

Projects which have received a final development order must initiate construction within twelve months and be at least substantially completed within thirty-six months unless there is an executed developer's agreement which provides otherwise in order to maintain assigned concurrency determination. Failure to do so will result in the loss of assigned concurrency determination and development order. The concurrency determination process will be required to be re-initiated and a new development order will be required.

Policy 1.3.5

Require a proposed development to avoid and/or mitigate those identified impacts which negatively affect an adjacent local government's adopted level of service standards.

OBJECTIVE 1.4

The City shall require all development to bear a fair, equitable and proportionate share of facility improvements required to maintain the adopted minimum level of service standards.

Policy 1.4.1

All new development and redevelopment will be assessed a pro rata share of the costs necessary to ensure the public facility improvements generated are available at the time

the development impacts occur, including consistency with the City's Transportation Proportionate Fair Share Ordinance.

Policy 1.4.2

The City will accept dedications, or construction in lieu of, as an alternative to the payment of all, or a portion of any, required fees provided there is an executed developer's agreement.

Policy 1.4.3

The City shall evaluate impact fees, the need for additional fees, and the use of mandatory dedications or fees every five years, at a minimum, to ensure the rates are consistent with the required construction costs for public facility needs generated by new development. Such new fees may require review by an ad-hoc citizens' advisory committee and at least one public hearing by the local planning agency before the additional fees are adopted by the city.

Policy 1.4.4

The City shall continue to use the stormwater utility as authorized by the City Council using the non-ad valorem fee collection method, as provided in Section 403.0893, F.S., as the source to fund stormwater capital improvement projects.

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INTERGOVERNMENTAL COORDINATION ELEMENT

Supporting intergovernmental collaboration and long-lasting partnerships

INTERGOVERNMENTAL COORDINATION ELEMENT

GOAL 1

The City of Apopka will continue to coordinate and execute agreements as needed with neighboring local governments to foster growth, effective delivery of services to both residential and commercial spaces, and enhance land use and land use compatibility between the City and adjacent local governments.

OBJECTIVE 1.1

Facilitate increased intergovernmental coordination in order to achieve the goals, objectives and policies of the Comprehensive Plan, further the appropriate goals and policies of the State Comprehensive Plan, and maintain consistency with the East Central Florida Regional Planning Council (ECFRPC) Strategic Regional Policy Plan (SRPP).

Policy 1.1.1

Amendments to the Apopka Comprehensive Plan will include an evaluation of effects it may have on the appropriate policies of the State Comprehensive Plan and the SRPP.

Policy 1.1.2

The City shall annually review the JPA and the Land Development Code (LDC) to ensure applicability of current and future needs in relation to the requirements of the Joint Planning Agreement.

Policy 1.1.3

The City will coordinate with Orange County to provide for provisions establishing adjacent land use compatibility, boundaries of future annexations, and a dispute resolution mechanism.

Policy 1.1.4

The City of Apopka will strive to assess and implement new mechanisms as needed to improve how it develops, manages, and amends its interlocal agreements to improve coordination with respective governments.

Policy 1.1.5
Should it become necessary, the City will utilize all possible enforcement mechanisms, including but not limited to, formal and informal dispute resolution mechanisms, litigation, or the administrative assistance of appropriate state agencies to achieve the agreements described in this plan.

Policy 1.1.6
The City of Apopka shall continually review the implementation of its LDC and public facilities systems to ensure that the appropriate policies of the State Comprehensive Plan and the SRPP are implemented.

Policy 1.1.7
Coordinate with Orange County, Seminole County, and Lake County, through interlocal agreements, if necessary, to improve the notification process regarding new development proposals located within one mile of the common boundary that may impact the other jurisdiction's provision of public facilities.

Policy 1.1.8
Continue to coordinate with Orange County to define procedures for annexation and to ensure that upon approval of an annexation ordinance, the City's comprehensive plan and LDC apply to the annexed property.

Policy 1.1.9
The City shall pursue an Interlocal Service Boundary Agreement (ISBA) to allow for annexations within the JPA in an effort to reduce existing and future enclaves within the JPA.

OBJECTIVE 1.2
The City shall continue to coordinate with Orange County Public Schools (OCPS) to ensure the provision of infrastructure needed to accommodate new schools and that sufficient school capacity and associated concurrency agreements are available for new development proposals.

Policy 1.2.1
The City will review and coordinate with OCPS on development plans for the expansion of existing schools or the development of new school facilities within the City to assess, identify, and address any potential infrastructural or community-based issues.

Policy 1.2.2
For plans that involve the development or expansion of school facilities, the City will coordinate with OCPS to review the plan for potential impacts on LOS standards to ensure that the plan is consistent with the City's interlocal agreement with OCPS.

Policy 1.2.3
The City and OCPS will continue working together to publicize its projects and activities to inform residents of the different services available to them, such as joint use recreational facilities.

Policy 1.2.4
The City will coordinate with OCPS regarding the location of schools near or adjacent to public facilities, such as parks, libraries, public transportation, community centers, etc.

Policy 1.2.5
To assist in the development of student enrollment projections, the City will continue to provide data on projected population growth, development trends, and demand for new school facilities in the City to OCPS.

Policy 1.2.6
Encourage the inclusion of a OCPS representative as an ex-officio member on the Local Planning Agency to comment on proposals that may potentially impact local schools. Similarly, encourage the designation of a representative of the City to serve on the OCPS Technical Planning Committee.

Policy 1.2.7
The City and OCPS will work to assess and identify potential opportunities to jointly plan, fund, and provide parks and recreation facilities to residents, such as joint-use parks at City schools.

OBJECTIVE 1.3
The City of Apopka shall continue to coordinate with state water resource agencies to provide enhanced protection of water resources in the area.

Policy 1.3.1
The City will ensure that SJRWMD is provided an opportunity to comment on proposed developments that may have substantial implications for local water resources in the land development review process.

Policy 1.3.2
The City will participate in the development of water supply development-related initiatives facilitated by SJRWMD that may have implications for the City.

Policy 1.3.3
To protect its potable water service, the City will coordinate with adjacent local governments as needed to continue enforcing its wellhead protection zone, consisting of a 200' radius from the wellhead, in which potentially high-risk land uses are prohibited.

Policy 1.3.4
The City will strive to protect public potable water wellfields from incompatible land uses and all other potential threats to water quality.

Policy 1.3.5
The City, in cooperation with Orange County, will continue to implement and annually reevaluate its Joint Planning Area (JPA) Agreement, which includes an intent to protect the Wekiva River and ensure its effectiveness for both jurisdictions.

Policy 1.3.6
The City shall regularly review its LDC to ensure compliance with the appropriate provisions of the Wekiva River Protection Act applicable to the City.

Policy 1.3.7
The City will look for support and assistance from external agencies, such as the Department of Health and the Wekiva River Basin Commission, as needed to facilitate the implementation of the Wekiva Parkway and Protection Act of 2004 (as amended).

Policy 1.3.8
The City shall support and coordinate with the ECFRPC, the SJRWMD, and other agencies and neighboring local governments as needed to address potential impacts of proposed redevelopment or any new development near Lake Apopka, included but not limited to new parks, roads, or trails.

Policy 1.3.9
The City shall ensure its reuse water policies, aquifer recharge, and stormwater management projects are consistent with existing plans established by the SJRWMD and any other significant policy frameworks that the City deems appropriate.

Policy 1.3.10
The City will coordinate appropriate activities with the FDEP, SJRWMD, and Orange County as needed to effectively manage the preservation and protection of surface and ground water quality, quantity, and aquifer recharge areas.

Policy 1.3.11
The City, in cooperation with the County, FDEP, and SJRWMD, will evaluate and promote, if viable, the establishment of a regional wastewater program that will decrease the prevalence of septic systems, minimize groundwater and surface water contamination, maximize the reuse of reclaimed water, and reduce future ground water demand through beneficial reuse.

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OBJECTIVE 1.4

The City shall continue to participate in and implement agreements with Orange County and other adjacent local governments as needed to facilitate the delivery of infrastructure services to residents, including roadways, water reuse, potable water services, solid waste disposal, and sewer services.

Policy 1.4.1

The City shall continue to participate in the Interlocal Solid Waste Agreement with Orange County.

Policy 1.4.2

The City shall utilize the Joint Planning Agreement as a guide for the review of projects and to assist in coordination between Apopka and Orange County which include the following items:

a. Joint Planning Area;
b. Utilities – potable water, sewer, and stormwater;
c. Kelly Park Interchange Land Use Plan;
d. Planning and development within the Joint Planning Area;
e. Public Services; and
f. Transportation facilities.

Policy 1.4.3

The City of Apopka shall continue to implement its Utility Service Area Agreement with Orange County for water and sewer service provision. The City will function as the primary provider for potable water service, reclaimed water and wastewater services within the City and within areas of unincorporated Orange County that lie within the City's utility service areas. The County will continue to serve potable water service, reclaimed water and wastewater services within the Adjacent Territorial Area even after they are annexed into the City of Apopka, as defined in the City of Apopka/ Orange County Amended and Restated Water, Wastewater and Reclaimed Water Territorial Agreement.

Policy 1.4.4

Continue to pursue new joint planning opportunities with adjacent local governments as needed to coordinate the provision of utilities to avoid duplication of facilities and services.

Policy 1.4.5

The City will continue to collaborate with other local governments, primarily through participation with MetroPlan Orlando and the Central Florida Regional Transportation Authority, to secure additional sources of funding and coordinate facilities' improvements for local transportation needs.

Policy 1.4.6
The City shall coordinate with Orange County, MetroPlan Orlando and the Florida Department of Transportation (FDOT) to monitor operating conditions of major roadways in and around the City and implement projects and strategies that enhance roadway conditions and improve regional connectivity where feasible.

Policy 1.4.7
The City of Apopka shall maintain and establish coordination agreements to coordinate with adjacent jurisdictions to address issues regarding infrastructure and transportation impacts of new development that affects more than one jurisdiction.

Policy 1.4.8
The City shall coordinate with the SJRWMD, FDEP, Federal Emergency Management Agency (FEMA) and other appropriate state and federal agencies that have jurisdictional authority in the City to ensure that water quality, stormwater drainage and flood control measures are addressed with impacts of development.

Policy 1.4.9
The City shall prioritize in the Capital Improvements Element any significant recommendations from the adopted Master Stormwater Management Plan prepared in collaboration with multiple jurisdictions and the SJRWMD.

Policy 1.4.10
The City will strive to coordinate with adjacent jurisdictions and external agencies to secure funding and facilitate plans, programs, and projects that enhance City infrastructure to increase its sustainability so that future generations may benefit from it.

OBJECTIVE 1.5
The City shall continue to work with external organizations, local governments, and non-profit agencies to address local housing needs and related community issues.

Policy 1.5.1
The City of Apopka will coordinate with local governments and external agencies like Orange County and the ECFRPC in the development and distribution of housing information for local/regional housing programs to residents.

Policy 1.5.2
The City will strive to collaborate with state agencies, local governments, and external agencies in the community whenever possible to develop and implement housing initiatives that address housing affordability, accessibility, and quality.

Policy 1.5.3
The City will continue to utilize its Community Redevelopment Agency to secure and apply funds within the CRA District to improve local housing and community conditions through programs such as the Residential Renovation Assistance Program and the Residential Fee Assistance Program.

OBJECTIVE 1.6
Upon adoption of the Comprehensive Plan, the policies, objectives, capital improvement proposals, and the level of service standards therein shall not be revised without completion of the plan amendment process required by Chapter 163, Florida Statutes.

Policy 1.6.1
The City will provide adjacent local governments and the affected regional and state agencies with an opportunity to provide comment regarding proposed plan amendments consistent with Florida Statutes.

Policy 1.6.2
The evaluation format for a plan amendment shall be reviewed as needed by the City to ensure that it includes an analysis of the proposed amendment's impacts on the Apopka Comprehensive Plan, potential impacts on adjacent local governments, the combined effect of all proposed amendments, and findings of fact for each proposed plan amendment.

Policy 1.6.3
The Community Development Department will prepare an evaluation of plan amendment applications received and will provide copies of this evaluation to the applicants and any other agencies that may be impacted by the amendment.

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RESILIENCE & SUSTAINABILITY ELEMENT

Working towards an equitably resilient and sustainable community

RESILIENCE & SUSTAINABILITY ELEMENT

GOAL 1

Create a vibrant, sustainable, and resilient community through innovative, inclusive, and sensible planning and implementation. To promote health and safety, environmental stewardship, social cohesion, strategic infrastructure, equity, prosperity, and overall community well-being. To protect the City of Apopka's treasured natural assets.

OBJECTIVE 1.1

The City shall work to integrate sustainable principles of development and redevelopment to promote and prioritize community resilience.

The City shall continue to promote measures and, when feasible, prioritize strategies (e.g., green building standards, land development code requirements, Arbor Day Foundation program, Tree City, and others) that enhance tree canopy and open spaces for the reduction of heat island effect, development of equitable and healthier communities, biodiversity support, stormwater management, water quality improvement, energy and water use reduction, roadway improvements, and other resilient efforts. The implementation of these nature-based solutions should be sensibly and strategically evaluated for suitability and best benefits of services.

Policy 1.1.1

The City will conduct research on funding opportunities, programs, and partnerships (e.g., the Orange County Housing Rehabilitation Program, Florida Single-Family Housing Repair Loans and Grants, and businesses within the Community Redevelopment Area) and use the findings to assist low-income property owners in enhancing the resilience of their homes, as needed.

Policy 1.1.2

The City shall continue to advocate for the priority of historical resources (e.g., Camp Wewa, Highland Manor) by encouraging preventive property maintenance and rehabilitation rather than demolition for redevelopment.

Policy 1.1.3

The City shall continue to support the implementation of low-impact development and best management practices (e.g., impervious surface reduction, vegetation for run-off filtration and retention, and others alike) within the Wekiva Study Area to conserve and protect its healthy water quality, natural habitat, and economic value.

Policy 1.1.4

The City shall encourage sustainable growth development to reduce environmental impacts and increase community connectivity, mobility, economic diversification, and sustainability.

Policy 1.1.5

The City shall work to promote and encourage the development community to obtain green certifications under the U.S. Green Building Council, Florida Green Building Coalition, Florida Yards and Neighborhoods Program, Energy Star, Florida Water Star^{SM}, and other programs.

OBJECTIVE 1.2

The City shall strive to reduce its community carbon footprint by increasing efforts toward sustainable growth development, alternative modes of transportation (e.g., transit, walking, biking, and other), and by promoting energy-efficient measures in municipal, public, and commercial buildings, where feasible.

Policy 1.2.1

To support County goals and regional efforts in significantly reducing regionwide greenhouse gas (GHG) emissions by the year 2030, the City will periodically develop its municipal operations GHG inventory and evaluate internal procedures, as conducted during its participation in the Audubon Florida and Regional Resilience Collaborative (R2C) Cohort. Following inventory results, the City will explore "next steps" for addressing internal inefficiencies by identifying and prioritizing high-impact actionable strategies that will help reduce GHG emissions and the social, environmental, and economic impacts of a changing climate.

Policy 1.2.2

The City will conduct an analysis to assess the potential for incorporating solar energy and other energy conservation and carbon reduction measures at city-owned facilities to support the reduction of greenhouse gas emissions from municipal operations, as deemed necessary.

Policy 1.2.3

The City will work to promote for installations of electric vehicle charging stations in city-

owned properties to be accessible/compatible with available technology and for station locations to be located and accessible by all neighborhoods for equitable use.

Policy 1.2.4

The City shall explore the opportunity to evaluate and update building energy codes for new and re-developments to and promote the use of renewable clean energy alternatives (e.g., solar energy) and include energy conservation measures, such as, passive solar design, weatherization, and reflective and green roofs.

Policy 1.2.5

The City shall continue to plan for a safe, connected, equitable, walkable, and bikeable community, and partner with organizations that encourage sustainable mobility options (e.g., FDOT yearly partnership for mobility week) and to promote physical activity for community health and a lower community carbon footprint through planning, design and building practices.

OBJECTIVE 1.3

The City shall work to strengthen economic resilience and diversification by developing partnerships, policies, and programs that support, retain, and/or expand small, disadvantaged, and independent businesses and promote social mobility, equity, and inclusiveness.

Policy 1.3.1

The City will continue partnerships with regional agencies, programs, industries, businesses, government entities, and Chamber of Commerce to promote local prosperity and economic diversity, inclusively and equitably, by providing mentorship, vocational guidance, training, and other relevant tools to residents from all education and skill levels, specifically to under-served individuals, neighborhoods, and economic centers within the City, to promote a resilient workforce.

Policy 1.3.2

The City shall seek opportunities to develop necessary partnerships to provide assistance programs to help improve the infrastructure and operational resilience of businesses.

OBJECTIVE 1.4

The City shall work with state and local agencies and organizations to increase sustainable and resilient opportunities within City operations and throughout the community.

Policy 1.4.1

The City is encouraged to evaluate all current and future plans, processes, projects, and

codes to ensure a cohesive approach to resilient community development.

Policy 1.4.2
The City shall promote awareness on environmental, socio-economic, and public health impacts related to the built environment and the changing climate by providing science-based information and education, and implementing City resilience efforts to increase community and stakeholder engagement, collaboration, and sensible planning.

Policy 1.4.3
The City shall encourage adaptive approaches, such as emerging technologies and climate change science data, and input from impacted community members to future infrastructure planning for more innovative, resilient, and inclusive development.

Policy 1.4.4
The City shall promote and exhibit diversity, equity, and inclusion within the City government operations, including staff, boards, and commission, and to incorporate community engagement.

Policy 1.4.5
The City is encouraged to work on increasing partnerships for regional efforts (e.g., Regional Resilience Collaborative) and continue its local collaboration with Orange County to support and enhance region-wide social, economic, and environmentally resilient action items to help strengthen and improve the residents' quality of life.

Policy 1.4.6
The City shall encourage resilient and sustainable development, such as community gardens, green spaces, and public facilities for community multigenerational purposes.

Policy 1.4.7
The City shall recognize and promote energy efficiency as a tool to increase housing affordability and as an equitable approach to increase resilience.

Policy 1.4.8
The City shall evaluate the potential investment of public facilities' weatherization to prepare for extreme weather and natural events in anticipation of climate change impacts. The City shall consider these climate impacts and resilience when planning investments in assets.

OBJECTIVE 1.5
The City shall integrate resilient infrastructure principles to provide maximum efficiency and return to service when considering current and future shocks and stressors and

changing climate.

Policy 1.5.1

The City shall continue to support heat reduction techniques through the City's Land Development Code and by promoting green building standards and the use of innovative site design and building materials that help lower heat absorption, energy usage, and the heat island effect.

Policy 1.5.2

It is recommended for the City to create a plan to expand and upgrade municipal lighting to improve energy efficiency, reduce energy costs, and improve operational resilience, especially, during local emergency and disaster events.

Policy 1.5.3

The City shall explore equitable, environmentally and economically sustainable, and resilient energy generation options (e.g., solar generators, on-site renewable energy, micro-grid, etc.) to include these infrastructures and improve energy needs during and after disaster events.

Policy 1.5.4

The City shall collaborate with partners across the region and state to assess and integrate diverse solutions for more equitable and resilient technological communications infrastructure.

DRAFT

City of Apopka

Comprehensive Plan 2030

Future Land Use Element

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FUTURE LAND USE ELEMENT

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INTRODUCTION

PURPOSE AND SCOPE

The most important objective of the Apopka Comprehensive Plan and the Future Land Use Element (FLUE) is to provide development guidance and growth management for the future. The FLUE addresses the adequacy of land uses in relation to current and future land demands throughout the 2030 planning period. The Future Land Use Map (FLUM) identifies the location of each land use category.

The Future Land Use Element (FLUE), in conjunction with the City's Land Development Code and other implementing mechanisms, is designed to guide the distribution of growth in Apopka to ensure that future patterns of land use are tailored to:

- Meet the statutory requirements of Chapter 163 and 187, Florida Statutes (F.S.) and 9J-5 Florida Administrative Code (F.A.C.); further the Florida Comprehensive Plan, Chapter 179, F.S. and the East Central Florida Regional Planning Council (ECFRPC) Strategic Regional Policy Plan (SRPP);

- Reduce sprawl, consistent with Rules 9J-5.006(3)(b) and 9J-5.011(2)(b)3, F.A.C.;

- Improve development efficiency by guiding development to existing growth areas where infrastructure systems are in place and where unit costs for public services and facilities are relatively low;

- Protect natural resources by guiding development away from wetlands and other natural resources; and

- Enhance community character by reinforcing existing development patterns and addressing compatibility issues.

RELATION TO OTHER ELEMENTS

Although the FLUE delineates the types and magnitude of development which the City foresees as its future, this element should not be viewed in isolation. The natural constraints to the land, the services needed to develop the land, the complete documentation of housing needs in the City and the regional and state agencies which regulate the development and use of the land within Apopka are only briefly summarized in this element.

More specific information on the quality of parks and recreational opportunities available in Apopka are listed in the Recreation and

Open Space Element, as is a discussion of land designated to be left as open space and undeveloped either for aesthetic reasons or due to natural impediments to development. The FLUE summarizes the amount of land necessary for single family and multifamily development. The issues of cost, tenure and other resident needs are more fully portrayed in the Housing Element. Issues relating to the amount of infrastructure needed for proposed development, including potable water, sanitary sewer, stormwater management and solid waste are discussed in the Infrastructure Element. The analysis of transportation problems and opportunities in Apopka are more fully detailed in the Transportation Element, including the importance of land use patterns to transportation. Costs and methods to finance the necessary transportation, infrastructure and recreation improvements for the development envisioned in the FLUE are listed in the Capital Improvements Element. The process by which other governmental agencies impact development decisions within the City and the methods through which the City can improve the relationships with these agencies are described in the Intergovernmental Coordination Element.

INVENTORY

GENERAL SETTING AND HISTORY OF APOPKA

The City of Apopka is located in northwest Orange County near the geographical center of the State of Florida. Lake County abuts the City limits to the north. The City borders Seminole County to the east and has incorporated portions of the Wekiva Springs State Park. U.S. Highway 441 (US 441) and State Road (SR) 436 intersect within the City and provide access to the Orlando metropolitan area. US 441 is also designated as both Main Street and SR 500. The multiple functions of this road are discussed in detail in the Transportation Element. SR 429, also known as the Western Expressway (a component of the Florida Intrastate Highway System, the FIHS), provides access to the Florida Turnpike, to the south. **Map 1-1** depicts the City's location in the State.

The history and prehistory of the Apopka area has been documented by Jerrell H. Shofner in The History of Apopka and Northwest Orange County, (Tallahassee: Rose Printing Company, 1982). The following summary has been excerpted from Shofner's book:

Chartered as the Town of Apopka City in 1882, Apopka was already the trading center of the area which today comprises Northwest Orange County. It had evolved into a town because early settlers had been attending lodge meetings at Orange Lodge No. 36, F & AM, since the early 1850s. The City's location between the Wekiva River and Lake Apopka made it the logical town site for those interested in citrus culture, an amenable climate, and winter homes. Early agriculture consisted of citrus orchards which utilized the Wekiva River to transport produce to market. Many of the citrus growers had nurseries to supply their own seedlings, but commercial nurseries cropped up in the early 1880s. By the end of that decade several thriving nurseries were operating in the Northwest Orange County area.

The first ornamental horticultural nursery was introduced in the area in 1913. The business grew only Boston ferns and by the 1920s had attracted enough area competition to convince City fathers to adopt the title "Fern Capital of the World". By the 1950s this title was transformed into the "Foliage Capital of the World" as more and more forms of ornamental plant materials were produced and sold from the Apopka area.

As railroads gave way to automobile transportation in the early 20th century, Apopka's role as northwest Orange County's trading and cultural center was enhanced.

EXISTING LAND USES

Table 1-1 summarizes the acreage by land use found within the City of Apopka in 2009. This table was derived from the Orange County property appraiser's Geographic Information System (GIS) database. The GIS database identified each land parcel and classified the existing land use or uses based on the property appraiser's land use codes. The City's existing land uses are shown on **Map 1-2**.

Pursuant to §9J-5.006(1)(f), F.A.C., the land uses adjacent to the City's boundaries must be shown on the land use map series. **Map 1-3** depicts the land uses for all lands adjacent to the City of Apopka.

TABLE 1-1: EXISTING LAND USE, 2009

	2009	
Existing Land Use	**Acres**	**% of Acres**
Agriculture	3,975.63	18.79%
Residential	4,390.18	20.75%
Commercial	471.90	2.23%
Office	222.59	1.05%
Industrial	754.55	3.57%
Institutional/Public Use**	3,285.17	15.53%
Vacant	3,721.47	17.59%
Subtotal Developable	**16,821.49**	**79.51%**
Conservation	340.12	1.61%
Park & Recreation*	2,150.22	10.16%
Water, R-O-W, Unclassified	1,848.17	8.73%
Subtotal Undevelopable	**4,338.51**	**20.50%**
TOTAL	**21,160.00**	**100%**

* Includes private parks and recreation facilities
** Includes some parks and recreation facilities

Source: Land Design Innovations, Inc., 2009 (Orange County Property Appraiser data)

HISTORIC RESOURCES

The City of Apopka has a significant recorded history. There are also documented prehistoric sites in the surrounding unincorporated areas. There are several methods commonly used to recognize historic places. Possibly the most prestigious method is listing on the National Register of Historic Places (NRHP). National Register listing does not provide any protection to a house or site other than economic incentives to maintain the historic character. Economic incentives may include tax deductions for restoration and/or increased property value.

Within the City of Apopka, there is one area listed on the NRHP - the Ryan & Company Lumber Company located at 210 E. Fifth Street. Four individual buildings are also on the National Register of Historic Places:

- Carroll Building, 407-409 S. Park Ave.;
- Seaboard Airline Railway Depot, 36 E. Station Street;
- Mitchill-Tibbetts House, 21 E. Orange St.; and
- Waite-Davis house, 5 South Central Avenue.

The City completed a Historic Properties Survey in 1992 which contains recommendations for historic preservation and possible National Register nominations. The study was completed in order to identify the City's significant historical resources and implement strategies to protect and enhance them. Over 190 sites have been listed on the Florida Master Site File from the first phase of this study and are included in **Appendix 1-1**. The identified historical and cultural resources are shown on **Map 1-4.** A windshield survey identified about 350 additional structures that may be historically significant, mostly concentrated within the original City limits of Apopka; however, several pockets of older structures are scattered throughout the City.

NATURAL RESOURCES

This section briefly discusses the natural environment within the City of Apopka. This information is discussed in greater detail in the Conservation Element.

Groundwater Aquifer Recharge

Prime aquifer recharge areas are located within the Apopka City limits and utility service area.

Soils and Topography

Soil conditions refer to those characteristics of the land having special relevance and importance to urban development. Soils in the City of Apopka and surrounding planning area are generally of the Lakeland-Blanton association characterized by nearly level to strongly sloping, well drained to somewhat excessively drained sandy soils interspersed with many lakes and ponds. Small areas of more poorly drained soils, or hydric soils, are found in the flat wooded and wet grassy flat areas scattered throughout the Apopka area, particularly bordering the lakes and ponds. There is little surface drainage pattern in the Lakeland-Blanton Association since most drainage is through the porous soil. The Conservation Element

contains a more detailed description of the soils in Apopka.

Floodplains

Floodplains are identified in conjunction with the Federal Emergency Management Agency's Flood Insurance Rate Maps. The National Flood Insurance Program is legislation that provides for the identification of flood hazard areas up to 100 year storm level and makes available federally subsidized insurance to property owners in such areas, provided these communities, have become participants and agreed to adopt and enforce minimum land use controls adequate to meet Federal Insurance Administration standards for future flood plain management. The City's programs that address stormwater management are described in more detail and drainage basins mapped in the Infrastructure Element.

Wetlands

The City of Apopka contains a variety of wetland types. The largest concentration of wetlands is located in southwest Apopka. These wetlands are associated with Marshall Lake, Upper and Lower Lake Doe, Lake Witherington and Lake Fuller. These wetlands are mostly freshwater swamp with areas of mixed wetland forest. Another area of wetlands, located only partially in the City is located in the northeast area and surrounds Lake McCoy, with most of the wetlands outside the City limits. This area contains the largest variety of wetland types in the Apopka area.

The third major area of wetlands is in northwest Apopka where a peat mine has been permitted to operate. The peat mine was permitted through Orange County and the SJRWMD with the condition that the wetlands be restored and endangered species be protected. The City's wetlands protection programs and a map showing where the wetlands are located are included in the Conservation Element.

Wekiva Study Area

The City is located within the Wekiva Study Area designated by the state legislature in its Wekiva Parkway and Protection Act, Part III of Chapter 369, F.S. that was signed into law in 2004 and amended in 2005. The Act requires local governments in the Wekiva Study Area to adopt amendments to their comprehensive plans. Both Orange County and the City of Apopka have adopted the required amendments. **Appendix 1-2** includes a set of overlay maps that are adopted as a part of the Future Land Use Map series and identify the natural resource features related to the Wekiva Study Area.

POPULATION PROJECTIONS

Chapter 9J-5, F.A.C. directs that the "comprehensive plan shall be

based on resident and seasonal population estimates and projections." According to the definition established by 9J-5, resident population refers to "inhabitants counted in the U.S. Bureau of the Census in the total population category." Seasonal population encompasses those "inhabitants who utilize, or may be expected to utilize, public facilities or services, but who are not residents. Seasonal population shall include tourists, migrant farm workers, and other short-term and long-term visitors." The total seasonal population combined with the total resident population represents the "total functional population."

Projected population figures determine future facility needs and land requirements and must be taken into consideration in preparing the Future Land Use Element. Population estimates and projections were prepared by Land Design Innovations, Inc. as part of the comprehensive plan and are shown in **Table 1-2.** A description of the methodologies used to formulate the projections is found in **Appendix 1-3**.

TABLE 1-2: POPULATION FORECAST, 2010-2030

Year	Permanent and Institutional Population	Seasonal Population*	Total Population
2010	41,382**	601	41,983
2015	56,138	815	56,953
2020	73,226	1,063	74,289
2025	97,330	1,413	98,743
2030	123,741	1,797	125,538

* Seasonal population based on 2000 Census percentage of seasonal units

**2010 estimate calculated based on building permits issued between 4/1/09 and 3/31/10

Source: U.S. Census 2000; Land Design Innovations, 2010

LAND USE ANALYSIS

AVAILABILITY OF FACILITIES AND SERVICES

Before determining the appropriate amount of acreage to be assigned for various land uses to accommodate future demand, it is important to evaluate infrastructure necessary to support the projected development. Infrastructure includes transportation, sanitary sewer, reclaimed water, solid waste, stormwater and potable water facilities.

Transportation

Roads located in the City of Apopka include those under the responsibility of the Florida Department of Transportation (FDOT), Orange County and the City of Apopka. The major transportation routes serving Apopka are US 441 (SR 500), SR 436 (Semoran Boulevard) and SR 429 (Western Expressway). These roads are essential to regional mobility and a majority of the current congestion levels can be attributed to growth in the Lake/Orange/Seminole County area.

A portion of US 441 is listed as an FDOT Constrained Facility and a portion is listed as an FDOT Backlogged Facility. US 441 is one of only two roadways in the City that are currently operating at or below the adopted LOS standard. US 441, from Park Avenue to SR 436 is operating at a LOS “F.” The segment of Welch Road from Rock Springs Road to Thompson Road is operating at a LOS “E.”. The Transportation Element analyzes the transportation system and proposes methods to address current and future roadway deficiencies.

With the 2009 passage of Senate Bill 360, Apopka has been designated a “Dense Urban Land Area” (DULA). This designation exempts the entire City from meeting State transportation concurrency requirements. This will allow the City to address deficiencies using a palette of comprehensive, multi-modal programs and facilities rather than focusing on individual roadway segments meeting concurrency standards. The Transportation Element includes policies related to the establishment of these programs.

The Apopka Orlando Airport, a general aviation field, is located within the City limits. Freight rail service is available, but no passenger rail service is available at the present time. Transit service is provided by LYNX (Central Florida Regional Transportation Authority). Four routes presently service Apopka (Routes 17, 41, 44 and 405). These routes operate on approximately fifteen minute to one hour headways. Route 405 is a circulator

connecting residential to shopping and businesses within the Apopka area. The routes have a central transfer stop (Apopka Superstop) at Central Avenue/7th Street. The passage of state legislation in December 2009 paves the way for development of the Central Florida Rail Corridor, which will provide high-speed rail service between Tampa and Orlando within the planning timeframe.

The City does not provide a comprehensive system of bicycle facilities; however, a trailhead is located in downtown Apopka allowing access to the 22-mile West Orange Trail, a "rails-to-trails" multi-use path. The City has identified the need to develop a more comprehensive sidewalk/bicycle trail system for use of City residents as an alternative to vehicular use.

Sanitary Sewer

The City of Apopka is responsible for providing sanitary sewer to all land within the approved utility service area, which includes the municipal limits and portions of unincorporated Orange County. Within the service area, isolated pockets of development still occur that are not connected to the central wastewater system. The Sanitary Sewer Sub-element evaluates and analyzes the sanitary sewer system provided by the City.

The sanitary sewer system consists of collection systems and treatment facilities including a water reuse system. The treatment facilities have a current permitted capacity of 4.5 million gallons per day (mgd). In 2008, the average daily wastewater flow was 4.3 mgd. The City is currently completing the planning and design to expand the capacity of the City's water reclamation facility to 8.0 mgd, which will provide for projected future needs through the 20-year planning timeframe.

The Apopka Regional Reuse of Water (ARROW) presently distributes approximately 4.5 mgd of reclaimed wastewater to commercial and residential consumers. Project ARROW provides three storage tanks with a total capacity of 4 million gallons, lined storage ponds with a capacity of 25 million gallons, a reclaimed water pumping station with a total capacity of 10,800 gallons per minute (gpm) and a reclaimed water distribution system consisting of over 10 miles of pipe ranging from 8 inches to 24 inches in diameter.

Stormwater Management

The Central Business District of Apopka sits on a broad ridge with elevations reaching 150 feet. The surrounding terrain slopes northeast toward the Wekiva River Basin, which has an elevation of 25 feet, and southwest toward Lake Apopka, with an elevation of 65 feet. The natural surface water drainage system consists of a large number of closed basins, which are relatively small, that may

be lakes or historically dry depressions.

Normal rainfall events generate runoff that is directed to these lakes or depressions by natural swales and drainage ways, or through man-made drainage facilities. For the most part, these depressions are not connected except in extreme rainfall events such as those associated with tropical storms. The one exception is the drainage way associated with Greenwood Cemetery in the northeast section of Apopka. Here, runoff is directed into a ravine, which is connected by man-made drainage conveyance under Votaw Road to Lake McCoy. Lake McCoy discharges to a dry depression known as Lake Coronia during extreme rainfall events then to Lake Prevatt and the Wekiva River.

The City's Drainage Master Plan was updated in April 2009. The master plan has identified one problem area that needs to be addressed, the flooding that occurs within the Lake Avenue/Main Street Drainage Basin during heavy rainfall events. Recommended improvements for correcting this flooding problem include installation of two manholes, two junction boxes, and approximately 1,800 feet of 30-inch drainage pipe.

An evaluation of the drainage system in the City of Apopka's utility service area is provided in the Stormwater Management Sub-element.

Aquifer Recharge

Urban development within critical aquifer recharge areas results in increased runoff to surface waters as opposed to percolation to the aquifer. Apopka is situated on porous sand hills where the most effective recharge areas are the ones also best suited for urban development. The City requires special performance criteria for development taking place in critical aquifer recharge areas.

Potable Water

The City of Apopka owns, operates and maintains five water plants and a water distribution system. There are no existing deficiencies in the City potable water system. In order to meet the potable water consumption needs through 2030, the City will need one additional water plant.

The City currently has a consumptive use permit (CUP) issued by the St. Johns River Water Management District (SJRWMD) for withdrawal of groundwater in the amount of 10.358 million gallons per year. The City's consumptive use permit is currently approved by SJRWMD on a year-to-year basis until the review process and final approval is completed for the City's request to combine several CUPs under one permit. The average day pumping rate during the calendar year

2008 was 7.307 mgd.

Solid Waste

Based on projections presented in the Solid Waste Sub-element, Orange County currently has adequate landfill capacity to meet the City's needs through the year 2030.

VACANT LAND SUITABILITY ANALYSIS

The ability of land to support development, better known as the carrying capacity, is a major determinant in land use patterns. Natural constraints to development include the presence of wetlands, 100-year floodplain areas and critical environmental habitats. Man-made constraints to development include areas of historic or archaeological significance.

Table 1-3 shows the acreage of uncommitted vacant lands. This includes vacant subdivided lots, vacant land parcels and vacant agricultural lands, which are cleared lands that have not been used for agricultural production in more than a year. **Map 1-5** depicts vacant land with the assigned future land use classification and a sensitive land overlay intended to show potential development constraints.

TABLE 1-3: VACANT LANDS

Future Land Use Categories	Vacant		Env. Sensitive	Developable	
	Acreage	%	Acreage	Acreage	%
Agriculture	157.17	4.3%	2.17	155.00	4.5%
Agriculture Estate	10.99	0.3%	0.00	10.99	0.3%
Agriculture Homestead	6.28	0.2%	0.01	6.27	0.2%
Residential:	2216.14	60.7%	126.13	2090.01	60.1%
Rural Settlement	85.33	2.3%	0.00	85.33	2.5%
Estate	160.94	4.4%	0.00	160.94	4.6%
Very Low Suburban	438.70	12.01%	22.72	415.98	12.0%
Low Suburban	472.23	12.9%	50.71	421.52	12.0%
Low	767.90	21.0%	37.27	730.63	21.0%
Medium Low	18.55	0.5%	0.00	18.55	0.5%
Medium	142.10	3.9%	14.62	127.48	3.6%
High Density	130.40	3.6%	0.82	129.58	3.7%
Mixed-Use	484.98	13.9%	13.05	471.94	13.6%
Office	49.75	1.4%	5.64	44.11	1.3%
Commercial	194.79	5.3%	7.62	187.17	5.4%
Industrial	512.07	14.0%	12.56	499.51	14.4%
Institutional/Public Use	19.15	0.5%	9.45	9.70	0.3%
Total	**3,651**	**100%**		**3,475**	**100%**

Future Land Use Categories	Vacant		Env. Sensitive	Developable	
	Acreage	%	Acreage	Acreage	%
Parks/Recreation	**1.54**	NA	NA	NA	NA
Conservation	**68.14**	NA	NA	NA	NA
Total	**3,721**				

Source: City of Apopka, 2009

PROJECTED LAND USE NEEDS

In order to meet the needs of the projected population, the amount of land needed for each type of development was analyzed. **Table 1-4** shows the projected land use demand for 2030 based on the ratio of land use acreage per 1,000 residents in 2009.

TABLE 1-4: PROJECTED LAND USE DEMAND AND LAND USE COMPARISON, 2009 – 2030

Land Use Categories	2009 ELUM Acreage	Acres/1,000 population	Demand Based on 2009 Ratio	2030 FLUM Acreage	Surplus/ Deficiency	2009 to 2030 Acreage Change
Population	---	40,406	125,538		--	
Residential	4,243	105	13,181	12,122	(1,060)	7,879
Low Density	2,922	72	9,078	11,074	1,996	8,152
Medium Density	1,279	32	3,973	805	(3,168)	-474
High Density	42	1	130	243	112	201
Mixed-Use	2,342	58	7,276	2,409	(4,867)	67
Office	218	5	677	194	(483)	-24
Commercial	469	12	1,457	975	(481)	507
Industrial	683	17	2,122	1,510	(612)	827
Institutional/Public Use	3,023	75	9,393	835	(8,558)	-2,188
Parks/Recreation	2,042	51	6,344	1,045	(5,299)	-997
Agriculture	2,728	68	8,476	916	(7,560)	-1,812
Vacant	3,226	80	10,022	0	NA	-3,226
TOTAL DEVELOPABLE	**18,973**	**470**	**58,947**	**20,006**	**(38,941)**	**-1,033**
Conservation	340	8	1,057	320	(736)	-20
Other (unclassified, ROW & Water)	1,847	46	5,738	833	(4,905)	-1,014
TOTAL UNDEVELOPABLE	**2,187**	**54**	**6,795**	**1,154**	**(5,641)**	**(1,033)**
GRAND TOTAL	**21,160**	**524**	**65,742**	**21,160**	**(44,582)**	**0**

Sources: City of Apopka, Land Design Innovations, Inc., 2010.

Note: Existing Land Use acreages in Tables 1-3 and 1-4 do not match because of the Mixed-Use category.

Table 1-5 presents the amount of developable residential lands by land use category and the holding capacity of those lands. Based on the acreage of vacant land designated as residential in the Future Land Use Map, the City could accommodate an additional 10,378 dwelling units. Future land use acreage is shown in **Table 1-7**.

TABLE 1-5: VACANT LAND ANALYSIS

Future Land Use	Density/ Intensity	Vacant Developable Acreage*	Use Split (Resid/ Non-Resid)	Density Factor**	Potential Residential Units
Agriculture Homestead	1 du/10 ac	6.27	-	90%	1
Agriculture	1 du/5 ac	155.00	-	90%	28
Agriculture Estate	1 du/2 ac	10.99	-	90%	5
Residential		2090.01			7,274
Rural Settlement	1 du/ac	85.33	95/5	75%	61
Estate	1 du/ac	160.94	95/5	75%	115
Very Low Suburban	2 du/ac	415.98	95/5	80%	632
Low Suburban	3.5 du/ac	421.52	95/5	80%	1,121
Low Density	5 du/ac	730.63	95/5	80%	2,776
Medium Low Density	7.5 du/ac	18.55	90/10	85%	106
Medium Density	10 du/ac	127.48	90/10	85%	975
High Density	15 du/ac	129.58	90/10	85%	1,487
Mixed-Use	15 dua/2.0 FAR	471.94	50/50	85%	3,009
Office	0.30 FAR	44.11			0
Commercial	0.25 FAR	187.17			0
Industrial	0.60 FAR	499.51			0
Institutional/ Public Use	0.50 FAR	9.70			0
Parks/Recreation	Not Developable	NA			NA
Conservation	Not Developable	NA			NA
TOTAL		**3,475**			**10,316**

***** Acreage adjusted to exclude areas of potential environmental constraints (wetlands, floodplains and wildlife habitats) and lands approved for development (approximately 689 acres).

****** Assumes that only a percentage of the acreage will be used for residential due to locational/density restrictions.

Source: City of Apopka, 2009

TABLE 1-6: FUTURE LAND USE

Future Land Use Categories	Maximum Density/Intensity	FLUM Acreage	Percent of Total Lands
Agriculture	1 du/5 ac	916	4.3%
Agriculture Estate	1 du/2 ac	243	1.1%
Agriculture Homestead	1 du/10 ac	648	3.1%
Residential		11,231	53.1%
Rural Settlement	1 upa	1,265	6.0%
Estate	1 upa	1,192	5.6%
Very Low Suburban	2 upa	1,363	6.4%
Low Suburban	3.5 upa	1,840	8.7%
Low	5 upa	4,524	21.4%
Medium Low	7.5 upa	311	1.5%
Medium	10 upa	494	2.3%
High Density	15 upa	243	1.1%
Mixed-Use	15 dua/2.0 FAR	2409	11.4%
Office	0.30 FAR	194	0.9%
Commercial	0.25 FAR	975	4.6%
Industrial	0.60 FAR	1,510	7.1%
Institutional/Public Use	0.50 FAR	835	3.9%
Parks/Recreation	0.20 FAR	1,045	4.9%
SUB-TOTAL		**20,006**	**94.5%**
Conservation	Not Developable	320	1.5%
Other (ROW & Water)	Not Developable	833	3.9%
GRAND TOTAL		**21,160**	**100.0%**

Source: Land Design Innovations, Inc. 2009

Future Agriculture Land Use

Agriculture land use is expected to decrease over the planning timeframe as urbanization continues. Many nurseries in the Apopka area are expanding, which tends to offset the smaller ones which are being absorbed by others. This land use currently occupies almost 19 percent of the land in the City; however, it is expected to convert to other land uses.

Future Residential Land Use

The City has designated 11,231 acres of residential land on the Future Land Use Map (FLUM) (**Map 1-7**). The proportion of acreage of land use to population, and the housing needs identified in the

Housing Element were used to determine future residential land use needs. The Housing Element identified a need for a total of 48,498 dwelling units by 2030. This 48,498 number reflects current units plus the additional units needed to accommodate projected population growth. Of the 48,498 housing units, a need for 41,005 units for single-family and 7,493 units for multi-family has been projected (see Table 2-21 in the Housing Element). The distribution between single-family and multi-family is based upon the current distribution (83.89% single-family).

The City expects an increase in residential acreage in the future but not to the extent of keeping the same 2008 ratios for the different density levels. The ratio of medium density acreage is expected to increase, while high-density will decrease in stand-alone residential districts. However, the mixed-use category encourages the development of high density residential development in conjunction with retail or office developments. That increase in available lands for higher density residential development, in addition to expected future annexations of residential lands, will address the future demand for residential land use.

Future Mixed-Use Land Use

The City has determined that future growth will focus on a strategy that incorporates infill/redevelopment principles in addition to expansion of jurisdictional boundaries through annexation. An infill/redevelopment strategy will result in increased development densities and intensities, which will need to be directed to the appropriate areas, where public facilities and services can support it.

The mixed-use land use category was developed based on area-wide master plans, ensuring that neighborhoods contain a mixture of land uses that reflect the desired character of the community, promote realistic housing-job balance, offer varied housing opportunities, are served by adequate transportation, protect environmentally sensitive lands, incorporate parks/open space and use traditional community building practices. The mixed-use designation within these master plans has been structured to ensure that it is compatible with existing and projected surrounding land uses.

In order to encourage innovative land use techniques, creative urban design, environmental protection and the use of sustainable development principles and practices, the following areas may be designated mixed-use on the official land use map:

1. Areas within the Expressway, Plymouth, West, and Northwest study areas as shown on the adopted master plans;
2. Areas within the Central Business District.
3. Areas that have been subject to a Small Area Study.

For any new mixed-use land designation, the applicant needs to obtain a comprehensive plan amendment, and shall submit the following:

1. Small Area Study - A land use study prepared to demonstrate the need for a new Mixed-Use designation within the City of Apopka. The area to be covered in the study will be determined by staff. However, it must include all properties within a 1-mile radius minimum, measured around the perimeter of the proposed Mixed Use District. The study shall cover existing and future conditions for the following aspects:

   - Land Use
   - Transportation
   - Utilities
   - Parks & Open Space

2. Master Plan - The applicant shall submit a site master plan for the proposed mixed-use property showing the following:

   - Requested mixed-use designation (community or employment), with justification;
   - Land use program, including proposed acreage, intensities and densities for each land use component;
   - Allowable uses, if more restrictive than City requirements;
   - Proposed amenities, credits and bonuses proposed;
   - Transportation plan to ensure connectivity and appropriate access (vehicular, bicycle and pedestrian);
   - Design principles, standards and guidelines, if more restrictive than citywide requirements; and
   - A Developer's Agreement containing the standards, bonuses and specific requirements of the project.

Future Commercial Land Use

Projections of future commercial land were based on the current ratio of land use to population. Based on the 2009 population of 40,406 the ratio is currently 12 acres per 1,000 residents. This ratio includes the commercial development included within mixed use areas. Applying the 2009 ratio to the 2030 population projection of 125,538, the City would need a total of almost 1,457 commercial acres (see **Table 1-4**).

This need is met in two ways. The FLUM shows that 975 acres are shown in the commercial land use category. When including the commercial and office acreage allowable in the mixed-use land use categories, the FLUM provides over 2,100 acres, or a ratio of

almost 15 acres per 1,000 residents. Since Apopka serves as a regional commerce center, the City has determined that this increase in the commercial ratio is appropriate.

Future Office Land Use

Projections of future office land were based on the current ratio of land use to population. Based on the 2009 population of 40,406 the ratio is currently 5 acres per 1,000 residents. This ratio includes the office development included within mixed use areas. Applying the 2009 ratio to the 2030 population projection of 125,538, the City would need a total of 677 office acres (see **Table 1-4**).

The FLUM shows that 194 acres are shown in the office land use category. When including the commercial and office acreage allowable in the mixed-use land use categories, the FLUM provides over 1,380 acres, or a ratio of about 9 acres per 1,000 residents. Since Apopka serves as a regional commerce center, the City has determined that this increase in the office ratio is appropriate.

Future Industrial Land Use

Industrial land use projections were calculated using the same basic methodology as described above for commercial and office lands. The amount of industrial acreage required to meet future growth is shown in **Table 1-4**. Currently, there are approximately 683 acres of developed industrial lands within the City of Apopka, or 17 acres for every 1,000 residents. Based upon the current work force and community needs, it is projected that the demand for industrial uses will increase at a ratio of about 17 acres per 1,000 residents. Applying the 2009 ratio to the 2030 population projection of 125,538, the City would need a total of almost 2,122 acres for industrial uses.

Future Recreation Land Use

Based on the analysis of additional recreation and open space needs identified in the Recreation Element, the City of Apopka requires three acres of park land per 1,000 residents. If the population reaches the projected 125,538 permanent residents by 2030, the City will need approximately 377 acres of park and open space to meet future recreation demands. Since approximately 292 acres of public park land is currently available within the City limits, an additional 85 acres are needed to meet the 2030 projected demand.

Future Public/Institutional Land Use

It is difficult to forecast a need for public and institutional

uses, because the provision of these uses is based upon such unknown factors as funding for capital facilities, long-range public school needs and other factors. The City has determined that the current public/institutional acreage, along with the acreage allowed in almost all the other land use categories, is appropriate to ensure that such facilities and services are located near the population they are intended to serve.

Growth in this land use category will come from schools, churches, day care schools, hospitals and clinics and governmental services. There are no planned expansions of governmental services at this time. Expansion of the City's wastewater treatment facility will occur at the present plant location. The Orange County School Board estimates the need for two additional schools in the Apopka area, and the City will work closely with the School Board to accommodate this need. With regard to health care facilities, Florida Hospital has expanded its Apopka facility on the present site, so no additional land is needed.

Future Conservation Land Use

This land use category includes those lands that contain valuable and threatened natural resources, such as floodplains, estuarine properties, and unique ecological communities. Several areas in the City have already been designated as conservation, but there may be other noteworthy areas identified in the future which may be considered for conservation designation on the Future Land Use Map. Additional conservation lands can be anticipated with annexations of natural resources.

NEED FOR REDEVELOPMENT

There are various areas in the City of Apopka/ Orange County JPA in which redevelopment is needed. **Map 1-7** shows the major redevelopment areas around the Apopka area as described in this section.

Community Redevelopment Area

The City of Apopka completed a Finding of Necessity and established a Community Redevelopment Agency, in accordance with Chapter 163.357, Part III, F.S. The CRA was tasked to administer the Community Redevelopment Plan, which was adopted in June 1993. The plan established the 644-acre Central Business District Community Redevelopment Area. The Community Redevelopment Plan, updated in 2005, provides a coordinated strategy of improvements and a vision of what the CRA area can become. Projects can be funded with the Community Redevelopment Trust Fund using Tax Increment Funds (TIF). Goals and objectives were prepared to guide the City in the

redevelopment of the district. By establishing a CRA the City can also apply for the Small Cities Community Development Block Grant. Program (CDBG).

Central Business District

The Central Business District (CBD) is located within the CRA and consists of thirty-six blocks in the original City limits encompassing 186 acres. This area was first developed during the last two decades of the nineteenth century. Many existing buildings in the CBD date from the first half of the twentieth century. As was true of downtowns during this time period, the area contains a mixture of all land use types and includes the primary governmental and commerce bases of the City. This mixture of uses provokes the "small town" atmosphere which many residents consider the most attractive quality of the City.

One of the most overwhelming concerns in the CBD is the need to reclaim Main Street (US 441) as a local commercial street. As identified in the Transportation Element, various segments of this road operate below normally acceptable traffic standards, primarily because the highway is a major route for traffic traveling from Lake County to Orlando.

This area includes many of the most historic structures of the City. These buildings and their historic context must be protected. At the same time, twenty-two percent of the total area of the Central Business District is vacant and several areas are underdeveloped. This provides tremendous potential for the City to allow infill development types. It will be one of the primary goals of the City to complete a study which will provide adequate means to determine the mixture of land uses and urban design guidelines necessary to renew this resource.

South Apopka

South Apopka has been designated as a Community Development Block Grant Target Area by Orange County. The portion that is within the City limits is available for Small City CDBG funding programs. The area has residential, commercial and industrial land uses which extend south of US 441, east of Bradshaw Road and extends south and east to the City limits. The county area includes the residential development just beyond the southern portion of the CRA area and the Central Business District.

Much of the development in this area was platted in the late nineteenth century. This area has a large minority population, low income and a high concentration of vacant and substandard housing units. Redevelopment of this area will be neighborhood- oriented to follow the policies of the Housing Element.

US 441 Corridor (Orange Blossom Trail)

This corridor extends through Apopka from the western area of Apopka in Plymouth to the southeast corner near the Seminole County line. This is the commercial and industrial corridor of Apopka, with direct access to the two major arterial roads in the City. Many of the uses along this corridor have been in existence since the incorporation of Apopka. This roadway is heavily traveled and, due to various deteriorating structures or outside open industrial storage, the redevelopment of the corridor is greatly needed.

Several factors contribute to the blight along the corridor, including a tremendous amount of traffic, outside storage of goods, a lack of continuity in setback and infill development, untended vacant lots, multiple five and six-way intersections, multiple driveway cuts in close proximity to each other, vacant and deteriorating structures, excessive and dilapidated signage, conflicting and competing land uses, and finally, jurisdictional changes (Apopka and Orange County).

The difference in land use and zoning development requirements between the City and the County can lead to various setbacks, design standards and code enforcement. These variations do not allow for consistent development of the corridor, and coordination between the two entities is needed. The City typically follows the practice of annexing property and designating the equivalent City land use category to that which it carries in Orange County. Annexation proposals are researched to allow for potential land use continuity along the corridor, which will help to promote more visually pleasing development.

SR 436/Semoran Boulevard Corridor

This corridor is experiencing similar conditions as those described along US 441; however, the magnitude is less extreme. SR 436/Semoran Boulevard is the main arterial road connecting Apopka to the Interstate (1-4) corridor and extends east from the downtown intersection of Main Street and US 441 to the Orange/Seminole County line (Line Drive). This corridor contains less industrial or heavy commercial types of use than that in the US 441 corridor and has developed as primarily commercial and office in nature and includes several business centers and shopping plazas. There are many existing buildings which are in need of renovation. Because this area lies within the City and County, it lacks consistency in design, setbacks and uses. Multiple driveway cuts pose a problem, but with the development of multi-tenant use areas, this situation has declined over the years.

ENTERPRISE ZONES

There are two Enterprise Zones located within the City of Apopka. These zones were established by the state and are targeted for economic revitalization. The Florida Enterprise Zone program offers financial incentives to businesses located in designated areas. These incentives are offered to encourage private investment in the zones, as well as employment opportunities for the area's residents. As part of this program, the City of Apopka encourages redevelopment of existing structures and development of new site developments, in accordance with the Apopka Development Design Guidelines.

South Apopka Enterprise Zone

This area is south of U.S. 441/Main St., east of Bradshaw, west of Sheeler Ave, and north of Cleveland Street. Portions of this zone are included in the CRA area and the Central Business District. Much of the property in this area was platted in the late nineteenth century. The residential portion of this zone is one of the lower income areas of the City and has a high concentration of vacant and substandard housing units. The commercial portion is part of the CRA area and is one of the targeted areas for the CDBG program and the Facade Renovation Grant Program. The South Apopka Enterprise Zone is approximately 2.1 square miles inclusive of both the Apopka city limits and the unincorporated areas.

Lake Apopka Enterprise Zone

This zone includes portions of the City of Apopka and unincorporated Orange County, with property uses ranging from agricultural to industrial. The area extends west from Plymouth-Sorrento Road and Binion Road to Lake Apopka, south and east of the Lake/Orange County line. The Lake Apopka Enterprise Zone encompasses 20.137 square miles of City and unincorporated county areas.

The Lake Apopka Redevelopment Area lies within the Lake Apopka Enterprise Zone and was established as part of the City of Apopka's Lake Apopka Redevelopment Plan. Chapter 373.461 (5), F.S. was established as part of the state's buyout of the muck farms around Lake Apopka. The statute specifies that proceeds from the sale of farm equipment are to be used to provide economic and infrastructure development assistance for northwest Orange County and Apopka, which have been "adversely affected economically". As part of the City's Lake Apopka Redevelopment Plan, an Impact Fee Trust Fund was created to fund the Impact Fee Incentive Program,

which can assist with the development of sites within the City limits of the Lake Apopka Enterprise Zone.

INCONSISTENT USES

The elimination or reduction of uses that are inconsistent with the City's character and proposed future land uses have traditionally been dealt with by: removal, if dilapidated, through the code enforcement process; or, by restrictions on the expansion or improvements for uses which are nonconforming to the zoning classification. The code enforcement process is most effective when used in conjunction with neighborhood development and redevelopment. Neighborhoods may be residential or commercial or a combination of uses. The concepts of neighborhood planning are more completely analyzed in the Housing Element. These same concepts will be used in commercial areas for elimination of blighted areas.

Any uses or areas that will be made non-conforming by adoption of the comprehensive plan will be precluded from either increasing the degree of non-conformity or from development of new non-conforming uses in the following manner:

1. Administrative rezoning for annexed properties shall be completed within one year after adoption of the associated comprehensive plan future land use amendment. No inconsistent use of land or a structure shall be substantially expanded nor be used as grounds for adding other structure or uses prohibited elsewhere in the same land use district; nor shall the inconsistent use of land or a structure be used as grounds for adding other structures or uses prohibited elsewhere in the same land use district.
2. The lot containing an inconsistent use shall not be enlarged, increased, or extended to occupy an area of land greater in size than existed at the effective date of adoption or amendment of this Comprehensive Plan.
3. No inconsistent use shall be moved in whole or in part to another parcel of land which shall create an inconsistent use on the parcel of land to which the use is moved. No additional structure which is not consistent with the requirements of this Comprehensive Plan shall be erected in connection with such inconsistent use of land.
4. The inconsistent use of a building or parcel shall not be reinstituted after the use has been discontinued for 180 days.
5. A single family residence that has been maintained as a non-conforming use for five years and held in the same, ownership, family ownership, family-inherited ownership or a combination of these ownerships, for at least 25 years may be enlarged or replaced if destroyed, with the stipulation that the enlargement or replacement shall not increase non conformance to land development codes. If a Final Development Plan associated with a

planned unit development (PUD) has not been approved by the City within three years after approval of the PUD master plan, the approval of the PUD master plan will expire. Additionally, if more than two years lapse between the Final Development Plan approval of any sequential phases of the PUD, the approval of the PUD master plan shall expire.

GREEN HOUSE GAS REDUCTION AND ENERGY CONSERVATION

Greenhouse gases (GHGs) are the gases in the atmosphere that trap heat. Carbon dioxide, methane, nitrous oxide, ozone and fluorinated gases are some of the most abundant GHGs in the atmosphere. Some of the GHGs, such as carbon dioxide, occur naturally in the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The greenhouse gases that enter the atmosphere because of the human activities are listed below.

- Carbon Dioxide - Burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).
- Methane – Production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide – Agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- Fluorinated Gases (also known as High Global Warming Potential Gases) – Variety of Industrial processes.

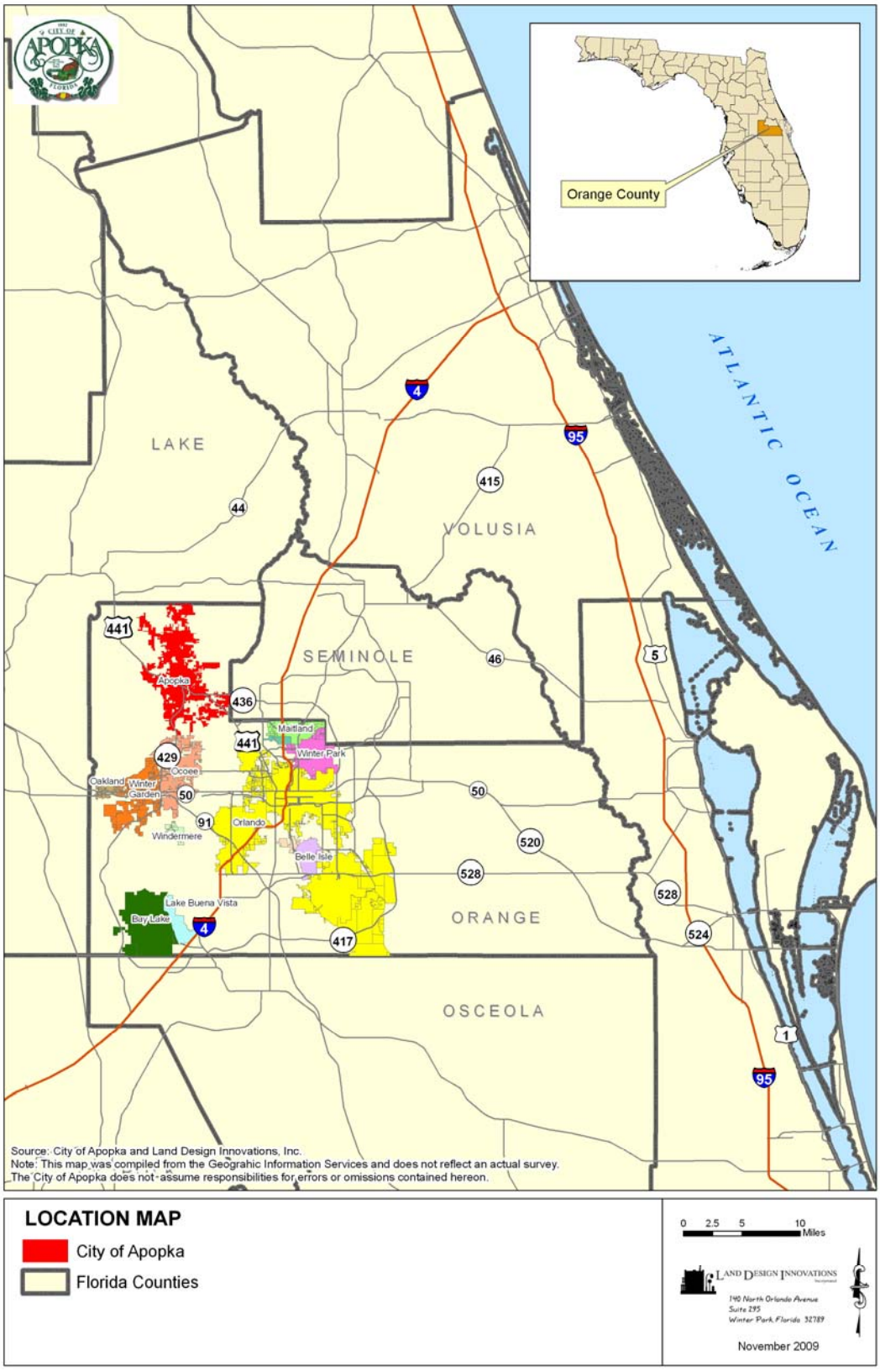
While greenhouse gases play a vital role in maintaining the necessary conditions for life on Earth, the rapidly increasing concentrations of these gases are causing a rise in global temperature – global warming. It is now apparent that the increasing atmospheric concentration of GHGs resulting from human activities is changing the climate in ways that pose serious risks to citizens' health, economy, and environment. To combat global warming, the Florida Legislature enacted House Bill 697 in its 2008 session. HB 697 amended Chapter 163, F.S. to address green house gas reduction and energy conservation through comprehensive plans. Chapter 163.31776(a), F.S., requires that the Future Land Use Element include greenhouse gas reduction strategies and energy efficient land use patterns, accounting for existing and future energy electric power generation and transmission systems.

The land use pattern plays a significant role in reducing vehicle miles travelled (VMT) and thus in reducing energy consumption and its associated GHGs emission. VMT can be reduced by promoting

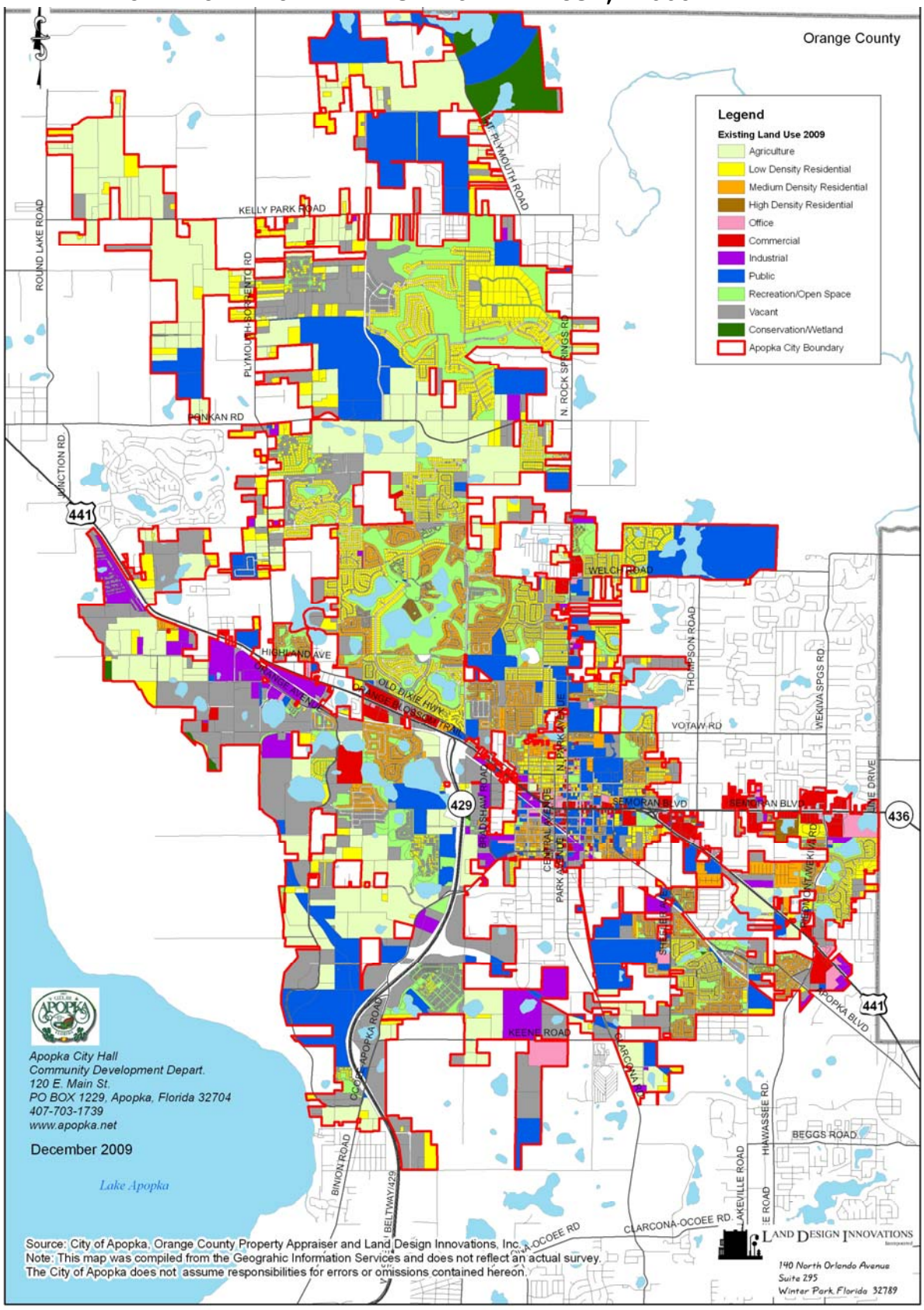
strategies such as compact development, high density development arranged to encourage pedestrians, bicycle and transit use, transit-oriented development and mixed-use development. The preservation of historic buildings and their adaptive reuse result in energy conservation. These buildings are typically closer to population centers and adaptive reuse generally involves lower impacts on natural resources than new construction. The use of "green" building standards, as opposed to conventional codes, results in energy conservation. In addition, protecting and enhancing green spaces provides natural carbon sinks in soils, vegetation and streambeds to mitigate carbon emissions.

Implementation of the City of Apopka's comprehensive plan goals, objectives and policies and enforcement of the land development regulations will reduce urban sprawl and VMT, encourage more mixed-use development in specific areas in the City, preserve green space and promote education of citizens in energy conservation measure and practices.

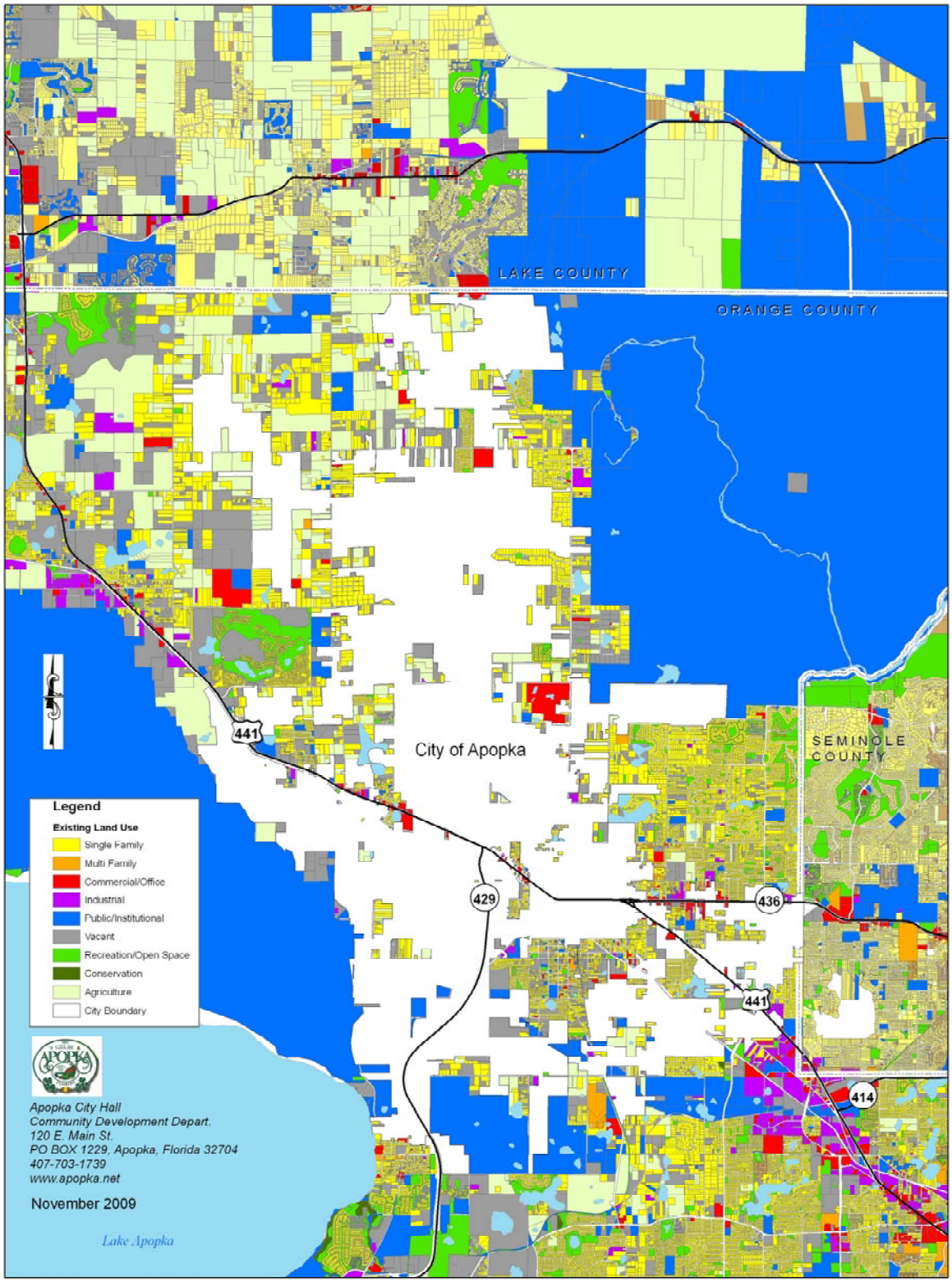
MAP 1-1: LOCATION MAP



MAP 1-2: CITY OF APOPKA EXISTING LAND USE, 2009

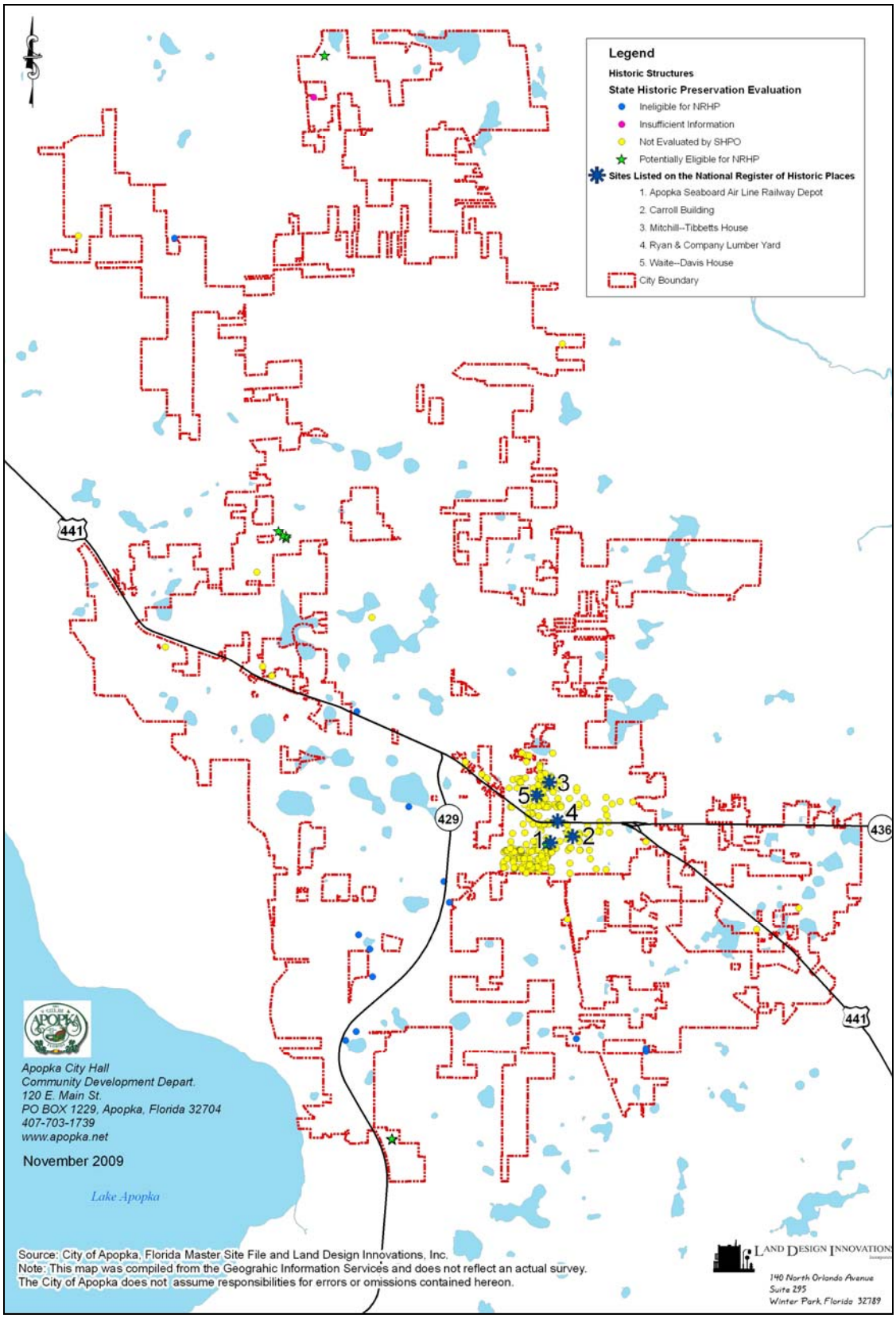


MAP 1-3: EXISTING LAND USE SURROUNDING APOPKA

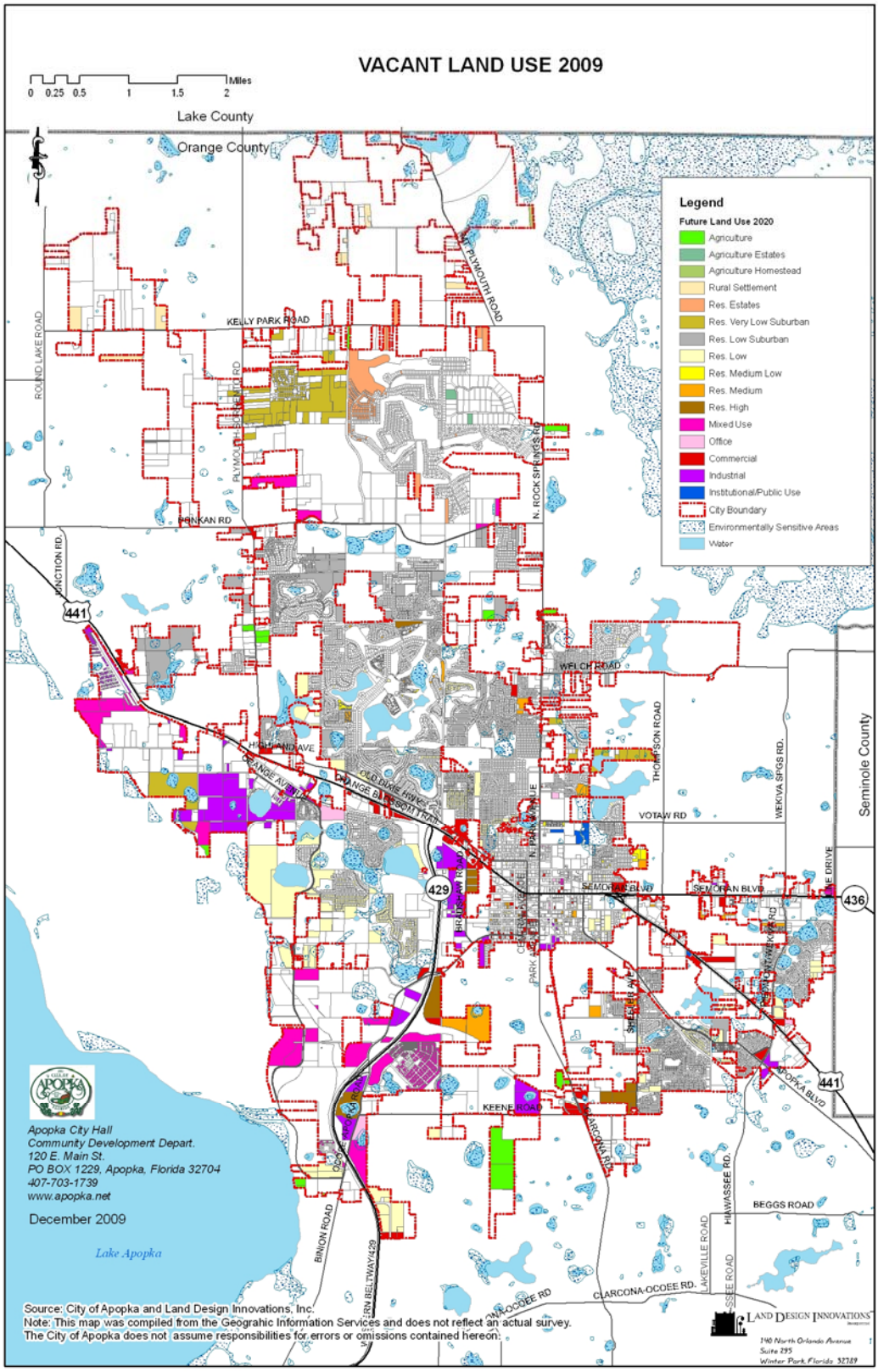


Source: City of Apopka, Orange County Property Appraiser, Lake County Property Appraiser, Seminole County Property Appraiser and Land Design Innovations, Inc.
Note: This map was compiled from the Geograhic Information Services and does not reflect an actual survey.
The City of Apopka does not assume responsibilities for errors or omissions contained hereon.

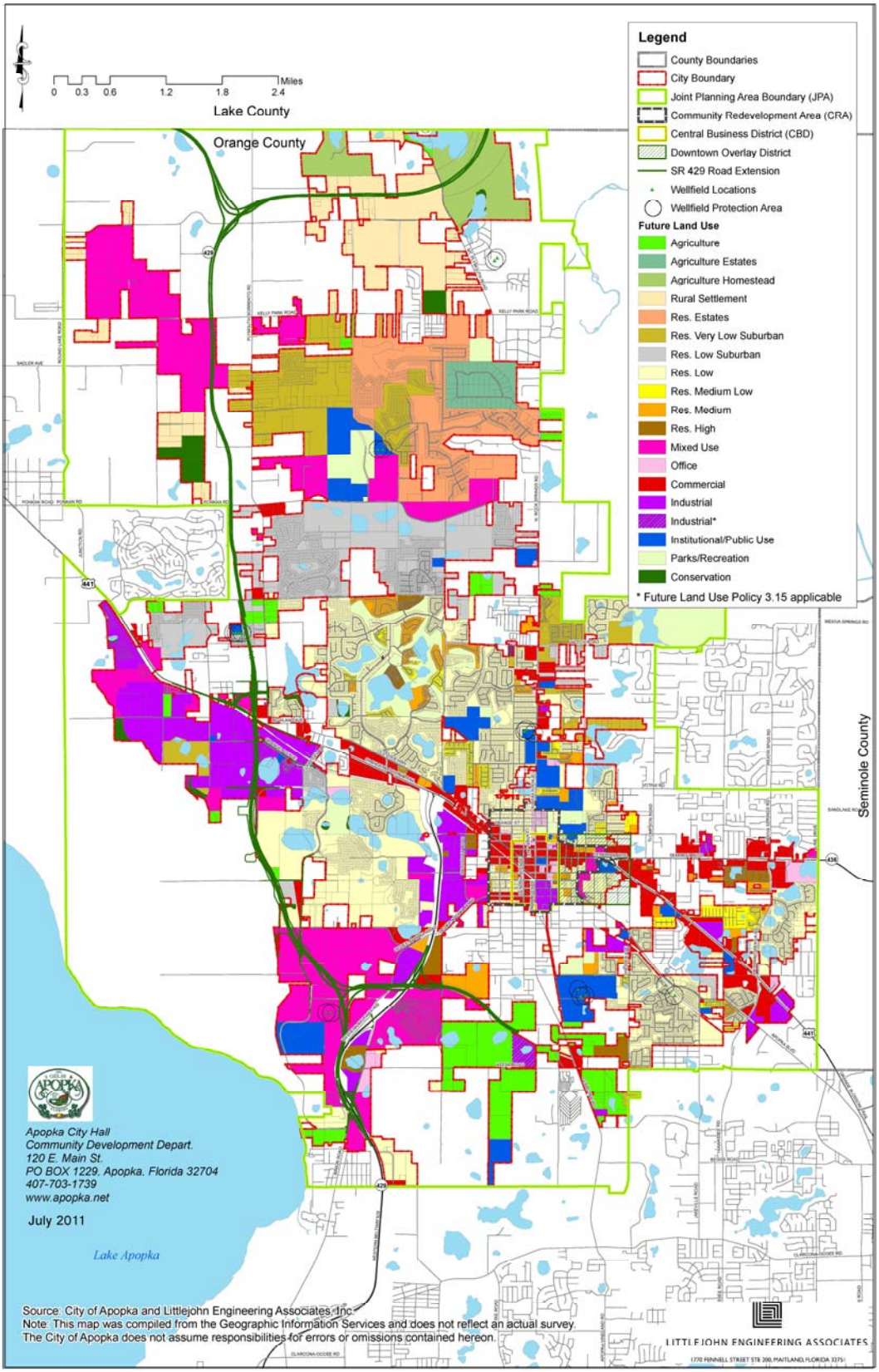
MAP 1-4: HISTORICAL AND CULTURAL RESOURCES MAP



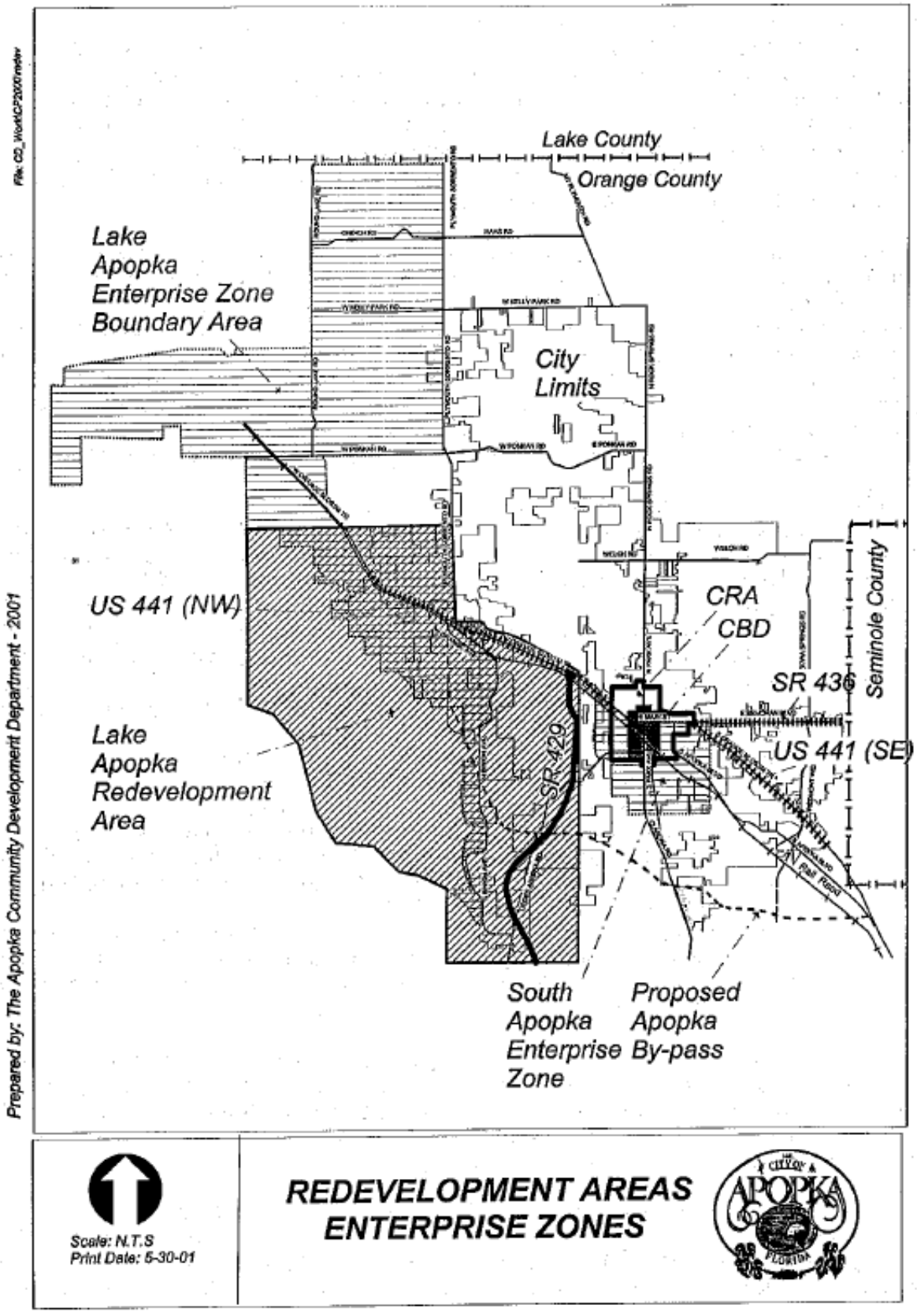
MAP 1-5: VACANT LAND BY FUTURE LAND USE CATEGORY



MAP 1-6: FUTURE LAND USE MAP, 2030



MAP 1-7: REDEVELOPMENT AREAS



APPENDIX 1-1

INVENTORY OF HISTORIC BUILDINGS SURVEYED IN APOPKA

(The complete Historic Properties Survey, May 1992, is on file in the City of Apopka, Community Development Department)

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
2	447 South Alabama Avenue	c. 1887	Frame Vernacular	Private residence	Private residence
4	506 South Alabama Avenue	1924	Colonial Revival	Private residence	Private residence
3	509 South Alabama Avenue	c. 1905	Frame Vernacular	Private residence	Private residence
136	918 South Alabama Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
309	1125 Apopka Boulevard	c. 1925	Frame Vernacular	Private residence	Private residence
335	2098 Apopka Boulevard	c. 1925	Bungalow	Private residence	Private residence
304	250 Cabel Lane	c. 1925	Bungalow	Private residence	Private residence
269	335 Carnation Court	c. 1925	Bungalow	Private residence	Private residence
54	11 North Central Avenue	c. 1924	Bungalow	Private residence	Private residence
55	38 North Central Avenue	c. 1924	Bungalow	Private residence	Private residence
58	141 North Central Avenue	c. 1924	Bungalow	Private residence	Private residence
62	204 North Central Avenue	c. 1890	Frame Vernacular	Private	Private

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
				residence	residence
274	231 North Central Avenue	c. 1925	Bungalow	Private residence	Private residence
273	245 North Central Avenue	c. 1925	Bungalow	Private residence	Private residence
272	253 North Central Avenue	c. 1925	Bungalow	Private residence	Private residence
50	5 South Central Avenue	1886	Frame Vernacular	Private residence	Private residence
49	22 South Central Avenue	c. 1900	Frame Vernacular	Private residence	Private residence
48	30 South Central Avenue	c. 1910	Frame Vernacular	Private residence	Private residence
46	107 South Central Avenue	c. 1900	Frame Vernacular	Private residence	Private residence
45	126 South Central Avenue	1925	Bungalow	Private residence	Private residence
43	140 South Central Avenue	c. 1919	Frame Vernacular	Private residence	Private residence
44	141 South Central Avenue	1912	Frame Vernacular	Private residence	Private residence
42	204 South Central Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
82	406 South Central Avenue	1926	Masonry Vernacular	Commercial	Commercial
83	550 South Central Avenue	1924	Masonry Vernacular	Commercial	Commercial
111	612 South Central Avenue	c. 1915	Frame Vernacular	Private residence	Private residence
110	702 South Central Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
108	816 South Central Avenue	c. 1940	Bungalow	Private residence	Private residence
97	1002 South Central Avenue	c. 1940	Shotgun	Private residence	Private residence
96	1012 South Central Avenue	c. 1940	Shotgun	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
95	1014 South Central Avenue	c. 1940	Shotgun	Private residence	Private residence
94	1016 South Central Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
93	1018 South Central Avenue	c. 1925	Bungalow	Private residence	Private residence
213	1150 South Central Avenue	c. 1925	Bungalow	Private residence	Private residence
214	1201 South Central Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
143	1186 South Clarcona Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
176	18 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
177	24 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
178	28 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
179	30 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
175	729 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
174	733 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
305	566 West Dixie Highway	c. 1925	Frame Vernacular	Private residence	Private residence
126	104 South Edgewood Avenue	c. 1925	Bungalow	Private residence	Private residence
125	155 South Edgewood Avenue	c. 1935	Colonial Revival	Private residence	Private residence
211	149 East Eighteenth Street	c. 1925	Bungalow	Private residence	Private residence
315	19 West Eighteenth Street	c. 19265	Frame Vernacular	Private residence	Private residence
172	13 East Eight Street	c. 1925	Frame Vernacular	Private residence	Private residence
170	26 East Eight Street	c. 1940	Shotgun	Private residence	Private residence
169	53 East Eight Street	c. 1940	Frame Vernacular	Private residence	Private residence
168	57 East Eight Street	c. 1940	Frame Vernacular	Private residence	Private residence
167	63 East Eight Street	c. 1940	Frame Vernacular	Private residence	Private residence
109	16 West Eight Street	c. 1915	Shotgun	Private residence	Private residence
219	74 West Eight Street	c. 1935	Bungalow	Private residence	Private residence
216	103 West Eight Street	c. 1935	Bungalow	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
217	110 West Eight Street	c. 1940	Frame Vernacular	Private residence	Private residence
227	131 West Eight Street	c. 1925	Frame Vernacular	Private residence	Private residence
228	134 West Eight Street	c. 1950	Frame Vernacular	Private residence	Private residence
247	250 West Eight Street	c. 1940	Frame Vernacular	Private residence	Private residence
92	31 East Eleventh Street	c. 1925	Frame Vernacular	Private residence	Private residence
149	122 East Eleventh Street	c. 1940	Frame Vernacular	Private residence	Private residence
206	344 East Fifteenth Street	c. 1935	Frame Vernacular	Private residence	Private residence
76	13 East Fifth Street	c. 1915	Frame Vernacular	Private residence	Private residence
17	210 East Fifth Street	1924	Frame Vernacular	Commercial	Commercial
18	223 East Fifth Street	c. 1925	Bungalow	Private residence	Private residence
47	1 East First Street	c. 1928	Masonry Vernacular	Private residence	Private residence
73	60 East First Street	c. 1932	Neoclassical	Private residence	Private residence
32	154 East First Street	c. 1920	Bungalow	Private residence	Private residence
127	242 East First Street	c. 1940	Bungalow	Private residence	Private residence
70	28 West First Street	c. 1920	Frame Vernacular	Private residence	Private residence
69	31 West First Street	c. 1900	Frame Vernacular	Private residence	Private residence
67	58 West First Street	c. 1915	Bungalow	Private residence	Private residence
68	61 West First Street	1902	Frame Vernacular	Private residence	Private residence
23	407 South Forest Avenue	c. 1925	Frame Vernacular	Commercial	Commercial
316	34 East Fourteenth Street	c. 1946	Log House	Private residence	Private residence
207	309 East Fourteenth Street	c. 1925	Bungalow	Private residence	Private residence
264	312 West Fourth Street	c. 1925	Bungalow	Private residence	Private residence
263	319 West Fourth Street	c. 1910	Frame Vernacular	Private residence	Private residence
262	320 West Fourth Street	c. 1900	Frame Vernacular	Private residence	Private residence
261	341 West Fourth Street	c. 1900	Frame Vernacular	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
137	906 South Georgia Avenue	c. 1910	Frame Vernacular	Private residence	Private residence
33	North Goodrich Avenue	1925	Bungalow	Private residence	Private residence
35	16 North Goodrich Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
34	17 North Goodrich Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
36	41 North Goodrich Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
317	1725 West Harmon Road	c. 1920	Frame Vernacular	Private residence	Private residence
256	124 South Hawthorne Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
257	306 South Hawthorne Avenue	c. 1925	Bungalow	Private residence	Private residence
258	308 South Hawthorne Avenue	c. 1925	Bungalow	Private residence	Private residence
307	16 North Highland Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
306	15 South Highland Avenue	c. 1925	Bungalow	Private residence	Private residence
130	120 South Highland Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
128	143 South Highland Avenue	c. 1925	Bungalow	Private residence	Private residence
129	144 South Highland Avenue	c. 1920	Frame Vernacular	Private residence	Private residence
12	517 South Highland Avenue	1925	Bungalow	Private residence	Private residence
13	541 South Highland Avenue	c. 1923	Frame Vernacular	Private residence	Private residence
14	601 South Highland Avenue	1886	Gothic Revival	Private residence	Private residence
15	615 South Highland Avenue	c. 1925	Bungalow	Private residence	Private residence
134	1009 South Highland Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
205	1328 South Highland Avenue	c. 1945	Frame Vernacular	Private residence	Private residence
204	1391 South Highland Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
323	2491 West Highland Avenue	c. 1905	Frame Vernacular	Private residence	Private residence
322	2765 West Highland Avenue	1884	Frame Vernacular	Private residence	Private residence
321	2803 West Highland Avenue	c. 1925	Bungalow	Private residence	Private residence
319	2805 West Highland Avenue	c. 1925	Bungalow	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
320	2807 West Highland Avenue	c. 1925	Bungalow	Private residence	Private residence
209	156 East Hunt Street	c. 1946	Shotgun	Private residence	Private residence
271	260 North Lake Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
270	301 North Lake Avenue	1950	Neoclassical	Private residence	Private residence
66	23 South Lake Avenue	c. 1910	Frame Vernacular	Private residence	Private residence
71	148 South Lake Avenue	c. 1915	Frame Vernacular	Private residence	Private residence
254	506 South Lake Avenue	c. 1935	Shotgun	Private residence	Private residence
215	1126 South Lake Avenue	c. 1925	Bungalow	Private residence	Private residence
313	1317 South Lake Avenue	c. 1926	Bungalow	Private residence	Private residence
336	1402 South Lake Pleasant Road	c. 1925	Bungalow	Private residence	Private residence
327	1609 Lester Schopke Road	c. 1925	Bungalow	Private residence	Private residence
326	1901 Lester Schopke Road	c. 1925	Bungalow	Private residence	Private residence
135	920 South Little Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
221	709 Lou-Ann Drive	c. 1940	Shotgun	Private residence	Private residence
222	719 Lou-Ann Drive	c. 1940	Frame Vernacular	Private residence	Private residence
223	727 Lou-Ann Drive	c. 1940	Frame Vernacular	Private residence	Private residence
224	735 Lou-Ann Drive	c. 1940	Frame Vernacular	Private residence	Private residence
226	742 Lou-Ann Drive	c. 1925	Frame Vernacular	Private residence	Private residence
225	743 Lou-Ann Drive	c. 1940	Frame Vernacular	Private residence	Private residence
56	19 East Magnolia Street	c. 1925	Bungalow	Private residence	Private residence
57	46 East Magnolia Street	c. 1940	Bungalow	Private residence	Private residence
38	127 East Magnolia Street	c. 1925	Frame Vernacular	Private residence	Private residence
37	131 East Magnolia Street	c. 1925	Frame Vernacular	Private residence	Private residence
63	75 West Magnolia Street	c. 1920	Frame Vernacular	Private residence	Private residence
279	142 West Magnolia Street	c. 1935	Frame Vernacular	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
278	145 West Magnolia Street	c. 1925	Bungalow	Private residence	Private residence
277	157 West Magnolia Street	1926	Bungalow	Private residence	Private residence
275	203 West Magnolia Street	c. 1925	Colonial Revival	Private residence	Private residence
81	30-34 East Main Street	c. 1921	Masonry Vernacular	Commercial	Commercial
80	38 East Main Street	1912	Masonry Vernacular	Commercial	Commercial
79	48 East Main Street	1923	Masonry Vernacular	Commercial	Commercial
77	65 East Main Street	c. 1932	Bungalow	Private residence	Commercial
78	72 East Main Street	1912	Masonry Vernacular	Commercial	Commercial
21	101 East Main Street	c. 1927	Masonry Vernacular	Commercial	Vacant
19	120 East Main Street	1924	Neoclassical	Education	Government
22	125 East Main Street	c. 1895	Colonial Revival	Private residence	Private residence
24	212 East Main Street	1922	Frame Vernacular	Commercial	Commercial
5	453 East Main Street	1859	Frame Vernacular	Commercial	Commercial
122	501 East Main Street	1903	Queen Anne	Private residence	Commercial
296	209 North Maine Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
295	224 North Maine Avenue	1941	Frame Vernacular	Private residence	Private residence
294	236 North Maine Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
292	240 North Maine Avenue	c. 1925	Bungalow	Private residence	Private residence
293	241 North Maine Avenue	c. 1940	Frame Vernacular	Apartment	Apartment
291	252 North Maine Avenue	c. 1925	Bungalow	Private residence	Private residence
290	256 North Maine Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
289	301 North Maine Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
287	319 North Maine Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
288	320 North Maine Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
286	334 North Maine Avenue	c. 1925	Frame Vernacular	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
120	538 East Mason Street	c. 1925	Bungalow	Private residence	Private residence
119	603 East Mason Street	c. 1935	Frame Vernacular	Private residence	Private residence
118	709 East Mason Street	c. 1925	Frame Vernacular	Private residence	Private residence
117	723 East Mason Street	c. 1940	Frame Vernacular	Private residence	Private residence
114	817 East Mason Street	c. 1925	Frame Vernacular	private residence	Private residence
121	10 South McGee Avenue	c. 1920	Bungalow	Private residence	Private residence
123	306 South McGee Avenue	c. 1910	Frame Vernacular	Private residence	Private residence
6	511 South McGee Avenue	c. 1905	Frame Vernacular	Private residence	Private residence
181	47 East Michael Gladden Boulevard	c.1940	Frame Vernacular	private residence	Private residence
103	14 West Michael Gladden Boulevard	c. 1935	Frame Vernacular	Commercial	Commercial
102	22-24 West Michael Gladden Boulevard	c. 1934 (demo 4/20/01)	Frame Vernacular	Commercial	Commercial
237	31 West Michael Gladden Boulevard	c. 1935	Bungalow	Private residence	Private residence
105	32 West Michael Gladden Boulevard	c. 1905	Frame Vernacular	private residence	Private residence
238	34 West Michael Gladden Boulevard	c. 1925	Frame Vernacular	private residence	Private residence
240	38 West Michael Gladden Boulevard	c. 1925	Shotgun	Private residence	Private residence
241	40 West Michael Gladden Boulevard	c. 1925	Shotgun	Private residence	Private residence
104	41 West Michael Gladden Boulevard	c. 1935	Frame Vernacular	Private residence	Private residence
239	61 West Michael Gladden Boulevard	c. 1920	Frame Vernacular	Private residence	Private residence
242	70 West Michael Gladden Boulevard	c. 1925	Bungalow	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
243	71 West Michael Gladden Boulevard	c. 1920	Frame Vernacular	Private residence	Private residence
244	104 West Michael Gladden Boulevard	c. 1935	Bungalow	Private residence	Private residence
245	144 West Michael Gladden Boulevard	c. 1925	Frame Vernacular	Private residence	Private residence
246	170 West Michael Gladden Boulevard	c. 1925	Shotgun	Private residence	Private residence
248	270 West Michael Gladden Boulevard	c. 1940	Bungalow	Private residence	Private residence
11	425 South Midland Avenue	1926	Bungalow	Private residence	Private residence
9	510 South Midland Avenue	c. 1925	Bungalow	Private residence	Private residence
10	511 South Midland Avenue	1924	Bungalow	Private residence	Private residence
8	521 South Midland Avenue	1926	Frame Vernacular	Private residence	Private residence
124	481 East Monroe Street	c. 1895	Frame Vernacular	private residence	Private residence
115	801 East Monroe Street	c. 1940	Frame Vernacular	private residence	Private residence
116	813 East Monroe Street	c. 1935	Frame Vernacular	private residence	Private residence
269	139 West Myrtle Street	c. 1924	Frame Vernacular	private residence	Private residence
267	140 West Myrtle Street	c. 1925	Bungalow	Private residence	Private residence
268	152 West Myrtle Street	1926	Bungalow	Private residence	Private residence
283	222 North New Hampshire Avenue	c. 1925	Bungalow	Private residence	Private residence
284	242 North New Hampshire Avenue	c. 1925	Frame Vernacular	irate residence	Private residence
285	342 North New Hampshire Avenue	c. 1925	Bungalow	Private residence	Private residence
59	22 East Oak Street	c. 1925	Frame Vernacular	Private residence	Private residence
60	48 East Oak Street	c. 1940	Frame Vernacular	Private residence	Private residence
61	56 East Oak Street	c. 1940	Frame Vernacular	Private residence	Private residence
1	458 South Oakland Avenue	c. 1925	Frame Vernacular	Private residence	Private residence
282	397 West Old Dixie Highway	c. 1925	Bungalow	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
299	410 West Old Dixie Highway	c. 1925	Bungalow	Private residence	Private residence
300	412 West Old Dixie Highway	c. 1925	Frame Vernacular	Private residence	Private residence
301	414 West Old Dixie Highway	c. 1925	Bungalow	Private residence	Private residence
298	417 West Old Dixie Highway	c. 1925	Frame Vernacular	Private residence	Private residence
297	419 West Old Dixie Highway	c. 1925	Frame Vernacular	Private residence	Private residence
302	426 West Old Dixie Highway	c. 1925	Frame Vernacular	Private residence	Private residence
303	437 West Old Dixie Highway	c. 1925	Bungalow	Private residence	Private residence
324	2427 West Old Dixie Highway	c. 1925	Bungalow	Private residence	Private residence
51	21 East Orange Street	1887	Frame Vernacular	Private residence	Private residence
52	31 East Orange Street	c. 1890	Frame Vernacular	Private residence	Private residence
53	36 East Orange Street	c. 1910	Bungalow	Private residence	Private residence
65	45 East Orange Street	c. 1924	Bungalow	Private residence	Private residence
64	73 East Orange Street	c. 1891	Frame Vernacular	Private residence	Private residence
280	171 East Orange Street	c. 1925	Frame Vernacular	Private residence	Private residence
281	235 East Orange Street	c. 1925	Frame Vernacular	Private residence	Private residence
40	108 North Park Avenue	c. 1940	Minimal Traditional	Private residence	Private residence
39	116 North Park Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
308	311 North Park Avenue	c. 1925	Bungalow	Private residence	Private residence
163	704 South Park Avenue	1925	Frame Vernacular	Private residence	Private residence
106	914 South Park Avenue	c. 1920	Frame Vernacular	Religious	Religious
107	950 South Park Avenue	c. 1925	Bungalow	Private residence	Private residence
212	1213 South Park Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
208	1563 South Park Avenue	c. 1946	Bungalow	Private residence	Private residence
337	1121 Piedmont Wekiva Road	c. 1918	Frame Vernacular	Private residence	Private residence
333	750 Plymouth Sorrento Road	c. 1925	Bungalow	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
332	801 Plymouth Sorrento Road	c. 1920	Bungalow	Private residence	Private residence
330	1255 Plymouth Sorrento Road	c. 1925	Bungalow	Private residence	Private residence
331	1277 Plymouth Sorrento Road	1926	Bungalow	Private residence	Private residence
329	1680 Plymouth Sorrento Road	c. 1915	Frame Vernacular	Private residence	Private residence
188	157 Rand Court	C. 1940	Frame Vernacular	Private residence	Private residence
145	169 Rand Court	C. 1925	Bungalow	Private residence	Private residence
146	171 Rand Court	C. 1940	Bungalow	Private residence	Private residence
187	175 Rand Court	C. 1925	Frame Vernacular	Private residence	Private residence
147	179 Rand Court	C. 1940	Frame Vernacular	Private residence	Private residence
148	185 Rand Court	C. 1940	Frame Vernacular	Private residence	Private residence
90	813 South Robinson Avenue	c. 1920	Frame Vernacular	Private residence	Private residence
91	959 South Robinson Avenue	c. 1910	Frame Vernacular	Private residence	Private residence
199	1112 South Robinson Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
200	1114 South Robinson Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
197	1120 South Robinson Avenue	c. 1940	Frame Vernacular	Private residence	Private residence
198	1166 South Robinson Avenue	c. 1945	Frame Vernacular	Private residence	Private residence
325	2251 Rogers Road	c. 1935	Frame Vernacular	Private residence	Private residence
41	42 East Second Street	c. 1930	Bungalow	Private residence	Private residence
26	134 East Second Street	c. 1923	Bungalow	Private residence	Private residence
27	153 East Second Street	c. 1925	Bungalow	Private residence	Private residence
29	157 East Second Street	1926	Bungalow	Private residence	Private residence
28	164 East Second Street	c. 1920	Bungalow	Private residence	Private residence
30	167 East Second Street	c. 1925	Bungalow	Private residence	Private residence
31	168 East Second Street	1924	Frame Vernacular	Private residence	Private residence
112	60 West Second Street	c. 1920	Frame Vernacular	Private residence	Private residence

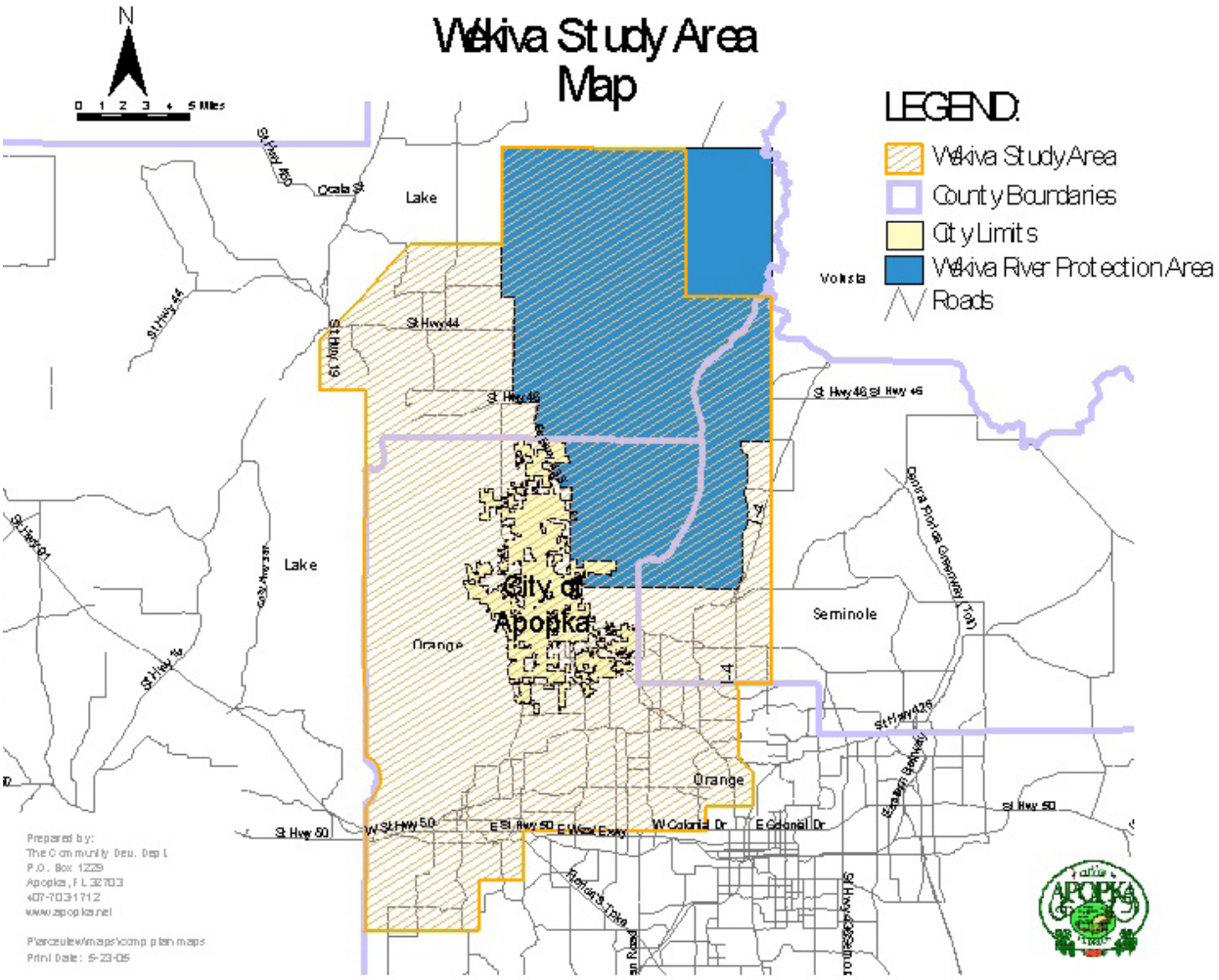
Record No.	Address	Date (Circa)	Style	Original Use	Present Use
72	77 West Second Street	c. 1940	Frame Vernacular	Private residence	Private residence
265	115 West Second Street	c. 1920	Frame Vernacular	Private residence	Private residence
255	214 West Second Street	c. 1935	Frame Vernacular	Private residence	Private residence
311	232 West Seventh Street	c. 1925	Shotgun	Private residence	Private residence
310	236 West Seventh Street	c. 1920	Frame Vernacular	Private residence	Private residence
166	58 East Seventh Street	c. 1940	Frame Vernacular	Private residence	Private residence
164	133 East Seventh Street	c. 1924	Frame Vernacular	Private residence	Private residence
87	224 East Seventh Street	c. 1905	Frame Vernacular	Private residence	Apartment
88	235 East Seventh Street	c. 1925	Frame Vernacular	Private residence	Private residence
89	247 East Seventh Street	1924	Frame Vernacular	Private residence	Private residence
133	312 East Seventh Street	c. 1925	Frame Vernacular	Private residence	Private residence
132	318 East Seventh Street	c. 1940	Frame Vernacular	Private residence	Private residence
131	412 East Seventh Street	c. 1900	Frame Vernacular	Private residence	Private residence
250	32 West Seventh Street	c. 1945	Frame Vernacular	Private residence	Private residence
249	225 West Seventh Street	c. 1925	Bungalow	Private residence	Private residence
203	203 East Sixteenth Street	c. 1935	Frame Vernacular	Private residence	Private residence
86	160 East Sixth Street	c. 1924	Frame Vernacular	Private residence	Private residence
16	217 East Sixth Street	c. 1924	Frame Vernacular	Private residence	Private residence
7	359 East Sixth Street	1924	Frame Vernacular	Private residence	Private residence
113	804 East Sixth Street	c. 1925	Bungalow	Private residence	Private residence
251	36 West Sixth Street #4	c. 1925	Frame Vernacular	Private residence	Private residence
252	48 West Sixth Street	c. 1940	Frame Vernacular	Private residence	Private residence
251	220 West Sixth Street	c. 1935	Bungalow	Private residence	Private residence
74	312-316 South Central Avenue	1925	Mediterranean Revival	Commercial	Commercial
75	404-406 South Central Avenue	1927	Mediterranean Revival	Private residence	Private residence

Record No.	Address	Date (Circa)	Style	Original Use	Present Use
20	407-409 South Park Avenue	1932	Masonry Vernacular	Physicians Office	Museum
173	737-739 South Davis Court	c. 1940	Frame Vernacular	Private residence	Private residence
338	1192 St. Francis Place	c. 1915	Colonial Revival	Private residence	Private residence
84	31A East Station Street	c. 1940	Frame Vernacular	Private residence	Private residence
85	36 East Station Street	1918	Frame Vernacular	Depot	Vacant
202	413 East Tenth Street	c. 1945	Frame Vernacular	Private residence	Private residence
101	7 West Tenth Street	c. 1925	Frame Vernacular	Private residence	Private residence
100	17 West Tenth Street	c. 1940	Shotgun	Private residence	Private residence
236	24 West Tenth Street	c. 1940	Frame Vernacular	Private residence	Private residence
99	37 West Tenth Street	c. 1940	Shotgun	Private residence	Private residence
98	40 West Tenth Street	c. 1940	Shotgun	Private residence	Private residence
233	45 West Tenth Street	c. 1920	Frame Vernacular	Private residence	Private residence
232	121 West Tenth Street	c. 1950	Frame Vernacular	Private residence	Private residence
231	203 West Tenth Street	c. 1950	Frame Vernacular	Private residence	Private residence
25	221 East Third Street	c. 1930	Frame Vernacular	Storage	Storage
142	127 East Thirteenth Street	c. 1925	Shotgun	Private residence	Private residence
141	229 East Thirteenth Street	c. 1925	Frame Vernacular	Private residence	Private residence
138	303 East Thirteenth Street	c. 1925	Frame Vernacular	Private residence	Private residence
139	308 East Thirteenth Street	c. 1940	Frame Vernacular	Private residence	Private residence
190	309 East Thirteenth Street	c. 1940	Frame Vernacular	Private residence	Private residence
140	324 East Thirteenth Street	c. 1940	Frame Vernacular	Private residence	Private residence
144	135 East Twelfth Street	c. 1925	Frame Vernacular	Private residence	Private residence
195	209 East Twelfth Street	c. 1935	Frame Vernacular	Private residence	Private residence
192	230 East Twelfth Street	c. 1935	Frame Vernacular	Private residence	Private residence
318	1665 U.S. Highway 441	c. 1915	Frame Vernacular	Private residence	Private residence

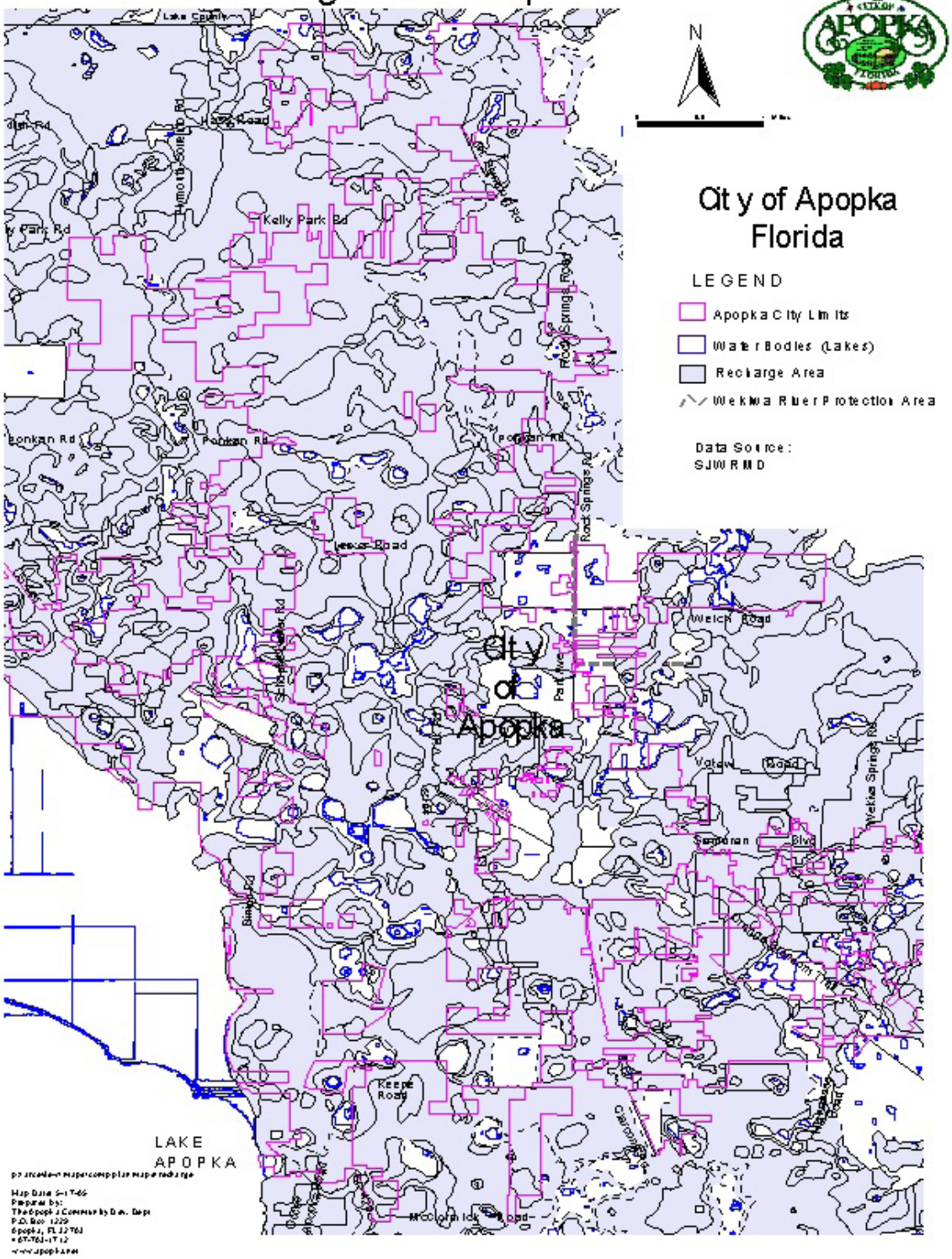
Record No.	Address	Date (Circa)	Style	Original Use	Present Use
328	1907 Vick Road	c. 1925	Bungalow	Private residence	Private residence
334	1122 Votaw Road	c. 1925	Frame Vernacular	Private residence	Private residence
229	742 South Washington Avenue	c. 1935	Frame Vernacular	Private residence	Private residence
312	1314 South Washington Avenue	c. 1920	Frame Vernacular	Private residence	Private residence

APPENDIX 1-2

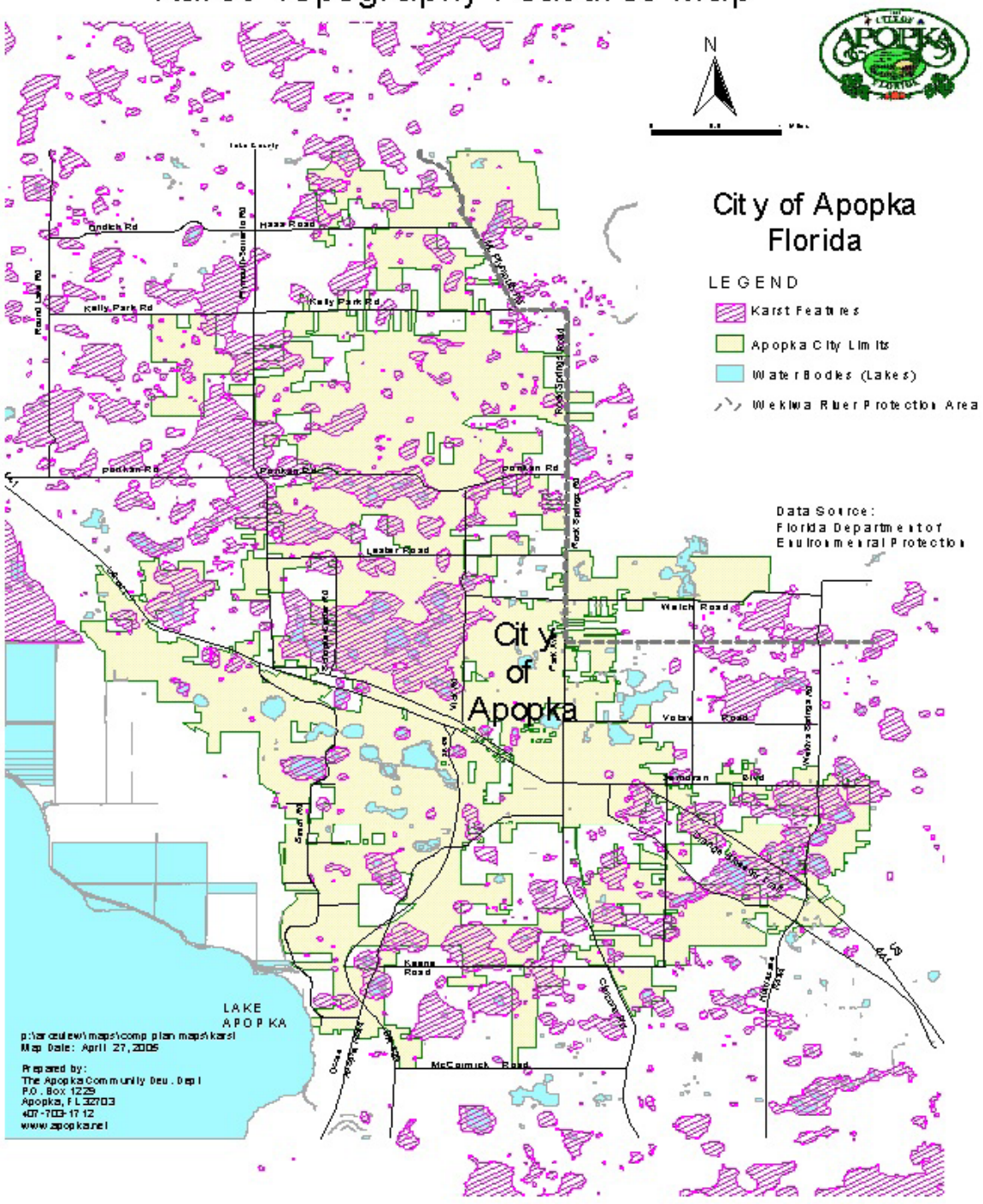
FUTURE LAND USE OVERLAY MAPS

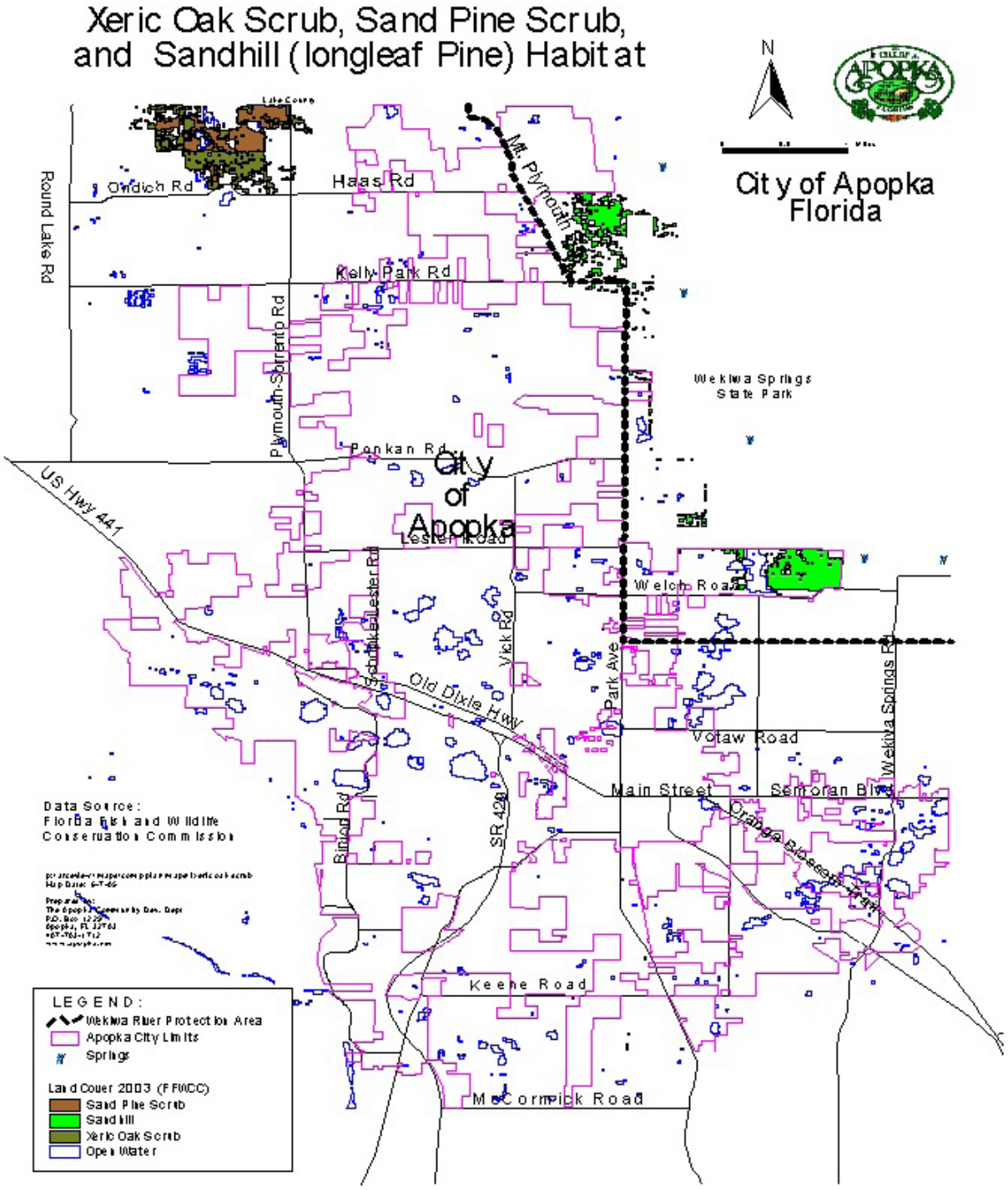

Wekiva Study Area Map
N
0 1 2 3 4 5 Miles
LEGEND:
Wekiva Study Area
County Boundaries
City Limits
Wekiva River Protection Area
Roads
Lake
Orange
Seminole
Volusia
City of Apopka
St Hwy 44
St Hwy 46
St Hwy 46 St Hwy 46
St Hwy 50
W St Hwy 50
E St Hwy 50
W Colonial Dr
E Colonial Dr
St Hwy 429
I-4
Prepared by:
The Community Dev. Dept
P.O. Box 1229
Apopka, FL 32703
407-703-1712
www.apopka.net
P:\arcgis\ew\maps\comp plan maps
Print Date: 5-23-05

Recharge Area Map

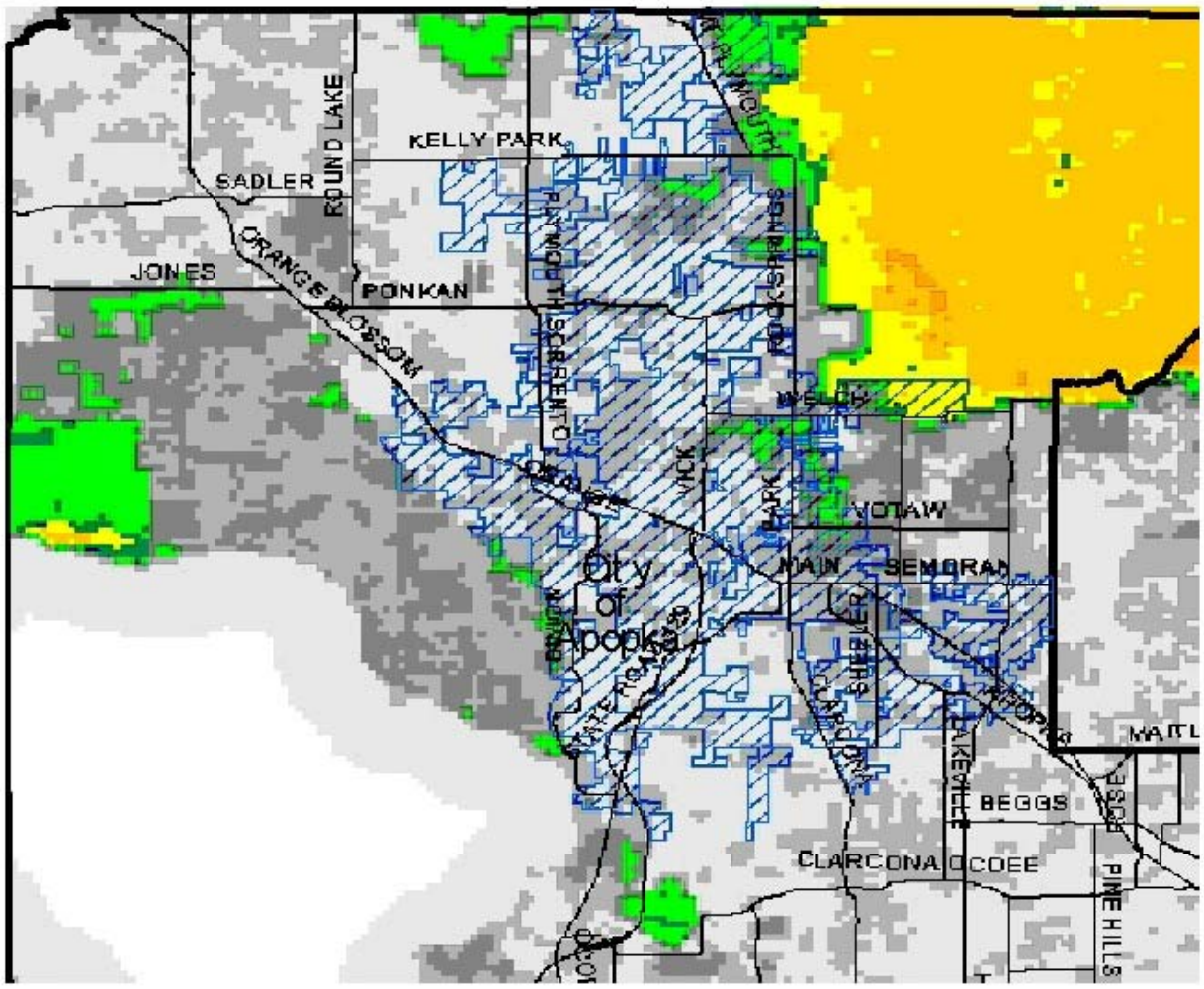


Karst Topography Features Map




Xeric Oak Scrub, Sand Pine Scrub,
and Sandhill (longleaf Pine) Habitat
N
City of Apopka
Florida
Round Lake Rd
Ondich Rd
Haas Rd
Mt. Plymouth
Kelly Park Rd
Plymouth-Sorrento Rd
Wekiwa Springs
State Park
Ponkan Rd
City
of
Apopka
US Hwy 441
Lester Road
Welch Road
Schopke Lester Rd
Vick Rd
Park Ave
Old Dixie Hwy
Votaw Road
Wekiva Springs Rd
Main Street
Semoran Blvd
Orange Blossom Trail
Binion Rd
SR 429
Keene Road
McCormick Road
Data Source:
Florida Fish and Wildlife
Conservation Commission
LEGEND:
Wekiwa River Protection Area
Apopka City Limits
Springs
Land Cover 2003 (FFWCC)
Sand Pine Scrub
Sandhill
Xeric Oak Scrub
Open Water

Wekiva Basin
Integrated Wildlife Habitat Ranking System



LEGEND:

Habitat Ranking System

1 - Least Important
2
3
4
5
6
7
8
9
10 - Most Important

City Limits

This map depicts the sensitivity of habitat areas on a sliding scale with a ranking of 1-10. The ranking is being the most sensitive and most important.

City of Apopka
Florida

Data Source:
Florida Fish and Wildlife
Conservation Commission

p:\arcview\maps\comp plan maps\habitat ranking
Map Date: April 25, 2005

Prepared by:
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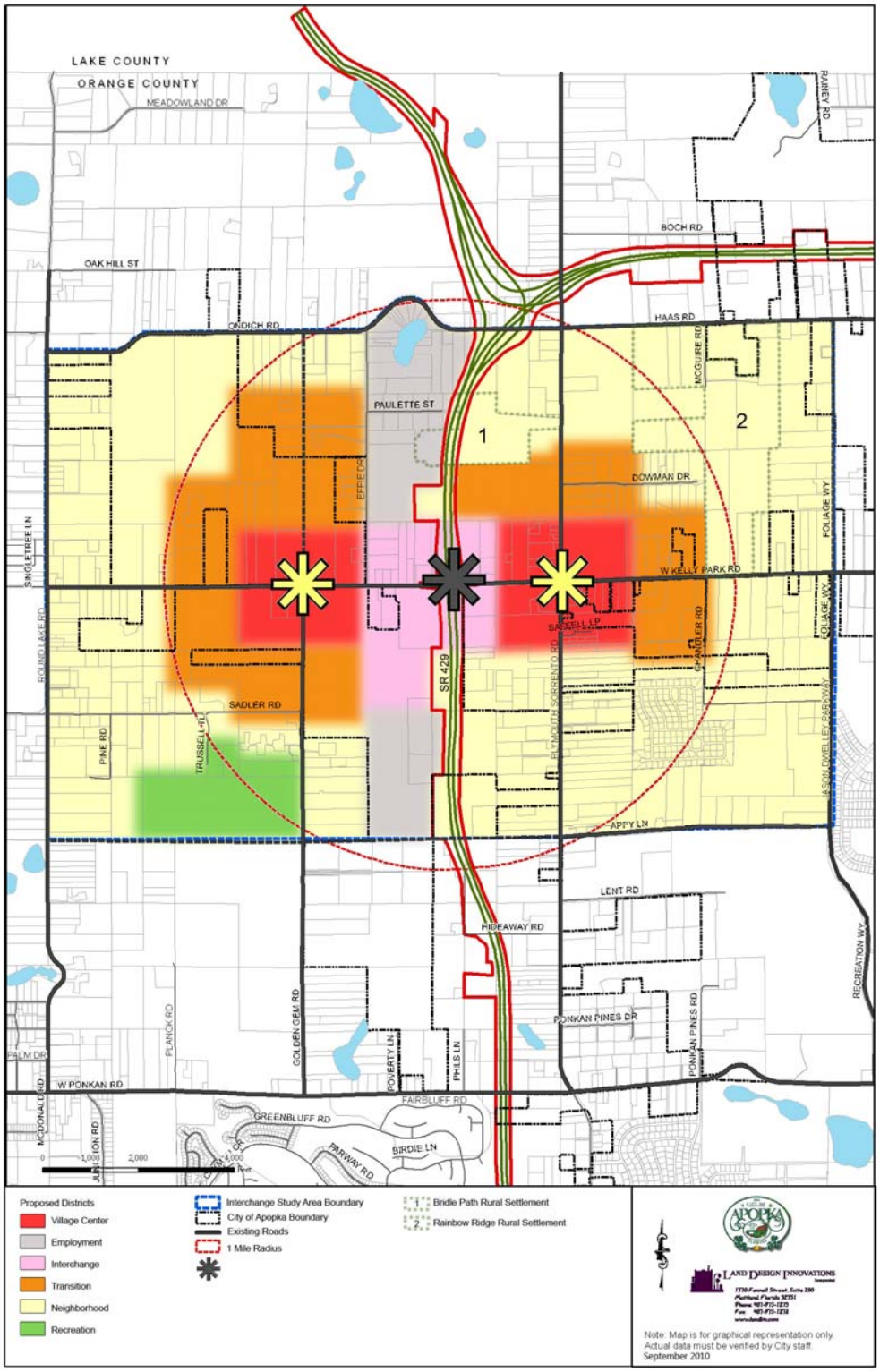
WEKIVA PARKWAY INTERCHANGE VISION PLAN



Character district boundaries are Illustrative only. See Policy 20.5 for additional information.

APPENDIX 1-3

POPULATION AND DEMOGRAPHICS

In order to plan for the future needs of the residents of the City of Apopka it is important to define the demographics and how the population trends are anticipated to change over time. The historic, present and future demographic compositions of the City are described in this section.

Population estimates and projections are required for each municipality submitting comprehensive plans in compliance with Chapter 163 of the Florida Statutes, and Rule 9J-5 of the Florida Administrative Code. Chapter 9J-5.005(2)(e), F.A.C., requires that the comprehensive plan be based on resident and seasonal population estimates and projections. Resident and seasonal population estimates and projections shall be either those provided by the University of Florida, Bureau of Economics and Business Research, those provided by the Executive Office of the Governor; or shall be generated by the local government.

The City of Apopka has selected to prepare its own estimates and projections for the comprehensive plan. The projections were calculated through the planning horizon, up to the year 2030, to more accurately depict future growth. Natural increase is generally the most significant factor in population growth in a short-term context (e.g. five to ten year time frame); over a longer time period, net migration becomes the dominant factor influencing population change. Net migration is the difference between in-migration and out-migration relative to a given geographic area under study.

This report contains the estimates and projections and a description of the methodologies utilized to generate the figures. Population estimates and projections are essential for the various elements that comprise the comprehensive plan, including land use, housing, recreation and the various infrastructure related elements. Estimates and projections have been calculated using approved Florida Department of Community Affairs data sources and projection methods.

HISTORIC POPULATION TRENDS: 1960-1990

Table P-1 illustrates the historic population growth between 1965 and 2000. Between 1960 and 1970, 467 residents were added, reflecting a 1.31 percent increase. The City has demonstrated a consistent record of significant growth since 1970. From 1970 to 1980 the City grew from 4,045 to 6,019 by adding 1,974 residents,

or a 48.8 percent increase. This ten-year period reflected a 4.9 percent annual increase which occurred during a period of recession which severely affected the largest Planned Unit Development in Apopka. The change between 1980 and 1990 represented an increase of 7,579 to a total of 13,611 people. This increase was more than 126 percent.

The Apopka community had captured 2.01 percent of Orange County's population by 1990, up from only 1.36 in 1960, 1.17 percent in 1970, 1.27 percent in 1980. Apopka's rate of growth from 1960 to 1970 lagged behind the County's but from 1970 to 1980 increased at a faster rate than did the county.

The rate of growth for Apopka has continued to accelerate since 1970. The 2000 U.S. Census provided the City of Apopka with continued proof that Apopka was growing at an extremely fast pace. The City added 13,031 residents from 1990 to 2000, or a 95.7 percent increase. Apopka's share of Orange County's population jumped from 2.0 percent to 3.0 percent and was confirmed as the fastest growing city in Orange County - the second largest city in Orange County behind Orlando.

Recent Population Trends 2000-2009

The City has continued to experience steady population growth since the 2000 Census. According to population estimates published by the University of Florida Bureau of Business and Economic Research (BEBR), the population grew 30 percent from 2000 to 2005 to a population of 34,801 and increased its share of Orange County's population from 3.0 percent to 3.3 percent. **Table P-1** illustrates recent population growth, based on BEBR population estimates. Apopka's has been steadily increasing its size through annexations every year, and this trend is expected to continue through 2030, resulting in the continued increase of its population.

POPULATION PROJECTION TECHNIQUES

Alternative population forecasts for Apopka to the year 2030 were performed using four curve fitting/extrapolation techniques and three shift-share approaches. The extrapolation techniques were applied based upon the City's historical population data. The shift-share approach assumes that the growth of the City is directly related to the growth of the County.

Curve Fitting/Extrapolation Techniques

Curve fitting/extrapolation techniques rely on professionally accepted mathematical formulas to project growth (or decline) trends, as revealed by historic population data, into the future. Four types of extrapolation techniques were used to forecast the City's population:

Linear- Linear projections forecast a constant rate of population growth (or decline) in terms of additional (or fewer) residents; as a result, the relative population change in terms of percentage increase (or decrease) diminishes over time.

Geometric - Geometric projections forecast a constant relative increase in population over time; as a result, the absolute population increase (or decrease), in terms of additional residents, increases over time.

Parabolic - Parabolic projections tend to forecast population growth (or decline) at an increasing rate over time, both in absolute and relative terms; as a result, the parabolic technique usually produces a significantly higher net change in population than the geometric or linear techniques.

Shift-Share Forecast

The shift-share forecast approach, a variation of the historic population trend forecast, was also performed using three of the four techniques identified above. The shift-share approach assumes that the growth of a community is directly related to the growth of a region. This approach forecasts a community's share of the region's growth into the future using historic population share rates. The forecasted share rates are applied to the region's forecasted population to derive the community's forecasted population.

Evaluation of Forecasts

The results of the population forecasts using the three techniques based on ***historic*** trends are shown in **Table P-2**. As shown in this table, the 2030 forecasts vary from a low of approximately 47,250 using the linear historic trend technique to a high of approximately 143,300 using the geometric trend technique.

Table P-2 also shows population forecasts using three ***shift-share*** techniques: linear, geometric and parabolic. The 2030 forecasts vary from approximately 79,070, using the linear shift-share method to approximately 141,070 using the parabolic shift-share approach. Of the three shift-share scenarios, the parabolic shift-share forecast seems to better reflect the expected future growth trend.

The alternative forecasts scenarios prepared for Apopka were evaluated to determine the most likely forecast, based upon the following characteristics.

Evaluation Statistics

The appropriateness of each extrapolation technique, from a mathematical perspective, can be determined using evaluation statistics. Evaluation statistics measure the extent to which a given extrapolation technique corresponds to the historic population data. Two evaluation statistics were used to evaluate the City's population projections:

(1) Coefficient of Relative Variation (CRV)

The CRV is an input evaluation statistic. As such, it compares the underlying trends in the historic data to the assumed trend for each extrapolation technique. The more closely the extrapolation technique matches the historic data, the lower the CRV. **Table P-2** shows the corresponding CRV for each method used. The geometric historic trend had the lowest CRV, followed by the linear historic trend.

(2) Mean Absolute Percentage Error (MAPE)

The MAPE is an output evaluation statistic. The MAPE compares the underlying trends of the historic data to the forecasted trend for each extrapolation technique. The more closely the forecasted trend of a given extrapolation technique matches the historic pattern, the lower the MAPE. **Table P-2** shows the corresponding MAPE for each method used. The parabolic shift-share forecast had the lowest MAPE with the parabolic historic trend forecast next lowest. The linear historic trend forecast deviates the most from matching historic data trends.

Recommended Population Forecast

Permanent Population

At the time the population projections were prepared, the City was experiencing continued growth. However, in the past few years the City has a slow in growth due to the economic climate that is being experienced state-wide. Therefore, in order to reflect the slow down in growth, the population projections are being adjusted. This adjustment was done by comparing the 2010 projections with a recent estimate (2009 BEBR estimate plus units approved between 2009 and 2010) and noticing that the estimate accounted for approximately 88 percent of the population projection. All future projections were adjusted accordingly. The recommended forecast is shown in **Table P-1**. Forecasts developed by the Florida Housing Data Clearinghouse (University of Florida, Shimberg Center for Affordable Housing) are included for comparison purposes.

Seasonal Population

Based on historical growth, projections were calculated for the years through 2030. Seasonal population is not anticipated to greatly impact Apopka during the planning horizon, as approximately 1,200 seasonal residents (based on 455 additional seasonal dwelling units) are anticipated between the years 2010 and 2030. The seasonal population was added to the permanent population, as required by the State, for the purpose of calculating future public service and infrastructure.

TABLE P-1: APOPKA HISTORICAL POPULATION AND POPULATION PROJECTIONS

Year	Actual Apopka Pop (BEBR)	Shimberg Center Forecast	Orange County	Apopka Actual Share of County Population	Linear Forecast		Geometric Forecast		Parabolic Forecast		Adjusted Forecast
					Apopka Share	Apopka Population	Apopka Share	Apopka Population	Apopka Share	Apopka Population	Apopka Population
1965	3,812		302,200	1.30%							
1970	4,045		344,311	1.20%							
1975	5,265		424,552	1.20%							
1980	6,019		471,016	1.30%							
1985	7,935		554,659	1.40%							
1990	13,611		677,491	2.00%							
1995	18,449		758,962	2.40%							
2000	26,642		896,344	3.00%							
2005	34,801		1,043,437	3.30%							
2010		43,862	1,139,864		3.30%	37,481	3.60%	40,474	4.10%	47,177	**41,983**
2015		52,601	1,299,015		3.60%	46,321	4.10%	53,084	4.90%	64,000	**56,953**
2020		60,998	1,437,418		3.80%	55,248	4.70%	67,602	5.80%	83,481	**74,289**
2025		68,785	1,636,255		4.10%	67,434	5.40%	88,563	6.80%	110,960	**98,743**
2030		76,260	1,797,582		4.40%	79,074	6.20%	111,973	7.80%	141,070	**125,538**

Note: 1965 population is an estimate

Source: University of Florida, Bureau of Business and Economic Research (BEBR)
Orange County Population Source: 1965 - 2005 = BEBR Estimates
2010 - 2030 = Orange County's Population Projection (Website)

TABLE P-2: EVALUATION OF ALTERNATIVE FORECASTS

Characteristic	Population Trend Forecast			Shift-Share (Apopka to Orange County) Forecast		
	Linear	**Geometric**	**Parabolic**	**Linear**	**Geometric**	**Parabolic**
Assumptions	Apopka's population increases at a constant rate; relative growth rate diminishes over time.	Apopka's population increases at an increasing rate; relative growth rate remains constant over time.	Apopka's population increases at an increasing rate; relative growth rate increases over time.	Population growth in Apopka is a function of population growth in Orange County.		
Evaluation Statistics						
Coefficient of Relative Variation (CRV)	0.79	0.49	1.48	0.91	0.97	3.38
Mean Absolute Percentage Error (MAPE)	22.84	10.33	8.20	15.66	10.34	4.43
2030 Population Forecast	47,250	143,300	96,640	79,070	111,970	141,070
% Change from existing (2005)	35.8%	311.8%	177.7%	127.2%	221.7%	305.4%
Total Change from existing (2005)	12,450	108,500	61,840	44,270	77,170	106,270
Average Annual Growth Rate (2005 - 2030)	1.2%	5.8%	4.2%	3.3%	4.8%	5.8%

MAPE Value: Mean absolute percentage error (also known as MAPE) is measure of accuracy in a fitted time series value in statistics, specifically trending. It usually expresses accuracy as a percentage for various experiments. The lesser the MAPE value, the more accurate the projections.

CRV – The lower the value, the more accurate the projections.

Source: Land Design Innovations, 2009

FUTURE LAND USE ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL 1

Ensure that the character and location of new and redeveloped land uses maximize the economic benefit to the land; complement the environmental and historic resources; and meet the housing and service needs of the current and projected population.

Objective 1

The City of Apopka shall review and amend its Land Development Regulations to ensure provisions are included which provide that infill development, redevelopment and new development proposals are appropriate to the topography, soil conditions and the availability of facilities and services.

Policy 1.1

New development or redevelopment must meet the adopted levels of service for public facilities as established by the Apopka Comprehensive Plan.

Policy 1.2

The public facilities that are needed to serve future development shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with development.

Policy 1.3

Private or public electric utilities needed to support the future land use categories may be permitted by right or as a special exception in all land use designations.

Policy 1.4

Development will be encouraged in areas with excess capacities for public facilities, and discouraged in areas with deficient capacities for public facilities unless these facilities can be provided concurrently with development and adopted levels of service.

Policy 1.5

Public facilities and utilities shall be located to consider maximizing the efficiency of services provided, minimize their costs and minimize their impacts upon the natural environment.

Policy 1.6

The City of Apopka shall require property which is within the Utility Service Area, adjacent to the city limits and receiving city sewer, and/or water, to annex, and properties which will receive said services but which are not adjacent to the city limits, but within the Utility Service Area, shall file a deed of encumbrance to annex when the property becomes contiguous to the city limits.

Policy 1.7

The City of Apopka shall continue to require compensating storage for all flood water displaced by development below the elevation of the base 100-year flood and require the finished floor elevation of all inhabitable structures be located 1-foot above the base 100-year flood elevation.

Policy 1.8

The City of Apopka shall require all development which receives city water or sewer services to annex immediately following the time at which the property becomes contiguous to the Apopka City limits.

Policy 1.9

The Apopka Land Development Code shall include criteria for joint access and the distance which a curb cut must be from intersections, for all road classifications.

Policy 1.10

The City of Apopka shall protect the functionality and integrity of controlled access roadways as higher volume through-traffic corridors through the development of an adequate arterial and collector support system, as designated on the Future Transportation Map series.

Policy 1.11

The City of Apopka shall restrict direct access to arterial roads when access via another facility can be provided.

Policy 1.12

Residential neighborhoods shall be designed to include an efficient system of internal circulation and street stub-outs, when appropriate, to connect adjacent developments and link neighborhoods.

Policy 1.13

The City of Apopka shall work to consolidate and reduce the number of curb cuts in commercial areas through such methods as vehicular cross access agreements.

Policy 1.14

The Apopka Land Development Regulations shall include drainage standards which are based on lot coverage data specific to Apopka.

Policy 1.15

An assessment shall be made at the time of any and all Comprehensive Plan land use amendments of the soil conditions and topography of the subject property and the ability of the soils and topography to support the proposed density/intensity and land uses.

Policy 1.16

An analysis of proposed development and redevelopment based on recommendations, deemed appropriate by the City of Apopka, shall be contained in any existing or future hazard mitigation reports.

Policy 1.17

The City of Apopka shall coordinate existing and future land use water supply planning with all applicable governmental agencies, including municipal, county and regional plans, and St. Johns River Water Management District and the Florida Department of Environmental Protection.

Objective 2

The City shall continue to utilize state and federal funds, as applicable, to assist in revitalization of commercial, housing and infrastructure improvements to redevelop slum or blighted areas when such grants or monies become available.

Policy 2.1

The City shall utilize the terms “Slum Area” and “Blighted Area” as defined in 163.340, Florida Statutes.

Policy 2.2

The City’s Redevelopment Plan shall be utilized, and updated on an annual basis during the budgetary process. The plan identifies funding mechanisms and sources which can be used in underutilized commercial and residential areas and addresses the use of tax increment financing, tax and benefit assessment districts, public-private joint ventures, and utility fees and utility districts.

Policy 2.3

A Redevelopment Advisory Board shall be established and utilized as a means to gain input from the public for redevelopment issues throughout the City.

Policy 2.4

Annexations of properties adjacent to S.R. 436 and U.S. 441 shall include an analysis of the redevelopment of declining adjacent or on-site strip commercial areas and recommendations shall be made to identify alternatives to existing development.

Policy 2.5

The City of Apopka shall implement the recommendations of the parking study for the Central Business District and the Community Redevelopment Area, which investigated municipal-owned parking facilities, joint use/shared facilities and provisions for pedestrians in a phased timeline beginning in 2011.

Policy 2.6

The City shall continue to implement the requirements of the CRA Design Guidelines and the City of Apopka Development Design Guidelines in the Central Business District and the CRA area as well as throughout the City.

Policy 2.7

The City shall encourage building preservation and development in the Central Business District which are based on historic

character of the area through the use of the CRA Design Guidelines and enforcement of the City of Apopka Development Design Guidelines.

Policy 2.8

The City shall utilize regional drainage facilities where available which can provide off-site retention for development and redevelopment in the Central Business District and CRA area.

Policy 2.9

The City of Apopka Community Redevelopment Plan for the Community Redevelopment Area shall preserve the mixture of uses necessary to promote the historic character and function of the area.

Policy 2.10

The City of Apopka shall complete an Economic Development Study to facilitate the development of new employment bases for Apopka residents by December 2011.

Policy 2.11

By December 2013, the City shall conduct a small area master plan study of the Central Business District that will establish general guidelines to promote the new development and redevelopment of properties within this area.

Policy 2.12

As part of the Central Business District small area master plan, the City shall address the following components within the study:

- An analysis of whether to expand the boundaries of the Central Business District
- Promoting and maintaining a viable and healthy mixture of uses to include: office, retail, residential and civic
- Protecting the historic resources of the area
- Determining what infrastructure improvements need to be made to increase development and redevelopment potential
- Encouraging quality architectural design through development incentives
- Encouraging pedestrian oriented development and urban design features

- Incorporating relevant findings of the Redevelopment Implementation Plan

Policy 2.13

By July 2014, the City shall update the Land Development Code to implement the Central Business District small area master plan.

Objective 3

The City of Apopka shall implement the Future Land Use Map and discourage the proliferation of urban sprawl by promotion of land uses which are consistent with its character and that are coordinated with planned and proposed regional and local transportation and other public facilities.

Policy 3.1

Each Future Land Use Map classification shall have a permitted primary use or uses and permitted secondary support uses. Secondary support uses shall require a special exception review or permit issued through the Planned Unit Development process. All special exceptions shall be accompanied by a site plan. The Planned Unit Development process is a form of performance zoning which may be applied to any land use category and is designed to provide the following:

1. provide an alternate method of land development not available within the framework of other zoning districts to special projects which merit such treatment;

2. allow the development of sites that would normally be difficult to develop due to topography, soils, or other site specific features;

3. promote the most compatible, beneficial use to adjoining neighborhoods;

4. preserve significant environmental, topographical or natural features;

5. allow a variety of housing types;

6. accommodate mixed uses;

7. offer a maximum amount of open space and recreational amenities;

8. prevent urban sprawl through the use of infill development and maximum use of existing public facilities currently in place.

Planned Unit Development may not be pursued simply as a means to circumvent traditional zoning requirements within the Land Development Code.

Policy 3.1.a

Agriculture Estate

The primary designation of this land use category shall be single-family dwelling units not to exceed one unit per two acre or less (1du/2ac) designed to facilitate a definite agriculture component, supporting infrastructure and public facilities sites of less than two acres; elementary schools and middle schools.

Special exception uses shall include:

1) Institutional uses of two acres of less
2) High schools
3) Supporting infrastructure and public facilities of two acres or more
4) Horticultural nurseries as a primary use

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 25 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.b

Residential Estate

The primary use shall be single family dwelling units up to 1 dwelling unit per acre, supporting infrastructure and/or public facilities of less than two acres; elementary schools and middle schools.

Special exception uses shall include:

1) Institutional uses of two acres or less
2) High schools
3) Supporting infrastructure and public facilities of two acres or more
4) Horticultural nurseries as a primary use

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 25 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.c

Very Low Density Suburban Residential

The primary use shall be residential dwelling units up to 2 dwelling units per acre, elementary schools; middle schools; supporting infrastructure of less than two acres, neighborhood parks.

Special exception uses shall include:

1) Institutional uses of five acres or less
2) High schools
3) Supporting infrastructure and public facilities of two acres or more
4) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 25 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.d

Low Density Suburban Residential

The primary use shall be residential dwelling units up to 3.5 dwelling units per acre, elementary schools; middle schools, high schools; supporting infrastructure of less than two acres, neighborhood parks.

Special exception uses shall include:

1) Institutional uses of five acres or less
2) Supporting infrastructure and public facilities of two acres or more
3) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 25 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.e

Low Density Residential

The primary use shall be residential dwelling units up to 5 dwelling units per acre, elementary schools; middle schools, high schools; supporting infrastructure of less than two acres, neighborhood parks.

Special exception uses shall include:

1) Institutional uses of five acres or less
2) Supporting infrastructure and public facilities of five acres or more
3) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 25 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.

(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.f

Low-Medium Density Residential

The primary use shall be residential dwelling units up to 7.5 dwelling units per acre, elementary schools; middle schools, high schools; supporting infrastructure of less than five acres, neighborhoods.

Special exception uses shall include:

1) Institutional uses of ten acres or less
2) Supporting infrastructure and public facilities of five acres or more
3) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Neighborhood commercial uses at a rate not in excess of 50 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.g

Medium Density Residential

The primary use shall be residential dwelling units up to 10 dwelling units per acre, elementary schools; middle schools, high schools; supporting infrastructure of less than five acres.

Special exception uses shall include:

1) Institutional uses of ten acres or less;
2) Supporting infrastructure and public facilities of more than five acres;
3) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Retail commercial uses at a rate not in excess of 50 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.h

High Density Residential

The primary use shall be residential dwelling units up to 15 dwelling unit per acre; elementary schools; middle schools, high schools; supporting infrastructure of less than five acres.

Special exception uses shall include:

1) Institutional uses of ten acres or less;
2) Supporting infrastructure and public facilities of five acres or more;
3) Horticultural nurseries as a primary use;

Planned Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) Retail commercial uses at a rate not in excess of 50 square feet of gross floor area per residential unit in the PUD. Commercial uses must be completely internalized within the PUD.
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods

Policy 3.1.i

Commercial

Primary uses shall be for business, commerce, and convenience shopping which may be neighborhood or community oriented. The maximum floor area ratio shall be .25 gross floor area. Institutional land uses of less than five acres; and public facilities or utilities of less than five acres.

The expansion of strip commercial areas shall be prohibited except in infill areas.

Special exception uses shall include:

1) Institutional land uses of five acres or more
2) Elementary schools, middle schools and high schools
3) Supporting infrastructure and public facilities of five acres or more

Planned Unit Development uses may include:

1) All primary land uses
2) All special exception uses
3) Multifamily development of up to fifteen dwelling units per acre, when located within a primary use structure
4) Other uses deemed compatible with and complimentary to the other proposed master planned uses and the surrounding neighborhoods.

Policy 3.1.j

Office

Primary uses shall be for business and professional offices or institutional land uses with a maximum floor area ratio of .30 gross floor area. Public facilities or utilities of less than five acres shall also be primary uses.

Special exception uses shall include:

1) Commercial land uses may be permitted at a rate of 25 square feet of gross floor area ratio per 1,000 square feet of office building
2) Elementary schools, middle schools, and high schools, supporting infrastructure and public facilities of five acres or more

Planned Unit Development uses may include:

(1) All primary land uses
(2) All special exception uses
(3) Single family or multi family residential development at a maximum density of 15 units per acre, when located in a primary use structure
(4) Other uses deemed compatible with and complimentary to the other proposed master planned uses and the surrounding neighborhoods.

Policy 3.1.k

Central Business District Overlay

The primary intent of the Central Business District overlay zone shall be to encourage business, commerce, and convenience shopping which shall conform to the historical intent and context of the Central Business District. The maximum floor area ratio shall be 2.0. No historic structure shall be made nonconforming.

Special exception uses for all designated land uses shall include:

(1) Following a review to ensure compatibility and crime prevention through environmental design, the mixed use of commercial/office/residential structures shall be permitted.
(2) All special exception uses permitted in the underlying land use classification.

Planned Unit Development uses may include:

(1) All primary land uses
(2) All special exception uses
(3) All Planned Development uses allowed in the underlying land use classification
(4) Other uses deemed compatible with and complimentary to the other proposed master planned uses and the surrounding neighborhoods.

Policy 3.1.l

Industrial

The primary use shall be industrial, intensive commercial, agricultural and business/research parks. Also allowed are public facilities and supporting infrastructure. The use of the Planned Unit Development process shall be encouraged. The maximum floor area ratio shall be .60.

Planned Unit Development uses may include:

(1) All primary uses
(2) Other uses deemed compatible with and complimentary to the other proposed master planned uses and the surrounding neighborhoods.

Policy 3.1.m

Agricultural

The primary designation of this land use category is any agricultural land use and, particularly, horticultural nurseries or greenhouses and residential dwelling units not to exceed one unit per five acres.

Greenhouses of less than five acres may be permitted as a secondary use in all future land use categories after a special exception review for compatibility.

Special exception uses allowed:

1) Elementary schools; middle schools, high schools

Policy 3.1.n

Parks/Recreation

Public and private recreation sites are the primary land use in this category. Public recreation sites shall be permitted by right or by special exception in all future land use categories. Commercial recreation shall be permitted in the commercial land use category. The maximum floor area ratio shall be .20.

Special exception uses shall include:

Elementary schools; middle schools, high schools

Policy 3.1.o

Conservation

Conservation land uses are designated on the Future Land Use Map, and shall serve as a conceptual indicator of conservation and wetland areas. If the area or a portion of an area designated as Conservation on the map is determined not to be a wetland based on actual wetland delineation by the applicant, the Future Land Use Map designation shall be consistent with the remainder of the parcel. A formal Future Land Use Map amendment shall not be required to change the Future Land Use Map designation under the above circumstances. Residential land uses will be permitted at a density of one dwelling unit per twenty acres in any conservation area.

Policy 3.1.p

Institutional/Public Use

Primary uses shall include public buildings and facilities. Existing public buildings and facilities and public education sites may be designated as institutional on the FLUM.

The maximum floor area ratio allowed in the Institutional/Public Use category shall be 0.30 for single story buildings and 0.50 for multi-story buildings.

Policy 3.1.q

Community Redevelopment Area Overlay District

The primary intent of the Community Development Overlay District shall be to encourage the development of residential and business and commerce uses consistent with the city's Community Redevelopment Plan as adopted and administered by the City's Community Redevelopment Agency. Allowable uses shall include those permitted through the underlying land use and zoning designations. The maximum floor area ratio for non-residential uses shall be twice that permitted through the underlying land use designation. Residential densities shall be consistent with those of the underlying land use designation.

Special exception uses shall include:

1) Following a review to ensure compatibility and crime prevention through environmental design, the mixed use of commercial/office/residential structures shall be permitted.
2) All special exception uses permitted in the underlying land use classification.

Planned Unit Development uses may include:

(1) All primary uses
(2) All special exception uses
(3) All PUD uses allowed in the underlying land use classification
(4) Other uses deemed compatible with and complementary to the other proposed master planned uses and the surrounding neighborhoods.

Policy 3.1.r.

Mixed-Use

The primary intent of the Mixed Use land use category is to allow a mixture of residential, office, commercial, industrial, recreation, institutional uses and public

facilities uses to serve the residential and non-residential needs of special areas of the City. This mix of land uses may occur on a single parcel or multiple parcels in the form of: a permitted single use; a vertical combination of different permitted uses; or a horizontal mix of different permitted uses. The intensity of development within the mixed-use land use categories will vary depending on location and surrounding uses. Transit-oriented design elements shall be encouraged to promote multiple modes of transportation in the mixed use categories.

The Land Development Code will establish zoning districts and/or zoning overlay areas with standards that define the appropriate location for various intensities/densities. The following maximum gross intensity/density standards shall not be exceeded.

	Community Center	**Employment Center**	**Central Business District**	**Interchange (3)**
USES ALLOWED (1)				
Residential	50% max.	30% max.	50% max.	75% max
Commercial	60% max.	40% max.	60% max.	30% max.
Office/Medical	50% max.	90% max.	70% max.	
Light Industrial	0	20%	10% max.	
Recreation (Passive or Active)	20% min.	15% min.	15% min.	15% min.
Institutional/Public/ Civic	50% max.	40% max.	50% max.	40% max.
DEVELOPMENT STANDARDS				
FAR (2) Min.	0.25	0.25	0.25	*(see Note 3)*
Max.	0.6	1	2	1
Density Max.	10	15	15	25

NOTES:

(1) See LDC for definitions of Residential, Commercial, Office, Light Industrial, etc.

(2) Calculated per individual site or in the case of mixed use by development site.

(3) Use percentages to be calculated based on the entire Wekiva Parkway Interchange Vision Plan Area. See Policies 20.~~7~~9 and 20.~~8~~10 for densities/intensities by character district.

Designation of a Mixed-Use Category

In order to encourage innovative land use techniques, creative urban design, environmental protection and the use of sustainable development principles and practices, designation of new mixed-use categories on the FLUM shall only be allowed for land located within the following areas:

1. Areas within the Expressway, Plymouth, West, and Northwest small area plans as shown on their respective master plans;

2. The CRA Overlay District depicted on the adopted FLUM;

3. Land anticipated for inclusion within the Wekiva Parkway Interchange Land Use Plan to be adopted by December 2010; and

4. Areas that have been subject to a *Small Area Study*.

Policy 3.1.s

Rural Settlement (Tier Density Max. 1 du/ac)

This land use designation is intended to apply within that area defined as the "Northern Area" in the Joint Planning Area Agreement between the City of Apopka and Orange County adopted on October 26, 2004, and other areas of the Wekiva Study Area as may be appropriate. The district is designed to facilitate development of single-family dwelling units and associated infrastructure which maximize the preservation of open space and promote the clustering of developments to both preserve and enhance the natural environment. This land use designation shall also include an agricultural component. Public facilities will be considered as Special Exceptions. Intensity of development within this land use category will vary depending upon the following framework:

a. Agricultural, not to exceed one residential unit per five acres (1 du/5 ac).

b. One residential unit per five acres (1 du/5 ac) with clustering required, with a minimum open space requirement of 25%.

c. Densities greater than one residential unit per five acres (1 du/5 ac) and less than one residential unit per one acre (1 du/1 ac) with clustering encouraged but not required, with a minimum open space requirement of 35%.

d. One residential unit per one acre (1 du/1 ac) in a development with an overall size of less than 25 acres, with clustering encouraged but not required, with a minimum open space requirement of 35%.

e. One residential unit per one acre (1 du/1 ac) in a development with an overall size of between 25 acres and 100 acres, provided the development is Planned Unit Development (PUD), with clustering required and a minimum open space requirement of 45%.

f. One residential unit per one acre (1 du/1 ac) in a development greater than 100 acres provided the development is greater than 100 acres and is a Planned Unit Development (PUD) with clustering required, with a minimum open space requirement of 50%.

All required open space within this land use category shall be permanently protected.

Special exception uses allowed:

1) Institutional uses of two acres or less.
2) Elementary schools; middle schools, high schools.
3) Supporting infrastructure and public facilities of two acres or more.
4) Horticultural nurseries as a primary use.

Policy 3.1.t

Agricultural Homestead

This land use category is intended to accommodate any agricultural or agricultural support use, particularly, farming operations, horticultural nurseries, greenhouses, agribusinesses, and residential dwelling units not to exceed one unit per ten acres (1 du/10 acres).

Greenhouses of less than ten acres may be permitted as a secondary use in all future land use categories after a special exception review for compatibility.

Special exception uses allowed:

1) Elementary schools; middle schools, high schools

Policy 3.2

Development and redevelopment shall be integrated with the adjacent land uses through:

(1) the creation of like uses; or
(2) creation of complementary uses; or
(3) mitigation of adverse impacts

Policy 3.3

New development and redevelopment must mitigate the adverse noise, visual, odor and vibration impacts created by that development upon all adjacent land uses that are not alike to the proposed development or redevelopment land use classification through requirements adopted as part of the land development regulations.

Policy 3.4

Established neighborhoods and emerging neighborhood units shall be protected by ensuring adequate public notice prior to land use designation and rezoning approvals of adjacent properties.

Policy 3.5

Residential development north of Ponkan Road and west of Rock Springs Road (Park Avenue) will be restricted to no more than two dwelling units per acre, unless otherwise authorized through the adopted Wekiva Parkway Interchange Plan.

Policy 3.6

By December 2014, the City shall develop a proposal for joint notification of development projects between the City and Orange County and the City and Seminole County.

Policy 3.7

By December 2013, the City of Apopka shall complete a study of the Central Business District and the Community Redevelopment Area to identify the mixture of uses necessary to promote the historic character and revitalization of the area. The recommendations adopted by the City Council shall be initiated within one year following the completion of the study.

Policy 3.8

All plan amendment and rezoning staff reports shall contain a section that explains how the proposed change is consistent with, and furthers, the intent of the Apopka Comprehensive Plan; the State Comprehensive Plan; and the Regional Policy Plan, and how it is coordinated with planned and proposed regional and local transportation system plans. These reports shall be forwarded to the appropriate City boards and made available for public inspection.

Policy 3.9

Administrative rezoning for annexed properties shall be completed within one year after adoption of the associated Comprehensive Plan future land use amendment.

Policy 3.10

Projects which have been approved for construction (i.e., obtained final engineering approval and obtained all required governmental agency permits) and projects within the scheduled review process for approval of construction plans at the time any comprehensive plan amendment is adopted will be considered to have vested rights providing that construction occurs within the allowable time periods as currently described through the developer's agreement or the City's Land Development Code.

Policy 3.11

A vested right(s) shall be found to exist by the city when the affected property owner demonstrates that (s)he, in good faith, upon some act or omission of the government has made such a substantial change in position or has incurred such extensive obligations and expenses that it would be highly inequitable and unjust to destroy the right(s) (s)he has acquired. Application to the City within one year after adoption of any Comprehensive Plan amendment, shall be made by any person believing (s)he has a vested right. If the affected party fails within the one year time period to submit an application requesting determination of the existence of a vested right, no vested right shall be deemed to exist. The burden of proof that a vested right exists shall be on the applicant. The applicant shall be required to submit all documents demonstrating the existence of a vested right to the Community Development Director. Thereafter the City Attorney shall issue a written determination within 30 days as to whether the vested rights of a real property owner are assignable and the period of time within which the vested

rights may be exercised. Appeal to the City Council must be submitted within 10 days to the City Clerk.

Policy 3.12

A real property owner may claim a vested right to a substantive right but not to a procedural right. If determined to exist, the vested right shall be assigned to the land. Upon the City's determination that a vested development right exists which is different from that provided in this plan, issuance of a development order consistent with the vested rights shall not be deemed inconsistent with the Comprehensive Plan.

Policy 3.13

A. No non-conforming use of land or a structure shall be substantially expanded, i.e.:

- increase but not decrease the number of hotel, motel, or residential units in existence on the parcel of land or in a structure;

- increase of in excess of ten percent(10%) of the floor area of a structure; increase in excess of five percent (5%) of the number of motor vehicle parking spaces located on the parcel of land;

- increase in excess of five percent (5%) the number of hospital, nursing home, retirement home, or adult congregate living facility beds located in any structure;

- decrease by five percent (5%) or more the area of the parcel;

- increase in excess of five percent (5%) of the storage capacity for chemical or petroleum storage facilities located on a parcel of land nor be used as grounds for adding other structures or uses prohibited elsewhere in the same land use district; nor shall the inconsistent use of land or a structure be used as grounds for adding other structures or uses prohibited elsewhere in the same land use district.

B. The lot containing a non-conforming use shall not be enlarged, increased, or extended to occupy an area of land greater in size than existed at the effective date of adoption or amendment of this Comprehensive Plan.

C. No non-conforming use shall be moved in whole or in part to another parcel of land which shall create a non-conforming use on the parcel of land to which the use is moved. No additional structure which is not consistent with the requirements of this Comprehensive Plan shall be erected in connection with such non-conforming use of land.

D. The non-conforming use of a building or parcel shall not be reinstituted after the use has been discontinued for 180 days.

E. A single family residence which has been maintained as a non-conforming use for five years and held in the same ownership, family ownership, family-inherited ownership, or a combination of these ownerships, for at least 25 years may be enlarged or replaced if destroyed, with the stipulation that the enlargement or replacement shall not increase non conformance to land development regulations.

Policy 3.14

The City shall consider the following when evaluating land use amendments, especially changes from very low density categories to higher density categories and voluntary annexation requests:

- Whether the amendment demonstrates a functional relationship of the proposed amendment to other more densely or intensely designated or development lands;
- The availability of public facilities and water supplies to service a more dense or intense land use; and
- Multi-modal transportation linkages between proposed residential use and neighborhood.

Policy 3.15

To coordinate land use with the elements of the comprehensive plan, Future Land Use Element subarea policies applicable to a specific parcel or geographic area may be appropriate. When a Future Land Use Map amendment is based upon data and analysis that assumes a development potential less than the maximum development potential allowed by the future land use designation on the amendment parcel, a subarea policy for the amendment parcel shall be adopted establishing the land use and development potential and public facilities mitigation, as necessary, that is supported by and consistent with the data

and analysis. Development of the following parcels shall be limited as follows:

PROPERTY OWNER	OCPA PARCEL ID NUMBER	ACRES +/-	FAR RESTRICTION MAXIMUM	FUTURE LAND USE
Clonts Farms, Inc.	18-21-28-0000-00-001	11.00	FAR 0.15	Commercial
Gail W. Brown	18-21-28-0000-00-057	3.00	FAR 0.10	Commercial
Mid Florida Freezer Warehouses, Inc.	01-21-27-0000-00-060	35.96	FAR 0.50	Industrial
Marilyn S. Boughan Trust	01-21-27-0000-00-029 01-21-27-0000-00-081 01-21-27-0000-00-082	12.44	FAR 0.50	Industrial
RRP Properties, LLC	01-21-27-0000-00-080	4.10	FAR 0.50	Industrial
Leaders, et. al.	06-21-28-7172-03-310 06-21-28-7172-03-320 06-21-28-7172-03-330	3.75	FAR 0.50	Industrial
Federal Citrus Corp	18-21-28-0000-00-015 18-21-28-0000-00-016 19-21-28-0000-00-010	28.50	FAR 0.25	Mixed Use
Wesley G. Benton Life Estate	18-21-28-0000-00-003 18-21-28-0000-00-006	10.88	FAR 0.30	Mixed Use

Objective 4

The City of Apopka shall protect its natural resources including wetlands as defined by 40C-4, FAC and 62-301, FAC, floodplain storage; and identified threatened and endangered species and species of special concern as defined in 68A-27.003, 68A-27.004 and 68A-27.005 FAC.

Policy 4.1

The City of Apopka shall require development which destroys native trees, to replace cleared trees with similar species and maturity levels on a one to one ratio within practical limitations, for all areas of the City.

Policy 4.2

The City of Apopka shall protect its natural resources including wetlands as defined by 40C-4 and 62-302 FAC, floodplain storage and identified threatened and endangered species and species of special concern as defined in the Future Land Use Element.

Policy 4.3

Where listed species are found, the City of Apopka shall maintain necessary habitat for the protection of listed species pursuant to Rules 68A-27.003, 68A-27.004, and 68A-27.005, FAC, either through preservation or mitigation or relocation.

Policy 4.4

The City of Apopka shall continue to require all new development to retain a minimum of ½ inch of run-off from the entire project site. However, retaining 3 inches of runoff from the directly connected impervious area within the project site shall be required unless it is demonstrated that post-development recharge is equal or greater than pre-development recharge as stipulated in Section 40C-41, FAC.

Policy 4.5

The City of Apopka shall continue to require that pollution abatement be accomplished by retention of runoff from the developed site with filtration into the soil through the bottom of the retention pond or through an approved filtering media consistent with the St. Johns River Water Management

District’s standards, unless more stringent measurements are required in other policies. The City shall require in its Land Development Regulations that stormwater treatment facilities be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use, in accordance with the classifications established in Chapter 62-302.400, F.A.C.

Policy 4.6

The City of Apopka shall require that the littoral zones and photic zones of manmade stormwater management systems be designed to provide physical filtration of stormwater consistent with the requirements of the St. John’s River Water Management District.

Policy 4.7

The City of Apopka shall utilize public lands for appropriate multiple uses, such as parks, stormwater management systems and preservation of natural habitats.

Policy 4.8

The City of Apopka shall protect the health, safety, and welfare of the public from the harmful effects of hazardous wastes by cooperating with the Florida Department of Environmental Protection (FDEP) and Orange County Environmental Protection Department (OCEPD) in the regulation and disposal of hazardous wastes.

Policy 4.9

The Apopka Land Development Regulations shall address and limit activities which have the potential to contaminate air, water, soil or crops.

Policy 4.10

Recreational development shall be limited to bike/pedestrian trails or passive recreation uses in areas adjacent to conservation areas.

Policy 4.11

The City of Apopka shall protect its potable water service by enforcing a wellhead protection zone, consisting of a 500' radius from the wellhead, in which potentially high risk land uses such as, but not limited to, industrial and manufacturing which use or store hazardous materials as defined by the U.S. Resource Conservation and Recovery Act and implemented by EPA are prohibited, consistent with FAC 62-521.200(7).

Policy 4.12

The City of Apopka, in cooperation which Orange County and the St. Johns River Water Management District (SJRWMD), shall ensure that the quality of surface water will meet state standards as detailed in Chapter 62-302.300 - 62-302.530 & 62-520.420 Florida Administrative Code (FAC).

Policy 4.13

The Aquifer Recharge Map in the Conservation Element shall serve as a map in the Future Land Use Map Series to identify and depict the aquifer recharge rates and areas within the corporate City limits of Apopka and any potential annexation areas.

Policy 4.14

The City of Apopka shall continue to coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) and the Florida Natural Areas Inventory (FNAI) to update the listed species and their habitats described in the Conservation Element.

Policy 4.15

The City of Apopka recognizes the need to protect specific rare natural communities within the Wekiva Study Area. These include the longleaf pine, sand hill, sand pine and xeric oak communities. The City shall require that a site assessment produced by an environmental professional verify the existence or lack thereof of these natural communities on all sites over 10 acres in size.

- If portions of these communities (less than or equal to 50%) exist on potential development sites, they shall be protected. The development potential lost through this protection shall be allowed to be transferred to more

appropriate areas of the site. If more than 50% of the site is encompassed by one of these communities, 50% of the natural community shall be protected with the density transferred from the protected portion of the site to the developed portion.

- As part of this assessment, the developer shall identify any karst features that include but are not limited to sinkholes with a direct connection to the aquifer and other karst features located on the site. All development shall maintain buffers in accordance with Policy 15.2 of this element.

Objective 5

The City of Apopka shall utilize the Apopka Historical Properties Survey of 1992 to encourage the protection of its historic resources, defined to be all historic sites eligible for listing on the Florida Master Site File, through identification and implementation procedures.

Policy 5.1

The City of Apopka shall utilize the Apopka Historical Society and the Museum of the Apopkans as resource for historic preservation issues.

Policy 5.2

The study of land uses appropriate to the historic nature of the Central Business District and the Community Redevelopment Area shall include recommendations based on incentives to reuse existing historic buildings where feasible.

Policy 5.3

The City of Apopka shall continue to promote preservation of historical sites throughout Apopka by use of the Apopka Historical Properties Survey, the Register of Historic Places and the Florida Master Site File.

Objective 6

The City of Apopka shall provide water and sewer services within the corporate limits or to areas within its Utility Service Area as defined in the Amended and Restated Water, Wastewater and Reclaimed Water Territorial Agreement with Orange County. Amendment to the Agreement shall require amendment to the Comprehensive Plan.

Policy 6.1

The City of Apopka will continue to give first priority to existing or developing enclave annexation.

Policy 6.2

The City of Apopka shall give highest priority to capital improvements which address existing level of service deficiencies.

Policy 6.3

The development of a variety of employment centers shall be encouraged in large scale planning developments in an effort to maximize the development's internal capture rate.

Policy 6.4

The City of Apopka will continue to pursue with Orange County joint planning opportunities, including, definition of an area logical for annexation; provisions for annexation of enclaves; compatibility of adjacent land uses; utilization of a common set of socioeconomic data for the Apopka environs; an equitable financing mechanism for recreation facilities used by non-residents; and conflict resolution.

Objective 7

The City of Apopka shall ensure the availability of suitable land for utility and public facility use necessary to support proposed development through acquisition or dedication during the development process.

Policy 7.1

The provision and programming of needed public facilities shall consider the needs of the existing developed urban and suburban areas and newly developing urban areas.

Policy 7.2

The City of Apopka shall maintain a representative from the Orange County School Board on the Local Planning Agency to review of proposals in conjunction with school siting needs.

Objective 8

The Apopka Land Development Code shall continually be updated to include the use of innovative land development criteria or guidelines as new opportunities for innovation are developed.

Policy 8.1

Planned Unit Developments (PUD) shall provide effective integration methods to maximize mixed uses such as multimodal transportation corridors, open space areas, consistent architectural guidelines and/or materials, consistent landscape guidelines and an integrated vehicular management system.

Policy 8.2

Development proposals shall include effective multi-modal transportation systems which may include provisions for car pooling, van pooling, mass transit, bicycling and walking.

Objective 9

Should a resource planning and management plan be developed pursuant to Chapter 380, F.S., the City of Apopka shall immediately coordinate development requests with the appropriate state agencies.

Policy 9.1

An annual evaluation of the Apopka Comprehensive Plan shall contain a section reviewing new regional plans developed pursuant to Chapter 380 which include any area included in the Apopka Comprehensive Plan.

Objective 10

All new development within the Wekiva River Protection Area shall be very low suburban residential density of two units per acre or less in nature, unless a proposed development would have less impact on natural resources.

Policy 10.1

The subdivisions of land which interfere with the required setbacks of protection zones pursuant to s. 373.415 F.S. shall be prohibited.

Policy 10.2

The density/intensity of any development on parcels of property adjacent to the waterways or wetlands of the Wekiva River System shall be concentrated on those parcels farthest from waterways, wetlands or public lands.

Policy 10.3

Upon annexation, Future Land Use designations of properties within the Wekiva River Protection Area shall be consistent with the established Orange County's intensity or density and allowable use shall be consistent with those allowed by the Orange County Comprehensive Plan. City Land Use amendments shall not exceed the intensity or density upon annexation.

Objective 11

The City of Apopka shall ensure adequate land is available for new public schools consistent with the Orange County School Board site selection and development criteria.

Policy 11.1

The City of Apopka shall allow public schools, elementary through High School, in the future land use designations as follows:

City of Apopka
Public School Siting Locations
by Future Land Use Designation as Allowable Use

	Allowable School Use		
Future Land Use Category	**Elementary School**	**Middle School**	**High School**
Agriculture (1 du/5 ac)	Allowed (SE)	Allowed (SE)	Allowed (SE)
Agriculture Estate (1 du/2 ac)	Allowed (SE)	Allowed (SE)	Allowed (SE)
Residential Estate (0-1 du/ac)	Allowed	Allowed	Allowed (SE)
Residential Very Low Suburban (0-2.0 du/ac)	Allowed	Allowed	Allowed (SE)
Residential Low Suburban (0-3.5 du/ac)	Allowed	Allowed	Allowed
Residential Low (0-5 du/ac)	Allowed	Allowed	Allowed
Residential Medium-Low	Allowed	Allowed	Allowed

	Allowable School Use		
Future Land Use Category	**Elementary School**	**Middle School**	**High School**
(0-7.5 du/ac)			
Residential Medium (0-10 du/ac)	Allowed	Allowed	Allowed
Residential High (0-15 du/ac)	Allowed	Allowed	Allowed
Mixed Use	Allowed (SE) Not Allowed in Industrial or Conservation Use areas	Allowed (SE) Not Allowed in Industrial or Conservation Use areas	Allowed (SE) Not Allowed in Industrial or Conservation Use areas
Rural Settlement (Tier Density 1 du/1 ac)	Allowed (SE)	Allowed (SE)	Allowed (SE)
Agricultural Homestead (1 du/10 ac)	Allowed (SE)	Allowed (SE)	Allowed (SE)
Commercial	Allowed (SE)	Allowed (SE)	Allowed (SE)
Office	Allowed (SE)	Allowed (SE)	Allowed (SE)
Industrial	Not Allowed	Not Allowed	Not Allowed
Parks / Recreation	Allowed (SE)	Allowed (SE)	Allowed (SE)
Conservation	Not Allowed	Not Allowed	Not Allowed
Institutional / Public Use	Allowed	Allowed	Allowed

Note: SE = Requires Special Exception
Source: Apopka Community Development Department, 2002

Policy 11.2

Public schools shall be developed in accordance with: (1) the Apopka Land Development Code (to the extent that the code is not in conflict with State or federal requirements); (2) the requirements of any mutual agreement between the City of Apopka and the Orange County School Board, which are consistent with this Comprehensive Plan; and (3) the following criteria for new public schools:

a. Schools shall be located in close proximity to existing or anticipated concentrations of residential development except for high schools and except for specialized schools which are suitable for other locations due to special characteristics.

b. Schools should generally be located away from industrial uses, airports, railroads, limited access roadways and other facilities which might adversely impact the schools

due to noise, vibration, odors, dust, toxic materials, traffic conditions, and/or other substantial hazards.

c. Schools shall minimize detrimental impacts on residential neighborhoods, hospitals, nursing homes, adult communities and similar uses through proper site location, configuration, design, layout, access, parking, and buffers. Detrimental impacts can include, but shall not be limited to school yard noise, parking, and traffic.

d. School size and land area requirements for elementary, middle and high schools shall meet the minimum standards established by the Orange County School Board.

e. Sites should be of sufficient size to ensure that buildings and ancillary facilities, as well as future expansions can be located away from flood plains, flood prone areas, wetlands, and other environmentally sensitive areas, and will not adversely impact historic or archaeological resources.

f. Public utilities (e.g. water, sewer, stormwater, and fire protection facilities) shall be available to the site.

g. Sites shall have on or direct access to a collector or arterial road and have safe and suitable ingress and egress for pedestrians, bicycles, cars, busses, service vehicles, and emergency vehicles. Ingress and egress shall not create detrimental impacts on roads adjacent to the site.

h. Mass transit or a public bus stop shall be located near the site when possible.

Policy 11.3

The City shall seek to co-locate public facilities, such as parks and recreation, community centers, and Orange County branch libraries, with schools to the greatest extent possible. In collocating facilities, the City shall use the following guidelines:

· Elementary Schools. Playgrounds may be collocated with elementary schools. In areas with densities high enough to support them, a neighborhood park with facilities for the elderly, a neighborhood recreation center, and a library sub-branch may be included.

- Middle Schools. Community parks and athletic fields are appropriate to be co-located with middle schools. A community center and a library sub-branch or branch may be included depending on the school's location and the population served.

- High School. Community parks with a community center and athletic fields may be collocated with high schools. A main branch library is also appropriate. If justified by the population to be served, a district park could be co-located with the school.

- School site combinations. Combinations of adjacent elementary, middle school, and high school sites may co-locate playgrounds, community parks, athletic fields, community centers and a library sub-branch if justified by the location and the population to be served. Appropriate land uses should be considered to each combination.

Policy 11.4

In order to ensure increased opportunities for coordination of land planning efforts with the Orange County School Board, the City shall continue to include representation by the Orange County Public Schools in the Local Planning Agency.

Policy 11.5

The City shall meet annually with the Orange County School Board or its representative to develop a school siting map, identifying potential location for new schools to serve anticipated growth.

Objective 12

The City shall maintain regulations in the LDC to implement the four Small Area Concept Plans for the Expressway, Plymouth, West and Northwest study areas.

Policy 12.1

The City shall coordinate with Orange County to shape the growth in this part of the county in a manner consistent with the Small Area master plans included within the Future Land Use Element.

Policy 12.2

Areas shown and assigned land use designations in the Small Area Study Master Plans which are not within the City's jurisdiction are only conceptual and do not assign any legally binding land uses. Should these areas be annexed, a Comprehensive Plan amendment will be required to officially designate them on the Future Land Use Map consistent with the land uses shown on the master plan included within the Future Land Use Element.

Policy 12.3

All development proposed within the boundaries of the four small area studies shall incorporate the following elements to the maximum extent feasible:

1. Public view/access to natural lakes within the study areas shall be preserved.

2. Residential developments around public lakes should be required to provide public streets, sidewalks or public parks around lakes instead of locating homes between the roads and the lakes.

3. Local streets should be designed in a grid system to the maximum extent possible and relate functionally to the surrounding arterial road network.

Policy 12.4

The City shall investigate the possibility of obtaining grant funds to install improvements at the gateways/focal points shown on the master plans of the four study areas. Improvements include coordinated directional signage, specialized landscaping, street furniture, fountains and landmarks/monuments.

Policy 12.5

The City shall support the construction of the Wekiva Parkway.

Policy 12.6

The City shall coordinate with the Expressway Authority and individual property owners to ensure that the borrow pits that result from the construction of an expressway can be reclaimed and redeveloped. The City shall adopt special design

standards by July 2012 to accommodate development in these locations.

Policy 12.7

The City shall include standards within the Land Development Code to ensure that development around Lake Apopka is consistent with the issues addressed in the Lake Apopka Planning Initiative, including protection of public access to Lake Apopka; protection of view sheds; integration of recreational uses; and incorporation of water-oriented commercial and recreational uses that can support eco-tourism.

Policy 12.8

The City shall establish a plan for improvements to the main access points to the Expressway Study Area. Improvements may include landscaping or monuments/signs to indicate the entrance to a neighborhood.

Policy 12.9

The City shall establish a plan for improvements to the main intersections in the Expressway Study Area, as shown in the master plan. Improvements may include roundabouts, uniform landscaping or streetscape furniture, islands or monuments/fountains.

Policy 12.10

The City shall ensure, through the Code Enforcement procedures, that industrial uses in the Expressway & Plymouth Study Areas are maintained in proper form so that they do not become a disincentive to attracting future economic development to the area.

Policy 12.11

The City shall consider an ordinance implementing Transfer of Development Rights to preserve any parcels along Lake Apopka that are still under private ownership.

Policy 12.12

The City shall ensure that the land development code includes requirements for adequate buffering to be provided between the airport/industrial uses and residential areas shown in the Plymouth master plan.

Policy 12.13

The City shall coordinate with FDOT and the County to build the proposed Lust Road extension as a tree-lined, scenic boulevard that will service the entire Plymouth area and would serve as the boundary for development expansion closer to Lake Apopka.

Policy 12.14

The City shall establish a plan for improvements to the main access points to the Plymouth Study Area – Proposed Apopka Bypass, Hermit Smith Road, and the proposed Lust Road intersection with U.S. 441. Improvements may include uniform landscape islands or monuments/signs to indicate the entrance to a neighborhood.

Policy 12.15

The City shall establish a plan for improvements to the main intersections in the Plymouth Study Area, as shown in the master plan. Improvements may include round-abouts, uniform landscaping or streetscape furniture, islands or monuments/fountains.

Policy 12.16

Within the “West” Study Area non-residential developments shall be designed to preserve the low-key, small-scale type of development that characterizes the West study area. Large-scale commercial developments such as department or discount stores shall be limited to U.S. 441.

Policy 12.17

The City shall establish a plan for improvements to the three main access points to the West Study Area from U.S. 441 - Junction Road, Hermit Smith Road and Plymouth Sorrento Road, and major intersections as shown in the master plan. Improvements may include uniform landscape islands or monuments/signs to indicate the entrance to a neighborhood, coordinated streetscape furniture.

Policy 12.18

Within the “Northwest Study Area”, the City shall coordinate with Orange County and the property owners to develop passive

recreation uses on the site currently used for mining. This area is adjacent to the Northwest Orange County Improvement Center, the site of the Annual Zellwood Sweet Corn Festival. These two parks could be joined, and connected to other parks in the adjacent neighborhoods through landscaped trails.

Policy 12.19

The City shall establish plans for improvements to the main access points to the Northwest Study Area, as well as major intersections as shown in the master plan. Improvements may include uniform landscape islands or monuments/signs to indicate the entrance to a neighborhood, coordinated streetscape furniture.

OBJECTIVE 13

The City of Apopka shall implement the Joint Planning Area Agreement (JPA) between the City of Apopka and Orange County adopted on October 20, 2004.

Policy 13.1

By December 2013, the City of Apopka shall amend the land development code to incorporate the Joint Planning Area Agreement requirements.

Policy 13.2

The City shall utilize the Joint Planning Agreement as a guide for the review of projects and to assist in coordination between Apopka and Orange County which include the following items:

a. Joint planning area;

b. Utilities/On site disposal systems; stormwater; Wekiva Parkway Interchange Land Use Plan;

c. Planning and development within the Joint Planning Area;

d. Public Services.

Policy 13.3

The City shall annually review the JPA and the land development code to ensure applicability of current and future

needs in relation to the requirements of the Joint Planning Agreement.

Objective 14

In an effort to manage development in the Wekiva Study Area in a way that ensures that the sensitive environmental resources are protected, , the City of Apopka shall utilize the best available data for land use amendments and development review from the St. Johns River Water Management District, the Fish and Wildlife Conservation Commission, the Department of Environmental Protection and other agencies.

Policy 14.1

The City of Apopka shall review all Future Land Use Map amendments which propose to increase densities/intensities in the Wekiva Study Area shall: optimize open space, and promote a pattern of development that adequately protects the natural resources, most effective recharge areas, karst features, and sensitive natural habitats of the area.

Policy 14.2

The City of Apopka shall review all plans for development which have identified sensitive resources to ensure it will be protected through approaches which may include coordinated greenway plans, dedication of conservation easements, acquisition of property, clustering of residential development, density credits and incentives, and low to very low density development.

Policy 14.3

No portion of any individual commercial or residential lot that is unbuilt may be counted towards the minimum open space requirements of Future Land Use Element Policy 3.1.s.

Policy 14.4

Stormwater facilities may be counted toward meeting the required open space standards, based upon the following conditions:

- Lined stormwater facilities cannot count toward the requirements. The entire facility must be pervious.
- No more than 50% of the open space requirements can be met with wetlands. Stormwater retention/detention

areas shall not count for more than 50% of the required open space percentages.

- Protected wetlands shall not count for more than 50% of the required open space percentages.
- Stormwater retention/detention areas and protected wetlands may be combined to meet the required open space percentages, but in no case shall the stormwater retention/detention areas and protected wetlands count for more than 75% of the required open space percentages.
- Lands with pervious surfaces utilized for sports or active recreation, provided that such lands shall not count more than 25% towards any open space requirements and the open space is permanently protected through conservation easements or similar binding mechanisms.

Policy 14.5

The following surveys and studies are required to be submitted with a subdivision plat or site plan or its functional equivalent, such as Planned Unit Developments for any project 30 acres in size or larger, and shall be conducted by a qualified environmental professional or a licensed geologist to evaluate the location and presence of sensitive environmental features.

1) An analysis of soils and other geotechnical information, using data such as the Wekiva Aquifer Vulnerability Assessment, to determine the location of the most effective recharge areas as the term is used in Rule 40C-41.063(3), F.A.C. or soils determined by the U.S. Soil Conservation Service to be Type “A” Hydrologic Soils Group which are considered to be the most effective recharge areas.

2) An analysis of the site to determine the location and nature of sinkholes and other karst features of the property such as stress-to-sink and other direct connections to the aquifer including an analysis to determine the depth to water table, the location of the Floridan aquifer relative to ground surface, and the thickness and extent of protective clay layers over the aquifer. This analysis may include the use of geophysical surveys, such as microgravity, ground penetrating radar surveys and soil borings or their appropriate alternatives and may be supplemented with

documented locations of sinkholes, light detection and ranging surveys (LIDAR) and aerial photographs.

3) An analysis of the site to determine the location of sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. This analysis shall be coordinated with the Florida Fish and Wildlife Conservation Commission and the Florida Department of Environmental Protection.

4) If the site will not be served by the sanitary sewer system, a comparative nitrate loading analysis for the proposed development shall be prepared using professionally acceptable methodology based on the existing land use at the time of this amendment versus the proposed land use activity at build-out. The analysis may take into account specific on-site best management practices and compensatory reduction off-site through the expansion of central sanitary sewer. The analysis must demonstrate, with all factors taken into account, that there is no increase in nitrate loading to groundwater. The comparative nitrate loading study submitted as data and analysis as part of the comprehensive plan amendment shall be deemed to meet this requirement.

Policy 14.6

Open space is defined as the land area that remains undeveloped or minimally developed, such as trails and boardwalks, as part of a natural resource preserve or passive recreation area and shall include land preserved for conservation purposes. Open space excludes water bodies, lots, street rights of way, parking lots, and impervious surfaces. Open space areas may include stormwater management areas that follow recommended BMPs as provided in Policy 14.5.

Policy 14.7

Priority for preservation and dedication of open space shall be given to the following resources: most effective recharge areas, wetlands, springs, spring runs, sinkholes, surface and subsurface caves, karst features, karst features with a direct connection to the aquifer and sensitive natural habitats including Long Leaf Pine, Sand Hill, Xeric Oak Scrub and Sand Pine scrub vegetative communities.

Policy 14.8

The following maps are included in **Appendix 1**-2 of the Future Land Use Element and are hereby incorporated into the Future Land Use Map series as overlays; the Wekiva Study Area Boundary Map, the Recharge Area Map, the Karst Topography Features Map, and the Xeric Oak Scrub, Sand Pine Scrub, and Sandhill (Longleaf Pine Habitat) Map . These overlay maps also serve to delineate the most effective recharge areas, karst features, and sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. The overlay map series are based on the best available data and analysis.

Objective 15

Site plans, subdivisions or their functional equivalent, such as Planned Unit Developments, within the Wekiva Study Area shall meet the design standards as set forth in the following policies.

Policy 15.1

Conservation subdivision designs shall include:

1) Clustering of units on small lots;
2) Establishment of open space, which shall be connected whenever possible, in recordable easements, plat or other recordable instrument. Open spaces percentages shall be as provided for in Policies 3.1.s;
3) Central water and sewer treatment facilities connected to the regional system; and
4) Minimal site disturbance.

Policy 15.2

Where feasible, development shall be buffered from springs, spring runs, sinkholes, caves and other karst features as shown below. The minimum buffer area shall consist of a setback that retains all natural vegetation within the buffer area.

Feature	Minimum Buffer
Springs	300 feet
Spring runs	150 feet
Sinkholes, with a direct connection to the aquifer	200 feet, measured from the drainage divide
Other sinkholes	100 feet, measured from the drainage divide
Caves	One-half mile, measured on the

Feature	Minimum Buffer
	surface from the centerline of the cave system
Other karst features with a direct connection to the aquifer (swallet or stream to sink)	200 feet, measured from the drainage divide

Policy 15.3

Where a lot of record is too small to accommodate development in compliance with the buffers set forth in Policy 15.2, all allowable use may be established provided that the building and associated paved areas are located the maximum distance possible from the karst features, and further provided that a swale and berm are located between the development and the karst feature. The swale and berm shall be designed to direct drainage away from the karst feature.

Objective 16

In order to minimize the contribution of nitrates to groundwater and to foster long-term stewardship of the springs, special design and Best Management Practices (BMPs) shall be instituted for all development within the Wekiva Study Area.

Policy 16.1

Development shall use joint or shared access to the maximum extent feasible in order to minimize impervious surfaces.

Policy 16.2

Non-residential development shall use shared parking to the maximum extent feasible in order to minimize impervious surfaces. All parking lots with 100 or more spaces shall be designed with a minimum of twenty (20) percent of the parking spaces in pervious area.

Policy 16.3

Design of parking lots, sidewalks, buildings and other impervious surfaces shall minimize connections between impervious surfaces through techniques shown on a site plan such as:

1) Directing flows from roof drains to vegetated areas or to rain barrels or cisterns for reuse of the water;

2) Directing flows from impervious surfaces so that they drain to vegetated buffers or natural areas; and

3) Breaking up flow directions from large paved surfaces.

Policy 16.4

Porous pavement materials, pervious concrete, and pervious asphalt should be used to minimize the amount of impervious surface with new development and redevelopment.

Policy 16.5

Commercial and industrial development shall be designed to minimize site disturbance by limiting clearing to the minimum area necessary to accomplish development, as follows:

1) Avoid or minimize the removal of existing trees and vegetation;

2) Minimize soil compaction by delineating the smallest disturbance area feasible; and

3) Maximize disconnection of impervious surfaces to reduce water runoff flows and increase opportunities for infiltration.

Objective 17

Proposed amendments to the Future Land Use Map (FLUM) within the Wekiva Study Area shall meet the criteria in the following policies:

Policy 17.1

Demonstrate that the proposed land use category is the least intensive category that will meet a demonstrated need of the use; and

Policy 17.2

All proposed land use amendments for properties over 30 acres in size will include an analysis to determine appropriate specific onsite BMP’s and compensatory treatment for nitrate/nitrogen reduction, both on-site and off-site,

including, if necessary, through connection to central sanitary sewer. The analysis must demonstrate, when all factors are taken into account, that there is no increase in nitrate/nitrogen loading to groundwater and surface water.

Objective 18

~~Prior to December 2010~~, T~~t~~he City shall implement the~~adopt a~~ Wekiva Parkway Interchange Land Use Plan adopted on September 15,2010, which ~~that~~ addresses the requirements of Section 369.321(1) F.S. as it relates to coordinated planning within the Wekiva area.

~~**Policy 18.1**~~

~~The City will evaluate the area within a minimum one mile radius from the proposed interchange and develop a Vision Plan and a subsequent Land Use Plan.~~

Policy 18.~~2~~1

The City shall implement ~~primary intent of~~ the Wekiva Parkway Interchange Vision Plan, which ~~is to develop a conceptual master plan to~~ guides the location of a range of uses, such as residential, office, commercial, industrial, recreation, public and institutional, at various densities and intensities around the proposed interchange. ~~The Wekiva Parkway Interchange Land Use Plan will establish the Future Land Use categories for the various sites contained within the study area.~~

~~**Policy 18.3**~~

~~The City will continue to coordinate the Interchange Vision Plan and the Land Use Plan with Orange County so that both Comprehensive Plans can be amended consistently.~~

~~**Policy 18.4**~~

~~A draft Interchange Vision Plan will be created to gather community input and collaboration with respective agencies and will become the basis for the Land Use Plan, to be adopted prior to December 2010.~~

~~**Policy 18.5**~~

~~The land use pattern and associated densities and intensities within the Interchange Study Area shall be established based upon a balance of the economic needs of the region in~~

~~proximity to the interchange and consideration of environmental resources and the availability of public services.~~

Policy 18.~~6~~2

Prior to rezoning any property within a one-mile radius of the interchange Study Area, the City shall amend its LDC to incorporate development standards that will implement the Vision Plan. These standards shall address creative planning solutions to protect environmentally sensitive lands, such as:

Open Space

Standards will be developed for appropriate percentages of open space for single parcels and/or for the entire Interchange Study Area.

Clustering:

Standards will be developed to allow multiple land owners to aggregate parcels for the purpose of calculating density/intensity and developing cohesive clusters of higher density/intensity in the area closest to the interchange and major intersections in the study area.

Transfer of Development Rights (TDR):

A TDR system shall be developed to allow land owners that have sensitive lands or lands farthest from the interchange, to sell density/intensity rights to owners of lands closest to the interchange. The vision plan will analyze the potential sending and receiving areas.

Form-Based Regulations:

Develop form-based regulations for the study area to ensure the Vision Plan is implemented.

Policy 18.~~7~~3

The development standards within the Interchange Study Area shall be applied through a zoning overlay, or similar method, that encompasses the study area. Developer agreements may be required.

Policy 18.~~8~~4

If a parcel is severed by the one-mile radius or is under common ownership, either the entire parcel will be included or excluded from the study area based upon the Vision Plan.

Policy 18.~~8~~5

In the event that the Wekiva Parkway is not constructed, it is anticipated that the Wekiva Parkway Interchange Plan will be reevaluated and appropriate comprehensive plan amendments adopted to address then-existing development and future land use designations within the Wekiva Parkway Interchange Plan Area.

~~Policy 18.9~~

~~The change to Mixed-Use land use category for sites within the Wekiva Parkway Interchange Study Area will become effective at the time the Kelly Park interchange is officially designated by the Expressway Authority. Until such time, the sites shall be designated as depicted on the Northwest Area Conceptual Master Plan included in the Joint Planning Agreement as Exhibit 'F'~~

Policy 18.~~10~~6

Before any development can occur within the Project Orlando LLC site(further identified as parcels 11-20-27-0000-00-003, 11-20-27-0000-00-013, 11-20-27-0000-00-036, 11-20-27-0000-00-042, 11-20-27-0000-00-057, 12-20-27-0000-00-060, 11-20-27-0000-00-030, 13-20-27-0000-00-023, 13-20-27-0000-00-005, 13-20-27-0000-00-061, 13-20-27-0000-00-026, 13-20-27-0000-00-032), the proposed development must be processed and approved as a Development of Regional Impact (DRI) as defined in Chapter 380.06, Florida Statutes and Chapter 28-24, Florida Administrative Code.

Policy 18.~~11~~7

Public school capacities and facilities serving the Project Orlando site shall be addressed with the rezoning and DRI processes. No increase in density above the vested 67 dwelling units shall be permitted by the City until it is demonstrated that adequate public school facilities are available to meet the increased demand.

Policy 18.~~12~~8

Prior to the completion of the interchange, but following the official designation of the interchange location by the Expressway Authority, a development program may be

permitted by the City which shall not exceed 7,000 average daily vehicle trips external to the Project Orlando project, subject to rezoning and a traffic study.

Policy 18.~~8~~9

A parcel assigned a land use designation during the 2010-1 or 2010-2 large-scale comprehensive plan amendment cycles, shall not be assigned a city residential zoning category or obtain a rezoning for residential uses until Orange County Public Schools has either issued a finding of school capacity or a school capacity enhancement agreement to the applicable property owner, excepting those parcels having a diminimus impact on public schools as defined in the Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency.

Objective 19

New development in the City shall comply with "Smart Growth" principles that minimize the emission of greenhouse gases and reduce vehicle miles of travel as opposed to conventional development standards that encourage urban sprawl. The following policies shall be incorporated into the City's LDC prior to the next required Evaluation and Appraisal Report.

Policy 19.1

Development in the mixed-use categories, and where appropriate in other land use categories, shall provide pedestrian-friendly street design.

Policy 19.2

New development, as well as infill development where feasible, shall provide interconnected street grid networks to disperse traffic and encourage walkability. Developments may include a hierarchy of narrow streets, boulevards and alleys; high-quality pedestrian networks; designs that encourage a greater use of bicycles, rollerblades, scooters and walking as daily transportation; connectivity to public transit; and a land use mix that demonstrates reduced external trips by encouraging internal trips.

Policy 19.3

New infill development in the mixed-use categories shall provide shops, offices and homes within neighborhoods,

including mixed uses in one structure, to offer opportunities to encourage walking and/or live and work environments.

Objective 20

Ensure development within the City of Apopka surrounding the Wekiva Parkway interchange will occur in a predictable, yet flexible manner consistent with the intent of the Wekiva Parkway and Protection Act, the community vision, and the City's economic development goals, and which will provide a balanced land use scenario that can accommodate economic and residential growth in the context of the environmental concerns identified within the Wekiva Parkway and Protection Act, and that can serve as the primary targeted area for greenfield development within the Wekiva Study Area.

Policy 20.1

The Wekiva Parkway Interchange Plan is composed of three elements: the *Wekiva Parkway Interchange Vision Plan*, the *Wekiva Parkway Interchange Land Use Plan*, and the *Wekiva Parkway Interchange Goal, Objectives, and Policies*. The *Wekiva Parkway Interchange Vision Plan*, adopted as part of the Future Land Use Overlay Series found in Appendix 1-2 of the Future Land Use Element, represents a conceptual scenario that demonstrates the intent of the Wekiva Parkway Interchange Plan and will guide the development of lands located within the Wekiva Parkway Interchange Vision Plan Area. The Wekiva Parkway Interchange Land Use Plan and the Wekiva Parkway Interchange Goal, Objectives, and Policies shall represent the regulatory elements of the Wekiva Parkway Interchange Plan. The land use configuration and distribution demonstrated on the Wekiva Parkway Interchange Vision Plan are intended to illustrate the potential application of the adopted Wekiva Parkway Interchange Vision Plan policies; however, the specific details for each development phase will be established through the approval of development plans consistent with the Wekiva Parkway Interchange Goal, Objectives & Policies, the Wekiva Parkway Interchange Land Use Plan, and the regulations established in the Wekiva Parkway Interchange Form-Based Code.

Policy 20.2

The Wekiva Parkway Interchange Vision Plan shall be applicable within Wekiva Parkway Interchange Vision Plan Area. The Wekiva Parkway Interchange Vision Plan Area is

generally comprised of a one-mile radius emanating from the anticipated Wekiva Parkway Interchange. The exact configuration is based upon a logical, parcel-specific boundary consistent with the intent of capturing a one-mile radius.

Policy 20.3

The annexation, land use change, and subsequent development of lands located within the Wekiva Parkway Interchange Plan Area for Apopka and the Wekiva Interchange Land use Plan Overlay for the County shall be consistent with the adopted Interlocal Agreement between Orange County and the City of Apopka regarding Wekiva Interchange Land Use Plan Overlay.

Policy 20.4

Prior to approving the first development plan within the Wekiva Parkway Interchange Vision Plan Area, the City shall adopt the Wekiva Parkway Interchange Form-Based Code establishing the design and development standards for the Wekiva Parkway Interchange Vision Plan Area. The Wekiva Parkway Interchange Form-Based Code shall be based on the criteria contained within the Wekiva Parkway Interchange Goal, Objectives, and Policies.

Policy 20.5

The Wekiva Parkway Interchange Vision Plan identifies the approximate location of the character districts necessary to support the anticipated development program within the Wekiva Parkway Interchange Vision Plan Area. The location and/or boundaries of the character districts shown on the Vision Plan are illustrative only, and it is the intent of the City that locations and boundaries can be refined through an administrative review, except where other review and approval procedures are specified, in either the Comprehensive Plan or the Wekiva Parkway Interchange Form-Based Code. The specific boundaries and locations of character districts will be established through the approval of development plans, as established through the Wekiva Parkway Interchange Form-Based Code procedures.

Policy 20.6

Deviations in the area-wide densities and/or intensities established in the Wekiva Parkway Interchange Land Use Plan, or proposed design elements that are not consistent with the Wekiva Parkway Interchange Goal, Objectives, and Policies

shall require a comprehensive plan amendment.

Policy 20.7

The Wekiva Parkway Interchange Form-Based Code shall include regulations governing the following community design elements for the Wekiva Parkway Interchange Plan area:

- An interconnected network of streets and paths designed to encourage pedestrian and bicycle travel, with traffic calming where appropriate;
- A complementary mix of land uses, including residential, employment, recreational, and civic;
- Appropriate densities and intensities of land uses within walking distance of transit stops; and
- Daily activities within walking distance of residences, public uses, streets and open spaces that are safe, comfortable and attractive for the pedestrian, with adjoining buildings open to the street and parking designed so as not to interfere with pedestrian and bicycle travel.

Policy 20.8

The Wekiva Parkway Interchange Form-Based Code shall include provisions requiring that the land uses incorporated into the Wekiva Interchange Vision and Land Use Plans are physically and functionally integrated, including a connected and continuous system of pedestrian facilities.

Policy 20.9

Development within the Wekiva Parkway Interchange Plan Area shall be assigned a Mixed-Use Interchange future land use designation and shall accomplish an overall mix of residential and non-residential uses as outlined in Policy 3.1.r. Assignment of the Mixed-Use Interchange Land Use future land use designation shall require an amendment to the Comprehensive Plan. This policy shall not be construed to remove any existing entitlements upon property within the Wekiva Parkway Interchange Plan Area, nor shall it prevent development consistent with the existing future land use designations. Development occurring under the existing future land use designations shall comply with the design criteria included in the Wekiva Parkway Interchange Plan to the extent that the criteria does not conflict with the existing future land use designation.

Policy 20.10

The City shall ensure that areas of greatest density and intensity within the Wekiva Parkway Interchange Plan Area are located at and between the two major intersection nodes at Kelly Park Road/Golden Gem Road and Kelly Park Road/Plymouth-Sorrento Road, but not upon areas of Karst formations. The Wekiva Interchange Form-Based Code shall require a mix of uses consistent with Wekiva Interchange Plan and shall establish a system of transfer of development rights to encourage increased density and intensity within Wekiva Parkway Interchange Plan Area. Development at the outer edges of the mixed-use area shall maintain compatibility with the lands adjacent to the Wekiva Interchange Plan Area by reducing density and intensity or by providing substantial buffers, landscaping, height, and lighting controls. The City shall also allow transfer of development rights to maintain 20% open space in the overall Study Area. Densities and intensities allowed within the Wekiva Parkway Interchange Plan Area character districts shall be as shown on **Table 20.10**:

Table 20.10: Wekiva Parkway Interchange Character District Standards

Character District/ Purpose	Uses	Minimum/ Maximum Acreage*	Density (Units per Acre)	Intensity (FAR)	Open Space (min.)
Village Center (VC) Safe, vibrant and pedestrian-oriented mixed-use area. Each Village Center may include a Core of up to 40 acres each.	Residential, retail, commercial, office and entertainment uses. Horizontal mixed-uses shall be allowed, but vertically mixed-uses are preferred.	**Min:** 200 **Max:** 380 (40 acres max. of VC Core in each village)	**Min:** 7.5 **Max:** 25 **District Average:** 12	**VC Core:** **Min:** 0.3 **Max:** 1.0 **Average:** 0.5 **Balance of VC:** **Min:** 0.25 **Max:** 0.7 **Average:** 0.35	10% minimum in the form of public plazas and small park spaces that are urban in character.
Interchange Accommodate highway-oriented vehicular service uses and provide a transition between the fast traffic exiting the highway and the pedestrian Village Center.	Highway-oriented uses, such as automobile service & repair, retail, office, and limited high density residential.	**Min:** 175 **Max:** 380	**Min:** 7.5 **Max:** 15	**Min:** 0.1 **Max:** 1.0	15% minimum in the form of neighborhood parks and common areas
Employment (formerly Edge District) Accommodate corporate office development and foster the development of a campus-like corporate park.	Office, hospitality, clean industry, large institutional uses (hospitals, educational facilities), and large scale residential,	**Min:** 190 **Max:** 380	**Min:** 4 **Max:** 7.5	**Min:** 0.1 **Max:** 0.5	20% minimum in the form of large parks and interconnected wildlife corridors.
Transition	Single family	**Min:** 380	**Min:** 5	**Min:** 0.5	15% minimum in

Character District/ Purpose	Uses	Minimum/ Maximum Acreage*	Density (Units per Acre)	Intensity (FAR)	Open Space (min.)
Provide a transition between the high-density/intensity Village Core and the low-density/ intensity areas at the edge of the study area.	home and single or multi-use office/medium-density residential	**Max:** 770	**Max:** 15	**Max:** 1.0	the form of neighborhood parks and larger common areas.
Neighborhood Preserve the existing low-density single-family residential neighborhoods and transition to the less intense uses just outside the study area.	Single-family homes and small scale support uses (schools, churches, day care facilities)	**Min:** 2,360 **Max:** 3,060	**Min:** 1 **Max:** 5	**Min:** .05 **Max:** 0.5	20% minimum in the form of large parks and interconnected wildlife corridors.

* Calculated based on the entire vision plan area acreage.

Policy 20.11

Maximum allowable development within the Wekiva Parkway Interchange Plan Area shall be allocated among land uses as follows:

Single Family: 7,500 units
Multi Family: 8,500 units
Commercial/Services: 22 million square feet

Policy 20.12

The character district regulations included in the Form-Based Code will ensure densities and intensities are allocated as noted in **Table 20.10** (see **Policy 20.10**). The TDR system will allow increased densities in the Core area (noted as bonus density on the table). The average density/intensity for individual districts and the entire mixed-use area shall not exceed the average allowed. The City shall establish a tracking system to ensure the densities/intensities are kept within the established limits. The tracker will also ensure the acreages of the character districts remain within the parameters set in **Policy 20.10.**

Policy 20.13

Development within the Wekiva Parkway Interchange Vision Plan Area shall be planned in a manner that maximizes internal circulation and does not cause the Florida Strategic Intermodal System (SIS) to exceed its adopted Level of Service Standard without appropriate mitigation.

Policy 20.14

The Wekiva Parkway Interchange Vision Plan Area shall include the following performance targets for transit, bicycle and pedestrian facilities as follows:

- 80% of all the bicycle and pedestrian facilities within the Plan Area shall function at LOS C or better;
- All parcels within ¼ mile of a transit stop should be serviced by pedestrian facilities operating at LOS C or better.

LOS standards shall be measured in accordance with the methodology established in the FDOT Multimodal Transportation Districts and Area wide Quality of Service Handbook (Nov. 2003 or as revised). The City shall coordinate with LYNX and METROPLAN ORLANDO to apply the

transit quality of service framework as found in the most recent edition of the Transit Capacity and Quality of Service Manual (TCQSM) and required as part of METROPLAN ORLANDO'S long-range transportation plan where feasible.

Policy 20.15

The City and applicants for development within the Wekiva Parkway Interchange Vision Plan Area shall incorporate transportation demand management strategies into the transportation planning process to alleviate congestion. A range of techniques will be considered, such as vanpool/ridesharing programs, parking management and pricing, transit vouchers, pre-tax incentives, telecommuting, flextime, and/or other appropriate trip reduction strategies.

Policy 20.16

Proposed development within the Wekiva Parkway Interchange Vision Plan Area shall contribute to providing a safe, convenient, comfortable and aesthetically pleasing transportation environment that promotes walking, cycling, and transit use. Appropriate improvements or enhancements to the multimodal network to incorporate into the Wekiva Parkway Interchange Form-Based Code shall include, but not be limited, to the following:

- Accommodations for pedestrian access and movement, including sidewalks, benches and clearly marked crossings;
- Accommodations for bicycles, including lockers, showers, and racks;
- Shared use paths in accordance with the FDOT Bicycle Facilities Planning and Design Guidelines Handbook;
- Accommodations for transfer of passengers at designated transit facilities;
- Preferential parking for rideshare participants;
- Access for motor vehicle passenger drop-offs and pick-ups at designated transit facilities and at commercial and office development sites; and/or
- Accommodation for the mobility impaired, including parking spaces, sidewalks and ramps for handicapped access.

Policy 20.17

Street cross-sections, design standards, and operational measures to ensure streets are safe and convenient for transit, automobile, truck, bicycle and pedestrian travel shall be incorporated into the Wekiva Parkway Interchange Form-Based Code. Strategies will include, but not be limited, to marked crosswalks, wider sidewalks, on-street parking, bus turnouts, traffic calming, raised medians or other appropriate safety enhancements that reduce hazardous conflicts between modes and that are consistent with the planned functions of the roadway.

Policy 20.18

The Wekiva Parkway Interchange Form-Based Code shall include standards for street intersections to facilitate pedestrian crossings.

Policy 20.19

Developments within the Wekiva Parkway Interchange Plan Area shall provide direct bicycle and pedestrian connections within and between residential areas and supporting community facilities and services, such as shopping areas, employment centers, transit stops, neighborhood parks, and schools. Standards and design criteria shall be established within the Wekiva Parkway Interchange Form-Based Code.

Policy 20.20

The City will include in the Wekiva Parkway Interchange Form-Based Code standards for roadways to be built/improved within the Wekiva Parkway Interchange Overlay District. The regulations will create a hierarchy of streets that equitably serve the needs of the pedestrian, the bicycle, public transit, and the automobile based on a grid network system of roadways. The City will support a multi-modal transportation environment that allows for various transit options.

Policy 20.21

Properties assigned the Mixed-Use Interchange future land use designation shall be rezoned to the Wekiva Parkway Interchange Mixed-Use Zoning District to be established in the Wekiva Parkway Interchange Form-Based Code.

Policy 20.22

The Wekiva Parkway Interchange Mixed-Use Zoning District shall establish a range of allowable lot types to ensure a mix of uses. The District shall also provide the form-based building requirements and range of allowable uses for each lot type. The lot type ranges will establish the development framework and pattern within which uses can locate.

Policy 20.23

Permitted land uses within the Wekiva Parkway Interchange Mixed-Use Zoning District shall be outlined in the Wekiva Parkway Interchange Form-Based Code, consistent with the Mixed-Use Interchange future land use designation and **Policy 20.10**. The Community Development Director shall have the authority to approve uses not listed there if the proposed use is compatible with the listed permitted uses and/or will generate or support the development of employment opportunities and/or an increased tax base.

Policy 20.24

Where feasible, developments within the Wekiva Parkway Interchange Plan Area shall maximize the preservation of open space and promote the clustering of uses to both preserve and enhance the natural environment and to maintain the rural character of areas outside of the Wekiva Parkway Interchange Plan Area. The amount of required open space shall vary by district, with the more intensive districts requiring less than 20% for urban plazas/ parks and the less intensive districts requiring more than 20% for passive/active parks and open space for areas. **Policy 20.10** establishes the minimum required open space per district.

Policy 20.25

The Wekiva Parkway Interchange Area Form-Based Code shall include the following provisions to promote efficient access to and through the area, and to protect the traffic flow along the Wekiva Parkway.

- Prohibit the vacation of rights-of-way to maintain the current grid system and facilitate its expansion;
- Require, as part of development approval, a spacing of 300 to 600 feet for local streets to create walkable “city” blocks and maintain connectivity in the area and avoid the use of the highway for local traffic;

- Prohibit the use of cul-de-sacs and gated neighborhoods;
- Coordinate with the Expressway Authority to encourage the extension of local roads under the highway to maintain connectivity between the east and west sides;
- Limit the number of driveways along Kelly Park Road, Golden Gem and Plymouth Sorrento Road within the Plan Area, and encourage the use of shared driveways instead;
- Require compliance with Section 6.02.10 of the LDC, which requires a minimum distance separation between driveways and intersections;
- Require internal connectivity between sites, through joint-use driveways or alleys, to keep traffic off main roads;
- The Form-Based Code shall include standards for right-of-way width and cross section design based on street typology; and
- Provide pedestrian/bicycle connections at a maximum separation of 350 feet, through the use of mid-block paths or pedestrian shortcuts.

Policy 20.26

Large developments with 50,000 gross square feet or more and are adjacent to a major street, which is or may be used as a transit route, shall provide access for on-site public transit. The public transit stop shall including a bus pullout and shelter.

Policy 20.27

The City shall coordinate with developers the design and construction of proposed new streets within the plan area in conformance with the design standards contained in the Form-Based code. The following standards shall be followed:

- Specific right-of-way location of streets other than those shown on Map 20 of the ILUP shall be determined through the development review process.
- Continue enforcing Section 6.02.05 of the City’s LDC (rights-of-way), which contains measures for the protection and use of rights-of-way, and consider the incorporation of more pedestrian-friendly standards in the Wekiva area form-based code.

Policy 20.28

Sites within the Wekiva Parkway Interchange Plan Area, as well as right-of-way areas, shall be subject to the vegetation protection and water conservation landscaping policies contained in the City's comprehensive plan. The City will include more restrictive vegetation protection standards in the Wekiva Parkway Interchange Form-Based Code to:

- Encourage transplanting and re-vegetation.
- Coordinate, on an as needed basis, with Orange County to update regulations for the protection of unique vegetative communities in both jurisdictions.
- Select and locate plants based on their ultimate growth.

Policy 20.29

In order to ensure that development within the mixed-use district creates a sense of community, the placement and orientation of buildings should be carefully planned. The following standards should be included in the form-based regulations:

- Primary building entrances shall orient toward the street, not to interior blocks or parking lots
- Freestanding single-use buildings should be avoided in all but the neighborhood character district, while mixed and interconnected buildings should be encouraged.
- Green areas or plazas may be used to create a prominent civic component to mixed-use areas. These green areas should be centrally located or placed in between the higher intensity uses.
- Standards for the design of gas stations, and other vehicular service uses, to ensure they fit into the desired pedestrian character. The Code will specify standards for building location, site layout, driveway location, signage and other design elements that will ensure compatibility with other proposed uses in the area.
- Building height regulations shall be established not to exceed the parameters listed for each character district in **Policy 20.30.**

Policy 20.30

Building heights shall be arranged so that the tallest buildings are located in proximity to the Kelly Park Interchange and Kelly Park Road itself between the two Village Center nodes. Building heights shall be stepped down/ reduced as development approaches the periphery of the Interchange Study Area and as development nears the rural lands outside the study area. The form-based code shall establish appropriate building heights for each character district and shall address reduced building heights in proximity to the edges of character districts and the study area itself in order to promote compatibility between districts and protection of the rural character of lands outside the study area. In no case shall building height exceed ten occupied floors within the Interchange Study Area without a Comprehensive Plan amendment.

Policy 20.31

The Wekiva Parkway Interchange Form-Based Code shall include standards for signage within the Wekiva Parkway Interchange Plan Area and shall have the purpose to maintain a pedestrian character within the village centers, but at the same time, allow visibility from the highway. Standards shall at minimum:

- Continue to require a sign master plan for all Mixed Use Developments, per LDC Section 2.02.20
- Ground signs shall not be allowed in the Core Area if buildings are located within 15 feet from the street right of way.
- Ground signs shall not exceed a maximum height of 12 feet. This maximum height may be further reduced in certain character districts.
- No billboards shall be allowed within the Wekiva Parkway Interchange Plan Area
- Building signs shall be designed to complement the architecture rather than obscure it.

City of Apopka
Comprehensive Plan 2030

Housing Element

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HOUSING ELEMENT

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HOUSING ELEMENT

INTRODUCTION

PURPOSE AND SCOPE

The Housing Element addresses the adequacy of the housing stock in the City of Apopka in relation to current and future demands through the year 2030. The Housing Element also sets housing policy, which will guide housing needs through the year 2030.

DATA SOURCES

The primary source of statistical information for this element was the U.S. Census of Population and Housing, 2000. The Shimberg Center for Affordable Housing, University of Florida, Florida Housing Data Clearinghouse (FHDC) and the University of Florida, Bureau of Economic and Business Research (BEBR) have also provided relevant statistics.

POPULATION PROJECTIONS

Table 2-1 shows the population projections prepared in conjunction with the City's Evaluation and Appraisal Report (EAR), adopted in October 2008. As noted in the detailed population estimates and growth trends found in the population report (Appendix A, FLUE), the City expects its population to continue increasing through the planning timeframe.

TABLE 2- 1: POPULATION PROJECTIONS, 2010-2030

Year	Permanent and Institutional Population	Seasonal Population*	Total Population
2010	41,382**	601	41,983
2015	56,138	815	56,953
2020	73,226	1,063	74,289
2025	97,330	1,413	98,743
2030	123,741	1,797	125,538

* Seasonal population based on 2000 Census percentage of seasonal units (.0013%)

**2010 estimate calculated based on building permits issued between 4/1/09 and 3/31/10.

Source: U.S. Census 2000; City of Apopka, 2010

CURRENT HOUSING STOCK DATA AND ANALYSIS

HOUSING TYPE

As shown in **Table 2-2**, almost 80 percent of the dwelling units in Apopka were single-family units in 2000. If mobile homes are included, single-family dwelling units make up almost 86 percent of all housing in Apopka. The mobile home share of total single-family units actually decreased from 10.7 percent in 1990 to 6.47 percent in 2000. In 2000, Apopka had a larger percentage of single-family homes (79.41%) than Orange County (62.86%); however, the percentage of mobile homes was similar. Multi-family dwelling units in 2000 represented 14% of the total housing units in Apopka, as compared to over 31% in Orange County. This includes apartment complexes, duplexes, triplexes, quadraplexes, rooming houses and condominium units.

TABLE 2- 2: DWELLING UNITS BY TYPE, 2000

Type of Unit	2000			
	County		City	
	Units	%	Units	%
Single-Family	227,164	62.86	8,002	79.41
Multi-Family	113,760	31.48	1,422	14.10
Mobile Homes	20,068	5.55	652	6.47
Other	357	0.10	0	0
Total	**361,349**	**100.0**	**10,076**	**100.00**

Source: Florida Housing Data Clearinghouse, 2000

TENURE

As displayed in **Table 2-3**, in 1990, 89.5 percent of the total occupied housing units within the City of Apopka and 90.2 percent of the total occupied units in Orange County were owner-occupied. Conversely, renter occupied housing stock in Apopka in 1990 represented about 28 percent (1,467 units) of the occupied units, while approximately 40 percent (151,062 units) of the occupied housing units in Orange County were renter-occupied. Between 1990 and 2000, the percent of owner occupied housing in Apopka increased by 4.5% of the total available housing units. Renter occupied housing in 1990 to 2000 has actually decreased the same 4.5%. Overall occupied housing from 1990 to 2000 has increased 5.3% in Apopka. Total housing in Apopka almost doubled in Apopka from 1990 to 2000. Most of the multifamily units were apartments and a smaller number were condominium units.

TABLE 2- 3: DWELLING UNITS BY TENURE, 1990 AND 2000

	1990				2000			
	County		City		County		City	
	Units	%	Units	%	Units	%	Units	%
Total Dwelling Units	**282,686**	**100.0**	**5,712**	**100.0**	**361,349**	**100.0**	**10,091**	**100.0**
Total Occupied Units	**254,852**	**90.2**	**5,112**	**89.5**	**336,286**	**93.1**	**9,562**	**94.8**
Owner Occupied Units	151,062	59.3	3,645	71.3	204,195	60.7	7,247	75.8
Renter Occupied Units	103,790	40.7	1,467	28.7	132,091	39.3	2,315	24.2
Total Vacant Units	**27,834**	**9.8**	**600**	**10.5**	**25,063**	**6.9**	**529**	**5.2**
Vacant – For Rent	12,471	44.8	205	34.2	10,116	40.4	110	20.80
Vacant – For Sale Only	3,730	13.4	103	17.2	3,619	14.4	131	24.8
Rented/Sold, Not Occupied	-	-	-	-	1,958	7.8	42	7.9
Seas., Recreational Occas. Use	4,574	16.4	179	29.8	5,351	21.4	131	24.8
For Migrant Workers	-	-	-	-	35	0.1	2	0.4
Other Vacant	-	-	-	-	3,984	15.9	113	21.4

Source: Census 1990 STF 1, and Census 2000 SF 1, U.S. Census Bureau

AGE OF HOUSING

The housing stock in Apopka, like the housing throughout Orange County, is fairly evenly distributed by age. As shown in **Table 2-4**, as of 2008, approximately 73 percent of the dwelling units in Orange County were constructed from 1970 to March 2000, while 87.5% of Apopka's housing stock was constructed during the same period. The 2000 Census indicated that 382 structures were built in Apopka prior to 1950, or about four percent.

Older housing usually provides lower priced housing and, accordingly, opportunities for first time home ownership, rental and replacement housing. As of March 2000, approximately 13% of Apopka's housing stock was built prior to 1970.

TABLE 2- 4: YEAR STRUCTURE BUILT

Year	Apopka		Unincorporated Orange County	
	Number	Percent	Number	Percent
Pre-1939	194	1.93	8,766	2.43
1940 to 1949	188	1.87	10,043	2.78
1950 to 1959	471	4.67	36,206	10.02
1960 to 1969	407	4.04	41,516	11.49
1970 to 1979	1,116	11.08	62,009	17.16
1980 to 1989	3,005	29.82	94,169	26.06
1990 to March 2000	4,695	46.6	108,640	30.07
TOTAL	**10,076**	**100.00**	**361,349**	**100.00**

Source: U.S. Census Bureau, 2000 SF-3

HOUSING AFFORDABILITY

Owner-Occupied Housing Value

A comparison of the value of owner occupied housing units in Apopka to Orange County in 2000 is shown in **Table 2-5**.

TABLE 2- 5: VALUE OF OWNER-OCCUPIED HOUSING, 2000

Specified Value	Orange County		City of Apopka	
	Units	Percent	Units	Percent
Less than $50,000	6,064	3.4	160	2.5
$50,000 to $99,999	73,170	41.6	2,942	46.3
$100,000 to $149,999	50,350	28.6	2,267	35.7
$150,000 to $199,999	21,934	12.5	684	10.8
$200,000 to $249,999	9,046	5.1	192	3.0
$250,000 to $299,999	5,111	2.9	69	1.1
$300,000 to $399,999	4,813	2.7	19	0.3
$400,000 to $499,999	2,095	1.2	21	0.3
$500,000 or more	3,328	1.9	0	0
Total Owner-Occupied	**175,911**	**100.0**	**6,354**	**100.0**
Median Value	**$107,500**		**$101,200**	

Source: U.S. Census Bureau 2000 SF-3

As shown in **Table 2-6**, housing within Apopka is considered fairly affordable compared to the Orlando Metropolitan Statistical Area,

Orange County or the state. According to the 2000 Census, the median housing value in Apopka was $101,200. The upper value quartile in 2000 was $128,900 and the lower value quartile was $81,200.

TABLE 2- 6: MEDIAN VALUES OF OWNER-OCCUPIED HOUSING, 1990 AND 2000

AREA	1990 Median Value	2000 Median Value
Apopka	$78,000	$101,200
Orange County	$81,400	$107,500
Orlando MSA	$84,300	$109,100
Florida	$77,100	$105,500

Source: U.S. Census, 1990, 2000

Mortgage Costs

Table 2-7 shows the monthly mortgage cost distributions for Apopka and Orange County as reported in the 2000 census. Approximately 16.3% of owner-occupied housing in Apopka was not mortgaged in 2000, according to the Census. Of the 6,354 owner-occupied units 5,316 units were mortgaged. The median owner cost for non-mortgaged units in the City was $296 per month, and $988 for mortgaged homes. The median costs in the county were $322 and $1,032, respectively.

TABLE 2- 7: MONTHLY COST OF OWNER-OCCUPIED HOUSING, 2000

	Orange County		City of Apopka	
	Units*	Percent	Units*	Percent
With Mortgage:				
Less than $200	64	0.05	0	0
$200 to $299	488	0.3	8	0.2
$300 to $399	1,436	1.0	9	0.2
$400 to $499	2,991	2.1	120	2.3
$500 to $599	5,831	4.1	255	4.8
$600 to $699	9,257	6.5	301	5.7
$700 to $799	14,079	9.9	524	9.9
$800 to $899	16,868	11.9	763	14.4
$900 to $999	16,229	11.4	772	14.5
$1,000 to $1,499	46,705	32.9	1,972	37.1
$1500 to $1,999	16,031	11.3	449	8.4
$2000 to $2,499	6,064	4.3	100	1.9
$2,500 to $2,999	2,708	1.9	43	0.8
$3,000 or more	3,396	2.4	0	0

	Orange County		City of Apopka	
	Units*	**Percent**	**Units***	**Percent**
Total with Mortgage	**142,147**	**100**	**5,316**	**100**
Median Monthly Cost	$1,032		$988	
Median as % of HH Income	22.9		22.7	
Not Mortgaged:				
$100 to $149	1,525	4.5	29	2.8
$150 to $199	2,623	7.8	73	7.0
$200 to $249	4,500	13.3	170	16.4
$250 to $299	5,813	17.2	269	25.9
$300 to $399	9,331	27.6	314	30.3
$400 to $499	4,610	13.7	82	7.9
$500 to $699	3,379	10.0	72	6.9
$700 or more	1,983	5.9	29	2.8
Total not Mortgaged	**33,764**	**100**	**1,038**	**100**
Median Monthly Cost	$322		$296	
Median as % of HH Income	10.5		11.1	
Total Owner-Occupied	**175,911**		**6,354**	

** Specified Units (the census excludes SF houses on ≥10 acres from count of specified units)*

Source: U.S. Census Bureau 2000 SF-3

Rental Costs

As shown in **Table 2-8**, rental payments in Apopka were comparable to those in Orange County as a whole in 2000. Approximately 20% of the Apopka households paid less than $500 for rent in 2000 while only 15.4% paid less than $500 in Orange County. A similar percentage of households in the City and County (26.5% and 30.5%, respectively) paid more than $800 for rent in 2000. The median gross rent paid in Apopka was $682 and the median in the County was $699, a difference of only $17. The median contract rent for the City was $577 in 2000. This indicates that expenses relating to rentals, above contract rent, were on average $105 per month. This figure includes services and utilities not included in the rental price of a unit, such as electricity and insurance.

TABLE 2- 8: COMPARISON OF MONTHLY GROSS RENT, 2000

	Orange County		City of Apopka	
Gross Rent	**Units**	**Percent**	**Units**	**Percent**
Less than $100	395	0.3	0	0
$100-$149	945	0.7	8	0.3

Gross Rent	Orange County		City of Apopka	
	Units	Percent	Units	Percent
$150-$199	1,184	0.9	18	0.8
$200-$249	1,115	0.8	24	1.0
$250-$299	1,612	1.2	45	1.9
$300-$349	2,077	1.6	54	2.3
$350-$399	2,582	2.0	114	4.8
$400-$449	4,427	3.4	89	3.8
$450-$499	5,994	4.5	129	5.4
$500-$549	8,925	6.8	147	6.2
$550-$599	9,809	7.4	138	5.8
$600-$649	12,344	9.4	223	9.4
$650-$699	13,280	10.1	254	10.7
$700-$749	13,167	10.0	333	14.0
$750-$999	36,961	28.0	480	20.2
$1,000 or more	14,198	10.8	248	10.5
No Cash Rent	2,824	2.1	68	2.9
Total Rental Units	**131,839**	**100.0**	**2,372**	**100.0**
Median Gross Rent	**$699**		**$682**	
Median as % of HH Income	**27.3**		**27.4**	

** Specified Units (The census excludes 1-family houses on 10 acres or more from count of specified units)*
Source: U.S. Census Bureau 2000 SF-3

Household Income

In 1999 household income was fairly evenly distributed, as shown in **Table 2-9**. This is probably attributable to many things including the change from a heavily agricultural economic base to a commuter or "bedroom" community. Sixteen percent of the Apopka households earned less than $20,000 in 2000, which puts those households into the very low income category. A total of 21.3% earned $20,000 to $34,999, the low income level. Nearly 20% of Apopka household income was between $35,000 and $49,999, the moderate income level. Approximately 30% of Apopka households earned over $60,000 per year.

TABLE 2- 9: HOUSEHOLD INCOME, 1999

Income Range	City of Apopka Households	
	Number	Percent
less than $10,000	571	6.0

Income Range	City of Apopka Households	
	Number	Percent
$10,000 to $14,999	465	4.9
$15,000 to $19,999	505	5.3
$20,000 to $24,999	554	5.8
$25,000 to $29,999	786	8.2
$30,000 to $34,999	696	7.3
$35,000 to $39,999	659	6.9
$40,000 to $44,999	668	7.0
$45,000 to $49,999	508	5.3
$50,000 to $59,999	1,082	11.3
$60,000 to $74,999	1,274	13.3
$75,000 to $99,999	807	8.5
$100,000 or more	974	10.2
TOTAL	9,549	100.00
Median Income: $43,651		

Source: U.S. Census, 2000

The United States Department of Housing and Urban Development (HUD) measures income distribution as a portion of the median household income for a Metropolitan Statistical Area (MSA). Households with incomes below the regional median are most affected by the variables that raise housing costs and reduce housing affordability.

Summary of Subsidized Housing Programs

The federal government has provided a limited quantity of housing or subsidies for housing costs to low and moderate income households since the depression. The State of Florida has assumed some of the administration of various federal housing programs and provides some state funding for house programs. Housing programs have lost support in recent years and funding has fluctuated accordingly. Federal and state support for housing is now at an all time low. As a result, local programs are beginning to emerge. Some examples of local programs are included in the Housing Forecasts section of this element. A detailed description of federal and state housing subsidies in included in the list below.

Public Housing: Housing Act of 1937 (P.L. 75-412) Title II, Housing and Community Development Act of 1974 (P.L. 93-383)

Conventional public housing helps public housing authorities provide shelter for low income residents at affordable rent through three type of financial assistance provided by the federal

government through the Department of Housing and Urban Development:

(1) Preliminary loans for planning;

(2) Annual contributions to amortize costs of both development and modernization;

(3) Additional annual contributions for operations (operating subsidy).

Eligible occupants are low income/moderate income households, as defined by the Department of Housing and Urban Development for the area, including the elderly and handicapped who pay no more than 30 percent of adjusted income for rent. Federal aid is also available to finance capital improvements in public housing projects: Annual contributions contracts are awarded to reflect increased development, costs of project as a result of capital improvements to improve health and safety conditions, to extend the useful life of the property, or to make it more suitable for its intended use. There is no public housing within the city limits of Apopka. The Orlando Housing Authority which operates several housing developments in the surrounding area, public housing and others, have an Interlocal agreement to operate in Orange County but do not have such an agreement with the City of Apopka.

FmHA 515, Rental Housing Loans: Housing Act of 1949 as amended, Section 515(P.L. 89-117)

Provides economically designed and constructed rental housing and related facilities suited for independent living by rural residents with low and moderate incomes and for those age 62 and over. The Farmers Home Administration (FmHA) provides loans to individuals, trusts, associations, partnerships, limited partnerships, state or local public agencies, consumer cooperatives, profit and non-profit corporations.

Borrowers must agree to provide rental units for occupancy by eligible individuals or families as determined by the Farmers Home Administration. Rent charges must be within limits that eligible occupants can afford to pay. Limited profit borrowers are allowed and eight percent return on their initial investment.

FmHA enters into an interest credit and rental assistance agreement allowing the eligible borrower interest credits to subsidize the loan repayment from market rate down to one percent interest. Assisted loans may also be made in connection with the HUD Section 8 Housing Assistance Payment Program for existing housing; under their program HUD will pay a portion of the eligible tenants rent including utility allowance in excess of fifteen (15) to twenty-five (25) percent of the household’s income.

Section 8 Subsidy Program: The Housing and Community Development Act of 1974 (P.L. 83-383)

The U.S. Department of Housing and Urban Development (HUD) provides rent subsidies through housing assistance payment contracts with eligible sponsors to help low and very low income families and elderly, disabled and handicapped individuals afford decent, safe and sanitary rental housing. HUD subsidizes the difference between the contract rent approved by HUD and the occupant family's or individuals required contribution of up to 30 percent of their adjusted income for rent.

Subsidized mortgage loan programs that may be used in conjunction with Section 8 rental subsidies include Section 202 direct loans for housing for the elderly and handicapped, FmHA section 515 loans for rural areas, and Section 221 (d) 3 FmHA insured mortgages.

Section 202 Direct Loans: Housing Act of 1959, as amended by the Housing and Community Development Act of 1974, Title II P.L. 86-372)

The U.S. Department of Housing and Urban Development provides direct loans to finance the construction or rehabilitation of rental or cooperative detached, semi-detached, row, walk-up or elevator-type structures, with the objective of providing for rental or cooperative housing and related facilities (such as central dining) for the elderly or handicapped.

Eligible sponsors are non-profit corporation and consumer cooperatives. Private non-profit sponsors of Section 202 housing may also be eligible for interest free loans to cover 80 percent of preconstruction expenses.

Beneficiaries must be elderly (62 years of age or older), physically handicapped, developmentally disabled or chronically mentally ill; families whose incomes fall within 50 percent of the median family income for the area in which the project is located may benefit from subsidy payments under the Section 8 Housing Assistance Payments Program.

Section 502 Rural Housing Loans: Title V of the Housing Act of 1949, Section 502 as amended, 42 U.S.C. 1971 (P.L. 89-117) (P.L. 92-310) (P.L. 98-51)
The Farmers Home Administration (FmHA) provides direct loans to assist lower income rural families to obtain decent, safe and sanitary dwellings and related facilities. Subsidized funds are available only for low and very low income applicants. Non-subsidized funds are available to low and very low income borrowers who do not qualify for interest credit assistance and to moderate

income borrowers only for subsequent loans for repair and rehabilitation and subsequent loans in connection with transfers by assumption or credit sales.

Dwellings financed must be modest in size, design and cost, and located in a place that is rural in character and does not exceed 10,000 in population, or in a place where population exceeds 10,000 but is not in excess of 20,000 provided the place is not a Metropolitan Statistical Area and has a serious lack of mortgage credit for low and moderate income families as determined by the Secretary of Agriculture and The Secretary of Housing and Urban Development. Interest credits granted annually reduce the effective interest rate to as low as one percent depending on the loan amount, size and income of the family.

Mortgage Insurance: There are various programs through the U.S. Department of Housing and Urban Development that provide insurance to mortgage lender against loss on mortgage loans. Detailed information can be obtained from the U.S. Department of Housing and Urban Development Field Office in Jacksonville, Florida.

Tax Exempt Bond Financing: In 1987 the State of Florida Housing Finance Agency had an annual housing bond volume of $150 million with local based allocation at $360 million (for all purposes including housing). Proceeds of tax exempt bonds sold at less than market rates because of their tax exempt status can be used to provide mortgage loans at reduced interest rates to house buying families earning under 115 percent of State, or local median income, whichever is higher ($31,970 for Florida in 1987).

Low Income Rental Housing Tax Credit: Tax Reform Act of 1986

To qualify a developer must build, rehabilitate or acquire a project and set aside at least 20 percent of the units for households having less than 60 percent of median income (both adjusted for family size). Rents to low income tenants are limited to 30 percent of the maximum qualifying income by family size, minus utility allowance. The annual value of the credit, which is received for ten years, is equal to nine percent (new construction, rehabilitation) or four percent (all acquisition, new construction, or rehabilitation of federally assisted projects) of the cost (minus land) of the low income units' construction, rehabilitation or acquisition cost. Federally assisted projects) of the cost (minus land) of the low income units construction, rehabilitation or acquisition costs. Federally assisted projects include those receiving FmHA loans and tax exempt financing, but do not include Section 8 rent subsides. Acquisition tax credits are limited to projects at least ten years old, with only a single owner allowed in the ten years prior to acquisition by the new owner.

Subsidized Renter-Occupied Developments

As shown in **Table 2-10**, as of 2008 there were a total of 930 apartment units available in Apopka. Of these, there were 35 rental assistance or subsidized units. Assistance programs for very low to moderate income rental housing units in the City are provided through the funding sources listed above. These units are designated for various special need groups including the handicapped, elderly and foliage industry workers. Due to completion of bonding guidelines for funding and federal assistance cutbacks, there has been a decrease in subsidized units.

Orange County maintains an Interlocal agreement with the City of Orlando Housing Authority to administer and operate various housing activities. There are several Orlando Housing Authority developments just outside the city limits.

Orange County does not maintain a listing of subsidized housing developments, but provides funding to those individuals or developments that are part of subsidized programs when applied for. As of 2008, the two largest apartment complexes in Apopka provide some degree of affordable housing programs, as shown below. Willow Lake provides 27 subsidized units. All of Willow Lake's apartments and 288 of Palm Key's Apartments provide caps that require a resident's income cannot exceed 60 percent of the median income for Orange County.

TABLE 2- 10: RENT SUBSIDIZED HOUSING, 2008

COMPLEX NAME	GENERAL LOCATION	NUMBER OF UNITS/BEDROOMS	SUBSIDIZED UNITS
Maine Avenue Apartments and Villas	South of Martin St. and East of Maine Ave. (499 N. Maine Ave.)	80 Units/ 80 Bedrooms	4 units through Section 8
Palm Key Apartments	South of E. Semoran Blvd. (S.R. 436), West of Piedmont-Wekiva Rd.	328	0 Rental caps on 288 units
Orange North Apartments and Villas	North of Orange Blossom Trail (U.S.441), South of Old Dixie Highway and East of Citrus Ave. (943 W. Orange Blossom Trail).	94 Units/ 156 Bedrooms	4 units through Section 8
Willow Lake Apartments	South of E. Semoran Blvd. (S.R. 436), East of Roger Williams Rd.	428	27 Rental caps on all units

Source: Apopka Community Development Department, 2009

Rent to Income Ratios

In order to assess the additional need for affordable rental housing, the ratio of rent to income was analyzed. As stated earlier, this study assumes that no more than 30 percent of gross household income should be spent on rent and utilities.

Table 2-11 shows the distribution of renter occupied housing units by gross rent to income ratios for Apopka based on 2000 incomes. The 2000 census defined income as the sum of amounts reported separately for wage or salary income; non-farm net self-employment income; farm net self-employment income; interest, dividend, net royalty income or rental income; Social Security or Railroad Retirement Income; public assistance or welfare income; and all other income. Receipts from money received from the sale of property, the value of "in-kind" income from food stamps, public housing subsidies, medical care, employer contributions for pensions, etc., and various lump sum receipts are not included.

As displayed in **Table 2-11**, only 14.3 percent of Apopka renter households paid 30 percent or more of their income for housing.

TABLE 2- 11: RENT TO INCOME RATIO, 2000

Ratio	Number	Percent
Less than 20 %	653	39.1
20 to 24 %	298	17.8
25 to 29 %	326	19.5
30 to 34 %	221	13.2
35 % or more	19	1.1
Not computed	155	9.3
TOTAL	1,672	100.0

Source: U.S. Census, 2000

Mortgage to Income Ratios

In order to assess the additional need for affordable owner occupied housing, the ratio of mortgage and housing utilities to income was analyzed. As stated earlier, this study assumes that no more than thirty percent of household income should be spent on mortgage and utilities. The ratios for 2000 Apopka households are displayed in **Table 2-12**. As shown in Table 2-12, only 25.2 percent or 1,599 owner-occupied households paid more than 30 percent of their income for mortgage costs.

TABLE 2- 12: MORTGAGE TO INCOME RATIO, 2000

Ratio	Number	Percent
Less than 20%	2,871	45.2
20 to 24%	1,128	17.8
25 to 29%	709	11.2
30 to 34%	489	7.7
35% or more	1,110	17.5
Not computed	47	0.7
TOTAL	**6,354**	**100.0**

Source: U.S. Census, 2000

Table 2-10 demonstrated the very low, low and moderate income rental facilities and units which are presently provided in Apopka through various assistance programs. The number of existing home owned housing units which were constructed through subsidized funding and which are meeting a portion of the present need for low to moderate income housing have not been inventoried.

Homes in Partnership is a non profit company which develops subsidized single family housing for low income families. Homes in Partnership has completed two subdivisions (West Apopka Hills) with a total 88 residential units. More than 125 houses have been constructed at various locations in the Apopka area. Habitat for Humanity also provides housing for low income families in the Apopka area.

GROUP HOMES

A special affordable housing need is congregate living facilities. Adult Congregate Living Facilities (ACLF) as defined by State Statutes (400.402, F.S.) are facilities licensed by the Department of Children and Family Services, which licenses and monitors group homes, foster care homes, nursing homes and family child care homes. The Agency for Health Care Administration (AHCA) licenses and monitors assisted living facilities, adult family care homes and adult day care centers. Generally, any facility providing such services to four or more residents not related to the owner or administrator, must be licensed by HRS; smaller facilities also must be licensed if they are advertised to provide such services. **Table 2-13** describes the four facilities located in Apopka, which serve a total licensed capacity of 166 residents.

TABLE 2- 13: ADULT CONGREGATE LIVING FACILITIES

FACILITY	APPROVAL PROCESS AND DATE	NUMBER OF APPROVED OCCUPANTS	GENERAL LOCATION
Apopka Retirement Homes	Special Exception #220 granted on 5/10/88. The site plan was approved by DRC on 9/20/88.	22	Located at the corner of Alabama Avenue and Monroe Avenue (750 Alabama Ave).
Dream Lake Manor	Annexed into the City with an existing special exception.	12	Located at the corner of Park Avenue and Myrtle Street (308 N. Park Ave).
Quest Inc. Group Home	Special Exception #214 was granted on 4/21/87.	12	27 West 1st Street
Sunbelt Living Center	The site plan was approved in September of 1991. Site plan #SPR 91-009.	120	Located at the corner of Oak Street and Highland Ave. (305 East Oak Street).

Source: Apopka Community Development Department, 2009

Developmentally disabled group homes licensed by the HRS can contain one to eight or more clients who require 24-hour care/supervision and are classified as mentally or physically handicapped. There are no group homes for the developmentally disabled within the municipal boundaries of Apopka.

MOBILE HOMES

Approximately six percent of the City's housing stock in 2000 consisted of mobile homes. Mobile home development usually provides an additional means to meet affordable housing needs. There are no HRS licensed mobile home parks within the City; however, there are four mobile home subdivisions, condominiums and cooperatives. There are also about 251 mobile homes located on separate lots, primarily in the agricultural areas throughout Apopka. The developments are listed in **Table 2-14**.

TABLE 2- 14: MOBILE HOMES

SUBDIVISION NAME	ACRES	NUMBER OF UNITS	GENERAL LOCATION
Chalet North	60.76 +/-	417	Located west of U.S. 441, and South of Roger Williams Road.
The Hills	20.00 +/-	122	Located West of U.S.441 and

SUBDIVISION NAME	ACRES	NUMBER OF UNITS	GENERAL LOCATION
			North of Piedmont-Wekiva Road.
Oakwood Estates 1st Addition	7.60 +/-	22	Located East of Christiana Avenue and North of East Magnolia Street.
Wekiwa Highway Park	8.90 +/-	38	Located East of Christiana Avenue and North of Monroe Avenue.
Miscellaneous lots	N/A	251	Located throughout Apopka
TOTALS	**97.26 +/-**	**599**	

Source: Apopka Community Development Department, 2009

HOUSING CONDITIONS

Housing condition relates to the structural quality or soundness of a housing unit, including structural components such as foundation, interior walls and roof structure. Also relevant is the availability of certain basic facilities such as complete plumbing facilities, central heat, and kitchen facilities. The size of a dwelling in relation to the size of the household occupying it is also a factor to consider in relation to housing quality.

Physical Conditions

A complete external housing evaluation survey was conducted as part of the preparation of the 1990 comprehensive plan. This evaluation, as listed in **Table 2-15**, revealed that nearly 90% of the housing inventoried was in standard condition with no visible outward signs of structural damage. Approximately 6% of the City housing was in need of moderate rehabilitation, which generally equates to a combination of cosmetic repairs such as replacement of curled shingles, broken windows, missing siding and peeling paint. Housing in need of substantial rehabilitation includes at least some visible costly repair such as a sagging roof or floor. Dilapidated housing generally includes very substantial damage such as roofs that have fallen in, missing doors and windows or signs of fire damage. The City has not conducted a windshield survey to assess structural conditions since 1989; however, code enforcement activities since that time, including demolition of unsafe housing, have aided in the further deterioration of housing and neighborhoods in the City.

TABLE 2- 15: APOPKA STRUCTURAL HOUSING EVALUATION, 1989

Condition	Number	Percent
Standard	4,302	88.8
Slightly Substandard	281	5.8
Significantly Substandard	163	3.4
Dilapidated	101	2.1
TOTAL	**4,849**	**100.0**

Source: Apopka Community Development Department, 1989

Units Lacking Complete Facilities

Housing units lacking certain facilities are another means of evaluating housing condition. The 2000 Census reported that less than one percent of the City's year-round housing stock lacked complete plumbing and/or kitchen facilities. Complete plumbing facilities include hot and cold piped water, a flush toilet and a bathtub or shower inside the housing unit for the exclusive use of the occupants of the unit. As shown in **Table 2-16**, 1,896 units in Orange County fell into this category in and 37 in Apopka. Kitchen facilities include a sink with piped water, a range or cooking stove and a mechanical refrigerator, all located inside the structure. As Table 2-16 shows, 1,963 units in Orange County and 85 units in Apopka lacked one or all of these facilities in 2000.

Units lacking central heat as counted in the Census are those where the respondent reports the primary source of heat as a floor, wall or pipeless furnace, room heaters that burn gas, oil or kerosene, fireplaces, stones or portable room heaters, or where the respondent reports no heating equipment. As indicated in **Table 2-16** there were 1,512 units lacking central heat in Orange County in 2000 and Apopka showed 79 lacking central heat.

TABLE 2- 16: DWELLING UNITS LACKING COMPLETE FACILITIES, 2000

	Apopka		Orange County	
Facility	**Number of Units (10,091)**	**% of Occupied Units**	**Number of Units (361,349)**	**% of Occupied Units**
Owner-occupied housing units lacking complete plumbing facilities	21	0.002	855	0.40
Renter-occupied housing units lacking complete plumbing facilities	15	0.001	1,041	0.80
Owner-occupied housing units lacking complete kitchen facilities	24	0.002	593	0.30

Facility	Apopka		Orange County	
	Number of Units (10,091)	% of Occupied Units	Number of Units (361,349)	% of Occupied Units
Renter-occupied housing units lacking complete kitchen facilities	61	0.006	1,370	1.0
Lacking heat	79	0.008	1,512	0.53

Source: U.S. Census, 2000

Overcrowding

The available living space and opportunity for privacy in a residential dwelling is a factor to consider in assessing the adequacy of a housing unit. At some point, overcrowding becomes a physical and psychological health hazard. More than one person per room is generally considered an indication of overcrowding. The best available information relating to this factor is the data reported in the most recent decennial census on the number of persons per room, derived by dividing the number of persons in each occupied housing unit by the number of rooms in the unit (only rooms used for living purposes are counted including living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year round use and lodger's rooms).

As indicated in **Table 2-17**, in 2000 only 7.8% or 742 of the year round occupied housing units in Apopka provided for 1.01 or more persons per room. The percentage of overcrowded rooms for Orange County is slightly smaller.

TABLE 2- 17: OVERCROWDED HOUSING UNITS – PERSONS PER ROOM, 2000

Persons Per Room	City of Apopka		Orange County	
	Number	Percent	Number	Percent
1.01 or more	742	7.8	12,841	6.9%

Source: U.S. Census, 2000

HISTORICALLY SIGNIFICANT HOUSING

As of 2000, approximately four percent of the houses in Apopka were constructed prior to World War II. This reference is often used by architectural historian because housing construction techniques changed drastically following World War II. Housing built before 1950, or more than fifty years old, is often qualified as "historically significant. The reasons that communities recognize historical sites, including houses, range from a desire to preserve cultural heritage to the wish to improve the economic value of the property.

There are several methods commonly used to recognize historic places. Possibly the most recognized and prestigious method is listing on the National Register of Historic Places. National Register listing does not provide any protection to a house or site other than economic incentives to maintain the historic character, including tax deductions for restoration and increased property value. The City of Apopka has one district listed on the National Register of Historic Places, the Ryan & Company Lumber Company located at 210 East Fifth Street. Four buildings in Apopka are listed on the National Register of Historic Places:

Carroll Building, 407-409 S. Park Avenue;
Seaboard Airline Railway Depot, 36 East Station Street;
Mitchill-Tibbetts House, 21 East Orange Street; and
Waite-Davis house, 5 South Central Avenue

The State of Florida presently maintains a data collection system of sites called the Florida Master Site File (FMSF). The FMSF does not place a qualitative value on sites but is maintained as a data source tool. The City completed a historic preservation survey of the City and the surrounding area in 1992. The survey was designed to identify all sites which may qualify for National Register nomination or listing on the Florida Master Site File. Nearly 200 houses in Apopka have been listed in the Florida Master Site File through the survey. Locations in Apopka with the highest concentration of resources are shown on **Map 2-1**.

Other methods of protecting and preserving historic housing include local registers and local preservation ordinances. These ordinances usually are overseen by a preservation board which follows guidelines for permitting demolition and new development intrusion in historic areas. A local ordinance provides the only protection or regulatory procedure for demolition or alteration of historically significant housing. Many times local recognition of historic housing provides the recognition that an older neighborhood or home is culturally valuable to the City even though it does not meet the requirements for nationally significant historical housing. Restoration, rehabilitation, renovation or reuse of historical housing can be promoted more easily following some form of recognition that a house or houses have more value than does a new building in its place. Limited funding for housing rehabilitation is available through State and Federal programs.

Following the completion of the survey, the City found there was a lack of interest in establishing a Preservation Board. The Apopka Historical Society and the Museum of the Apopkans provide community education and work with historic properties for preservation techniques. The City has also developed architectural design guidelines which must be utilized as a part any new development

throughout the City. Preservation and restoration of individual properties lies with the owner.

BUILDING ACTIVITY

Table 2-18 shows building activity since 2000. As discussed earlier, single family residential development has outpaced multifamily. The relationship between different types of single family development will be discussed under the analysis portions of the Housing Element. Demolitions are largely negligible. This is expected to increase somewhat with housing stock growing older in certain parts of the City. Conversions are extremely rare.

TABLE 2- 18: RESIDENTIAL BUILDING PERMIT ACTIVITY, 2000 TO 2009

Year	SF & Duplex Units	MF Units (3 or more units)	Total
2001	513	29	542
2002	528	32	560
2003	509	0	509
2004	650	6	656
2005	865	12	877
2006	793	166	959
2007	569	20	589
2008	356	0	356
2009	265	0	265
TOTAL	**5,048**	**265**	**5,313**

Source: U.S. Census Bureau, Building Permit Estimates, 2010

HOUSING FORECASTS

PROJECTED HOUSING UNITS

In order to more adequately plan for both future housing needs and future City service needs housing projections have been developed. Regardless of the type of housing being sought, growth in households creates demand for new housing. Demand for housing may also be created by loss of existing housing stock though catastrophes, demolition, or conversion to other uses. In Apopka, however, these losses are so small as to be considered negligible.

Household Size

In order to determine the number of house needed to accommodate the projected population, the population projections derived in the Future Land Use Element are divided by the persons per household. Data presented in **Table 2-19** indicates the projected household sizes in Apopka from 2000 to 2030. The household size is expected to continue the trend based on the 2000 Census, with more than half the households comprised of one to two persons. This household size is influenced by the large elderly and young professional components of the population.

TABLE 2- 19: ESTIMATED AND PROJECTED HOUSEHOLDS BY SIZE, 2000-2030

Household Size	2000		2010		2015		2020		2025		2030	
	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total
1-2 Persons	5,083	53	7,833	53	10,626	53	13,861	53	18,423	53%	23,422	53
3-4 Persons	3,348	35	5,173	35	7,017	35	9,153	35	12,166	35%	15,468	34
5 or more Persons	1,188	12	1,774	12	2,406	12	3,138	12	4,171	12%	5,303	13
Total Households	**9,619**	**100**	**14,779**	**100**	**20,049**	**100**	**26,152**	**100**	**34,761**	**100**	**44,193**	**100**

Source: Shimberg Center for Affordable Housing, 2006; Land Design Innovations (projections).

Income Range

Earlier, the distribution of household income was discussed for the year 2000. An examination of projected income is essential to assessing the future demand for housing. To avoid excessive housing costs, projected housing supply and costs must be in line with the household income. It is important to note that these projections assume that relative percentages of extremely low, very low, middle and upper income households remain stable over time. **Table 2-20** displays the projected range of income distributions from 2000 to 2030 and the total housing units needed to accommodate each income group. Cost-burdened households pay more than 30 percent of income for rent or mortgage costs. In 2000, 25.8 percent of Apopka's total households paid more than 30 percent of income for mortgages and 46.2 percent paid more than 30 percent for rent.

TABLE 2- 20: ESTIMATED AND PROJECTED HOUSEHOLDS BY INCOME RANGE, 2000-2030

Income Ranges	2000		2010		2015		2020		2025		2030	
	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total	# Units	% of Total
Extremely Low <30% of median	726	8	1,182	8	1,604	8	2,092	8	2,781	8	3,535	8
Very Low 30-50% of median	895	8	1,182	8	1,604	8	2,092	8	2,781	8	3,535	8
Low 50-80% of median	1,622	16	2,365	16	3,208	16	4,184	16	5,562	16	7,071	16
Moderate 80-120% of median	2,093	22	3,251	22	4,411	22	5,753	22	7,647	22	9,723	22
Above Moderate >120% of Median	4,283	46	6,798	46	9,223	46	12,030	46	15,990	46	20,329	46
Total Households	**9,619**	**100**	**14,779**	**100**	**20,049**	**100**	**26,152**	**100**	**34,761**	**100**	**44,193**	**100**

Source: Shimberg Center for Affordable Housing, 2006; Land Design Innovations (projections).

Projected Housing Demand by Type

Table 2-21 shows the projection of the number of single family and multi-family residential units. In 2030, a total of 83.89 percent of the total housing projected is assumed to be single-family units.

TABLE 2- 21: NEW HOUSING DEMAND BY TYPE, 2000-2030

	2000	2010	2020	2025	2030
Total Housing Units	10,019	15,666	20,700	43,025	48,498
Total New Housing	**Base Year**	**5,647**	**5,034**	**5,717**	**27,798**
Single-Family					
% of Total	84.55%	84.55	84.55	83.89%	84.55
Total SF Units	8,471	13,246	17,502	36,094	41,005
Number of New Units	**Base Year**	**4774.6**	**4256.2**	**9,159**	**23,503**
Multi-Family					
% of Total	15.45%	15.45	15.45	16.11%	15.45
Total MF Units	1,548	2,420	3,198	6,931	7,493
Number of New Units	**Base Year**	**872**	**778**	**1,758**	**4,295**

Source: U.S. Census, 2000; Shimberg Center for Affordable Housing; Land Design Innovations 2010

Projected Housing by Tenure

Table 2-22 reflects the high demand for owner-occupied units as opposed to rentals, again supporting the theory that the average household is expected to decline, as one to two person households are projected to show the greatest percentage increase of all household types over the next 20 years.

TABLE 2- 22: PROJECTED NEW HOUSING BY TENURE

	2000*	2015	2020	2025	2030
Total Demand	10,019	15,666	20,700	43,025	48,498
Owner-Occupied					
Number of Units	7,247	11,332	14,973	31,121	35,080
Percent of Total	75.80%	75.80%	75.80%	75.80%	75.80%
Renter-Occupied					
Number of Units	2,315	3,620	4,783	9,941	11,206
Percent of Total	24.20%	24.20%	24.20%	24.20%	24.20%

Note: Difference in percentages represents vacant housing.
Note: * 2000 US Census data are actual totals.
Source: Apopka Community Development Department, 2009; Shimberg Center for Affordable Housing, 2000

Projected Housing by Cost

Table 2-23 shows the regional household income distribution through 2030 and the equivalent affordable housing costs.

TABLE 2- 23: HOUSING COST AS PERCENTAGE OF INCOME

	2000	2015	2020	2025	2030
Renter-occupied households paying 50% or more of their income for rent	419	655	874	1,801	2,008
Owner-occupied households paying 50% or more of their income for rent	664	1,038	1,364	2,850	3,234
Total Households	1,083	1,693	2,238	4,651	5,242

Source: Shimberg Center for Affordable Housing, 2000

REPLACEMENT HOUSING

As of 1989, Apopka identified 281 slightly substandard housing units and 1,263 units in need of substantial rehabilitation. Because a significant portion of Apopka's housing stock is aging, replacement housing for substandard housing is an important issue and must be a high priority. Rehabilitation of most of the substandard housing units is feasible and preferable. Where existing housing units are identified as substandard, the City relies on code enforcement to ensure that housing is repaired or rehabilitated to meet codes. New housing units must meet the Florida Building Code and local building inspections are performed to ensure that code provisions are met.

LAND REQUIREMENTS

Table 2-21 shows that the City projects to have a total of 48,498 households by the year 2030, 32,832 of which will be new residents. As demonstrated in the Future Land Use Element, the City of Apopka will have adequate land to accommodate approximately 10,316 households, resulting in a deficit of about 22,516. The flexibility provided by the Mixed-Use Future Land Use Category, coupled with expected future annexations of residential land, will satisfy the future demand for housing.

AFFORDABLE HOUSING STRATEGIES AND PROGRAMS

The State of Florida, Orange County and many private, non-profit agencies and organizations coordinate to provide affordable housing programs and funding assistance to low and moderate income families in the Apopka Area. The agencies and their programs are described in this section

Orange County Housing and Community Development Department

The State of Florida has developed several proactive initiatives to encourage the provision of affordable housing at the local level. One such initiative is the State Housing Initiatives Partnership (SHIP) Program, which was created by the William E. Sadowski Affordable Housing Act of 1992. The Act established a dedicated revenue source to be used by local governments and municipalities to create affordable housing opportunities. Orange County administers the following programs through the SHIP Program:

Down Payment Assistance Program

The purpose of Orange County's Down Payment Assistance program is to provide funds to qualified first time homebuyers for down payment and closing costs associated with purchasing a home. The program provides assistance to qualified very-low, low- and moderate-income persons in Orange County on a first come, first ready basis. The program also requires that potential homebuyers complete a pre-purchase and post-purchase education program.

The buyer must;

- Meet the income requirements. Annual household income cannot exceed 120% of the area median income.
- Provide the greater of $1,000 or 1% of the sales price.
- Complete an approved home buyer's education seminar.
- Secure first mortgage financing.
- Fulfill a one-year residency requirement in the Orlando MSA (Orange, Seminole, Lake, or Osceola Counties)
- Have acceptable credit with a minimum FICO score of 620
- Have the legal right to permanently reside in the United States

The property must:

- Be new or existing with substantial rehabilitation and located in Orange County, outside the city limits of Orlando.
- Not exceed a sales price of $219,000.
- Receive competitive fixed rate financing.

The Home Buyer's Education Program

The Homebuyer's Education Program is a free service and provides education and technical services to assist eligible very-low, low- and moderate-income families in the process and procedure connected with the purchase of an affordable single family fee simple housing unit. Homebuyers Education addresses such topics as choosing a realtor, qualifying for a mortgage, inspecting a house, contracts for sale, home maintenance and credit issues.

All participants requesting down payment assistance must attend a Homeowners Education workshop. This program is an incentive to builders/developers to build affordable single-family housing countywide, excluding properties within the city limits of Orlando. In proportion to the sales price builders are eligible for reimbursement of up to 75% of total impact fees paid providing that the home is sold to income-qualified persons. This strategy is designed to be used in conjunction with the Down Payment Assistance Program.

Owner-Occupied Housing Rehabilitation Program

The Orange County Housing Rehabilitation Program provides deferred payment loans and or grants for the rehabilitation of substandard owner-occupied single-family units as follows:

1. Substantial rehabilitation of unit - maximum of $50,000 in repairs

2. Emergency repairs to unit - maximum of $15,000 in repairs

Deferred loans for rehabilitation of owner-occupied, single family units are provided to very low-income persons under this program. To qualify for the program, the rehabilitation of a unit must address a major code violation. All potential applicants must complete an application for participation in the program and will be awarded funding on a first come first serve basis. Additionally, applicants must meet the income criteria of the program and provide proof of home ownership.

Multi-Family Construction Program

The Multi-Family Construction Program will assist in providing funds for new construction or the renovation of existing multi-family rental developments serving low-income households. The SHIP assistance under this program may be used for site acquisition, site development, infrastructure improvements, renovations or any other locally approved activity. The County's financial assistance will be secured with a mortgage and note that will require repayment at a minimal interest rate of one and a half percent (1.5%). All assisted developments must commit to lower rents for a period of thirty (30)or more years and will comply with the low income set-aside requirements of the SHIP Program. Proposed new construction for Multi-Family Developments must be certified as affordable.

Non-Profit Housing Providers

There are several non-profit housing corporations which operate using subsidized and other available funds in conjunction with alternative development methods, where available, in an attempt to reduce affordable housing needs.

Homes in Partnership, Inc. (HIP)

Established in 1975, HIP is a community-based non-profit 501(c)(3) organization and a certified Community Housing Department Organization (CHDO) rural housing provider. HIP provides low-income families with equal opportunity access to quality built, energy efficient, affordable housing, and seeks to improve the economic conditions in the communities it serves.

The Corporation purchases land, develops it, and brings together qualified families who wish to build their homes by participating in a self-help housing program. During the past 27 years, HIP has built over 3,600 single-family houses, for very-low and low-income families residing in underserved rural areas of Central Florida.

Housing and Neighborhood Development Services (HANDS)

HANDS of Central Florida, Inc., assists residents in Central Florida in buying an affordable home or renting an apartment. As well, HANDS provides comprehensive private housing counseling sessions and the mass homeownership education necessary to receive down payment assistance from Central Florida cities and counties. The organization also helps families avoid mortgage foreclosure and predatory loans.

HANDS operates an Affordable Housing Resource Center through their website, providing information and counseling session scheduling free of cost to very-low, low- and moderate-income persons in search of affordable rentals and homes. The organization serves over 4,000 Central Florida residents per year.

Florida Community Capital Corporation (FCC)

FCC is a wholly owned subsidiary of Florida Community Partners. Incorporated in 1999, FCC is a Florida 501(c)(3) corporation which was created to specifically encourage the flow of capital from a variety of sources. FCC is a certified Community Development Financial Institution (CDFI); a Community Housing Development Organization (CHDO); and a Community Development Corporation (CDC). These designations have long-term value to the organization, since they enhance the organization's ability to raise capital for the furtherance of its mission.

FCC is currently targeting its activities to areas that are severely distressed in terms of poverty, unemployment and household income. Poverty rates range from 25%-53% and all areas have a concentration of low-income households and distressed housing conditions. Apopka is one of the communities designated as eligible for funding under this program.

Public/Private Partnership

Another means for providing affordable housing is through public/private partnerships. These partnerships have evolved as local governments have seen the need to expand their involvement in the provision affordable housing while facing financial limitations. These partnerships have encompassed all aspects in the provision of low income housing, from development to finance to management.

The Orange County Housing Finance Authority (OCHFA) is a public benefit, quasi-governmental organization whose mission is to promote and provide financial resources for affordable area housing for Central Florida families and individuals. This is achieved by continually seeking out innovative financing products and funding sources and partners to maximize their efforts.

OCHFA accomplishes its mission by issuing mortgage revenue bonds that lower first-time homebuyers' cost of purchasing, and the developers' costs of acquiring, constructing and rehabilitating housing. OCHFA's work is done in partnership with developers, lenders, investors, and nonprofit organizations that use their financing to serve low- and moderate-income Central Florida families. The Authority uses government and private funds to invest in financially sound, well-designed projects that will benefit communities for many years to come.

In addition to issuing bonds on behalf of Orange County, the Authority, through interlocal agreements, issues tax-exempt single-family housing revenue bonds on behalf of Orange, Lake, Seminole and Osceola counties. The Authority also issues Tax-Exempt Multi-Family Housing Revenue Bonds on behalf of Seminole and Lake Counties. Nonprofit developers organized under IRS Code 501(c)(3) may partner in several ways with the Authority for production of affordable homeownership or rental housing.

Mobile Homes

Mobile homes have long suffered from a negative perception that mobile home developments lower the value of surrounding property values. Mobile homes are, however, one of the most inexpensive housing types available. Their prices average 40% less than

comparable traditional housing. Lenders are now financing mobile homes as real property instead of personal property as they had in the past. The City of Apopka currently allows mobile homes within agricultural, mobile home park (MHP) and mobile home subdivision (MHS) zoning classifications. A review of existing mobile home inventories indicates that all mobile homes are located in medium-low density residential land use classifications.

Multi Family

Although home ownership is commonly held as a positive goal, it is important to remember that very low income households will probably never be able to afford a house and its related maintenance costs. Housing opportunities for these individuals must be provided. Certain zoning regulations have decreased the appropriateness of multifamily housing in the City. This includes minimum living area requirements of 750 square feet.

As mentioned previously, subsidized funding sources have provided nearly all the multifamily low and moderate income housing available in the City. Probably the most successful of these programs is the mortgage revenue bond financing which requires a maximum of 20% of the total housing units to be affordable to households earning less than 50% of the area-wide median income, or 40% of the units for households at or below 60% of the area-wide median income. This type of development allows affordable multifamily housing for low moderate income households to be integrated with moderate and upper income multi-family housing. Once the bonds have been paid, the complex can revert to regular rent or other programs.

Family Oriented Housing

One means of providing family-oriented housing is by allowing a small apartment to be a portion of a structure, in the backyard or as a portion of a single family home. This accessory apartment is often called a "Mother-in-Law" or "Granny" apartment. It has an independent kitchen and bath facility but is clearly subordinate to the main unit which makes it acceptable in an otherwise single family neighborhood. This is distinguished from a duplex.

These apartments are commonly found in older neighborhoods in the region which have larger houses or detached garages. The apartment allows use of the excess space. It also provides a viable and usually pleasant alternative to apartment houses or complexes if the environment of the single family neighborhoods is maintained through the assurance of adequate infrastructure such as parking. The City of Apopka currently does not allow this type of use.

Special Housing Requirements

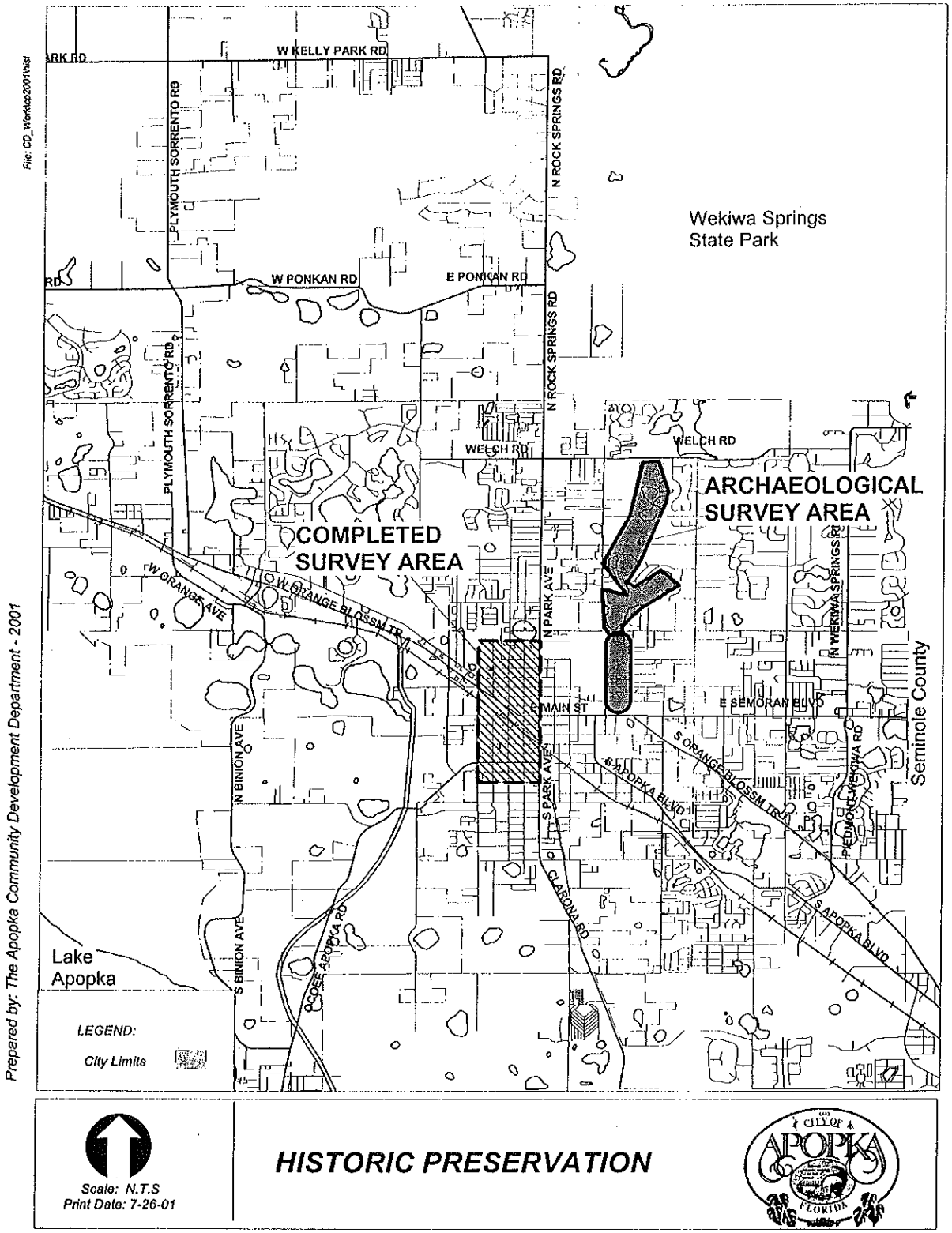
Special housing needs identified earlier in this document, including affordable housing for group home facilities and other special care facilities, particularly for the elderly, will be of special concern in the future. The state's initiative to de-institutionalize care for those special needs will not change during the planning period. As the Apopka population continues to grow, the need for these facilities will also grow. The City's Land Development Code must be able to accommodate the demand consistent with state requirements. Group housing facilities are presently allowed in all zoning categories by special exception in the City. The City will follow the locational criteria outlined in Chapter 419, F.S., which addresses concentration of this type of facilities.

Farmworker Housing

The generally accepted definition of a seasonal farm worker is an “individual whose principal employment (51 percent) is in agriculture on a seasonal basis, who has been employed within the last 24 months.” A migrant farm worker is defined the same but “establishes for the purposes of such employment a temporary abode” (U.S. Code, Public Health Services Act, “Migrant Health”). Migrant non-farm workers are usually family members, such as spouses or offspring, who live with the farm workers but do not engage in fieldwork.

Special housing needs in Florida particularly pertain to affordability for farmworker housing. With the state buyout and closing of the Lake Apopka muck farms, demand for farmworker housing has decreased dramatically in the Apopka area. There are approximately 350 acres of active citrus farm land, while the remaining existing agricultural land is made up primarily of nurseries of various sizes. Nurseries rarely employ large numbers of workers and many times do not employ more than family members. Any demand for farmworker housing is met by the existing units in the unincorporated area around Apopka and lower rent apartments such as the Maine Avenue Apartments and Villas, Orange North Apartments and Villas, Willow Lake Apartments, and Palm Key Apartments.

MAP 2- 1: HISTORIC PRESERVATION STUDY AREA



HOUSING ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL:

To provide safe, decent, sanitary housing at an affordable cost to all present and future residents of Apopka.

Objective 1

The City of Apopka shall designate in the Future Land Use Element adequate amounts of land to accommodate a total of 23,503 single family units (including mobile homes) and 4,295 multifamily units between 2000 and 2030.

Policy 1.1

The City of Apopka shall, at least every three years, analyze and amend, as may be necessary, its land development regulations to eliminate barriers to the provision of adequate housing and to establish the framework and site standards for infill and new development of a variety of housing types that can accommodate a wide range of incomes.

Policy 1.2

The City of Apopka shall maintain site location for institutional housing criteria in the Apopka Land Development Code and amend when necessary, pursuant to Chapter 419 F.S.

Policy 1.3

The City shall consider the implementation of requirements and/or incentives to encourage the participation of the private sector in the provision of affordable housing, including housing density bonuses and inclusionary housing requirements.

Policy 1.4

The City of Apopka shall review development proposals to ensure:

(1) adequate secondary or emergency access;

(2) reduction of through traffic in residential areas or limit the number of access points to a residential neighborhood;

(3) limit or buffer higher intensity uses and particularly high car volume users in developments adjacent to residential areas;

(4) ensure safe and adequate pedestrian access, multimodal access, etc.

Objective 2

The City of Apopka shall encourage and assist the private sector in the provision of safe, affordable housing for special needs populations, including work force income and low and moderate income households.

Policy 2.1

The City of Apopka shall coordinate with private developers and non-profit community development foundations to ensure that all means of meeting the need for 3,345 affordable housing units for very-low, low and moderate income households are explored and implemented by the year 2030.

Policy 2.2

The City of Apopka shall coordinate with housing providers to pursue available federal, state, county, and private non-profit funding sources, as well as facilitate the development and permitting processes for private organizations such as Habitat for Humanity and Homes in Partnership that provide affordable home ownership.

Policy 2.3

Concentrations of affordable housing shall not be targeted in any one geographic area. The City shall encourage the development of higher density, mixed-income residential uses in areas that are located within close proximity of transit, rail or other modes of transportation besides automobiles.

Policy 2.4

The City of Apopka shall coordinate and partner, when feasible, with the Orange County Housing Finance Authority and the Florida Housing Finance Authority to promote the development of affordable and workforce housing in Apopka.

Policy 2.5

The City of Apopka shall coordinate with the Orange County Housing and Community Development Division in facilitating the

programs of the State Housing Initiative Partnership (SHIP) Program, including down payment assistance, rehabilitation programs and the multi-family construction program for affordable and workforce housing.

Policy 2.6

The City of Apopka shall review City owned property for use as affordable housing sites and placement on the Florida Affordable Housing Inventory of Publicly Owned Lands at least every three years.

Policy 2.7

The City of Apopka shall permit granny or guest cottages in low density residential land use classifications when infrastructure needs, including parking, are available, and neighborhood character will not be adversely impacted.

Policy 2.8

The City of Apopka shall review its Land Development Code and the permitting process annually to ensure the regulations do not constitute exclusionary zoning practices.

Policy 2.9

The Apopka Land Development Code shall require that sites for affordable housing are located in close proximity to a collector roadway or higher and provide access to the following facilities, services and/or activity centers through an interconnected system of sidewalks, bicycle paths/lanes and transit stops and amenities:

- Employment centers;
- Shopping centers that include stores offering household goods and services needed on a frequent and recurring basis; and
- Public parks, recreation areas, and/or open space.

Objective 3

The useful life of the existing housing stock, particularly affordable housing, shall be conserved through effective implementation of regulatory action programs directed toward preserving neighborhood quality, including conservation of natural resources, maintenance of community facilities and code enforcement activities.

Policy 3.1

The City of Apopka shall continue to utilize code enforcement requirements as a means to ensure the maintenance of standard housing and to achieve corrective action to eliminate substandard housing, consistent with the Florida Statutes.

Policy 3.2

The City of Apopka shall continue regular code enforcement activities of housing in neighborhoods where substandard housing is most prevalent.

Policy 3.3

The City of Apopka shall encourage the rehabilitation of existing housing and seek or assist in the pursuit of federal and state funds to rehabilitate or demolish housing for which rehabilitation is not economically feasible.

Policy 3.4

The City shall minimize potential blighting influences within residential areas by promoting the use of best management principles and practices of land use planning, urban design and landscaping in development and site plan review.

Policy 3.5

The City of Apopka shall continue its fire training program where in dilapidated houses appropriate for fire training exercises are burned by the City Fire Department.

Policy 3.6

The City of Apopka shall utilize the minimum housing codes included in the Florida Unified Building Code, and any local amendments thereto, with enforcement provided by the building department.

Policy 3.7

The City of Apopka shall complete a cost assessment study for a re-inspection program of substandard rental properties by July 2011.

Policy 3.8

The City of Apopka shall continue to actively participate in

the Small Cities CDBG Program.

Objective 4

Mobile homes shall be allowed in any low-medium density residential land use classification, pursuant to Section 320.8285 and 320.823 F.S.

Policy 4.1

The City of Apopka shall ensure that supporting infrastructure is provided to new mobile home parks and subdivision as well as existing mobile homes if deemed necessary.

Policy 4.2

The City of Apopka shall review and amend its LDC as needed to provide for mobile home parks and subdivision development modifications.

Objective 5

The City of Apopka shall support nominations to the National Register of Historic Places of all historic housing, which is deemed locally or nationally significant by the Apopka Historical Properties Survey and/or identified by the Florida Master Site File.

Policy 5.1

The City of Apopka shall assist owners of historically significant housing in applying for and utilizing state and federal assistance programs.

Policy 5.2

The City of Apopka shall utilize the Apopka Historical Society and the Museum of the Apopkans as resources for historic preservation issues.

Policy 5.3

The City of Apopka shall encourage private investment in historically significant housing by providing information, technical assistance and financial incentives.

Objective 6

The City of Apopka shall encourage and help foster resident

commitment to neighborhoods experiencing a high level of crime, negative quality of life situations or other signs of neighborhood instability.

Policy 6.1

By December 2015, the City shall establish a program for the development of neighborhood improvement plans.

Policy 6.2

Resident and/or property owner participation shall be required for city intervention unless critical circumstances dictate otherwise.

Policy 6.3

Neighborhood Improvement Plans should address code enforcement, landscape, buffering, elimination of some through traffic, drainage improvements, and funding mechanisms, etc.

Policy 6.4

Neighborhood improvement plans shall be for specific geographical areas, which can be considered a “neighborhood,” and shall include the open space and recreation facilities, the crime statistics, the types of infrastructure available, information on traffic around and through the neighborhood and population and housing estimates for the neighborhood.

Policy 6.5

Methods of funding shall be investigated, including CDBG programs, front foot or acre assessment, , specialtaxing districts,, federal, state and local subsidy programs and so forth.

Objective 7

The City of Apopka shall work with housing providers to identify methods available for replacement of dilapidated housing structures and shall generate a report enumerating these options by June 2003.

Policy 7.1

Areas with high concentrations of dilapidated structures will be removed, in-filled, or rehabilitated in accordance with neighborhood plans.

Policy 7.2

Funding mechanisms will be publicized targeted including state and federal grants, density transfer incentives and non-profit organization involvement.

Objective 8

The City of Apopka of Apopka shall allow group homes and foster care facilities in any residential land use classification, in accordance with the LDC.

Policy 8.1

The City shall utilize the locational criteria for siting of community residential facilities pursuant to Chapter 419, F.S.

Policy 8.2

The City shall review development proposals for community residential facilities to ensure that adequate infrastructure, including parking, is available.

Objective 9

The City of Apopka shall provide relocation housing pursuant to Sections 337.25, 421.55 and 723.083, F.S. for housing removed as a result of City action.

Policy 9.1

The placement of public facilities shall be planned so as to minimize the demolition of housing and related relocation of residents.

Policy 9.2

When housing must be removed as a result of City actions, the City shall assess the feasibility of moving that housing and rehabilitating it to standard, affordable conditions to preserve it as part of the City’s housing stock.

City of Apopka
Comprehensive Plan 2030

Transportation Element

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TRANSPORTATION ELEMENT

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TRANSPORTATION ELEMENT

INTRODUCTION

Mobility is a key element in the well-being of a City, thus the transportation system is the framework upon which the city is built. However, the transportation system must be fully coordinated with other elements of the comprehensive plan, especially the Future Land Use Element, to complement the collective goals, objectives, and policies of all the other elements and the City's vision.

One of the most vital elements of any community, urban or rural, is its transportation system. Transportation impacts virtually every aspect of our lives. An area's transportation network, including its streets, highways, public transit, airports, and railroads, is essential to the orderly functioning of an area by providing mobility for people and goods and access to land.

PURPOSE AND SCOPE

This Transportation Element addresses existing and anticipated transportation conditions in the Apopka area. Substantial growth has occurred in the Apopka area, both inside and outside of the current City limits. Therefore, this element addresses transportation needs within the existing City limits as well as outside of the City limits in an area of potential future City annexations.

RELATIONSHIP TO OTHER ELEMENTS

It is important to coordinate land use and transportation planning. Often, in response to demands for additional capacity, new roadways are built that divide or destroy established neighborhoods. Many times, a two-lane roadway is widened to increase capacity, much to the detriment of surrounding neighborhoods. The existence of a roadway facility often influences the location of certain land uses. However, it is not all one sided. Effective transportation planning can be accomplished if it is based on future land use projections, and effective land use planning can be accomplished if it is coordinated with transportation planning efforts.

EXISTING CONDITIONS ANALYSIS

The City of Apopka is located in northwest Orange County. As in most urbanized areas, the City's transportation system consists of an integrated network of state, Orlando Orange County Expressway Authority (OOCEA), Orange County and local roadways. State facilities include U.S. Highway (US) 441(also referred to as SR 500), and State Road (SR) 436. County roads include County Road (CR) 424, CR 435, and CR 437A, as well as a number of other collector level roads. City facilities, which comprise much of the City's roadway system, include a number of major and minor collector roads as well as all local residential roads. The City is also served by the Central Florida Railroad. **Map 3-1** depicts the general location of the Apopka area and some of the roadways.

This section of the element presents an analysis of existing transportation conditions for the City of Apopka. As a first step in the analysis, roadways within and outside the City limits are functionally and administratively classified. This section also contains a discussion of existing transportation facilities other than roadways.

ROADWAY CLASSIFICATION

A roadway system can be classified in two ways, functionally and administratively. The functional classification defines a facility's physical and operational characteristics. The administrative classification refers to actual governmental responsibility. As part of the existing conditions analysis, the functional and administrative classification of roads in the Apopka area was determined.

Administrative

The administrative classification of roads in the Apopka area is limited to State, OOCEA, County, and City responsibilities.

- State facilities: SR 436 and US 441
- OOCEA facilities: SR 429, SR 414 John Land Expressway (Apopka Bypass)

  Orange County facilities: CR 424 (Apopka Boulevard), CR 435 (Park Avenue/Rock Springs Road), CR 437A (Ocoee-Apopka Road), Bradshaw Road, Binion Road, Boy Scout Road, Hawthorne Avenue, Keene Road, Lakeville Road, Piedmont-

Wekiva Springs Road, Plymouth-Sorrento Road, Ponkan Road, Sheeler Road, Sandpiper Road, Thompson Road, Votaw Road and Welch Road

- City roadways include all local streets and several collector roads.

Functional

The function of a roadway is two-fold: to provide access to land uses adjacent to the roadway facility and to provide mobility through an area. As more access points are added to a roadway, the ability of the facility to provide mobility to through-traffic decreases. Roadway facilities designed for mobility generally have higher speeds and restrictive access controls as well as more capacity than those designed for land access. Roads are traditionally classified into six general categories, which are listed below.

1. Limited Access Roadways (Interstates, Expressways, Freeways) - Devoted primarily to the movement of trips over long distances. Access from adjoining parcels is prohibited and access is limited to exit and entrance ramps located at major roadways. This roadway is generally a multi-lane divided facility designed to serve large volumes of high-speed traffic.

2. Major Arterial - Designed for the movement of large volumes of traffic over a relatively long distance. Serves major movements of traffic entering or leaving an urban area, as well as a majority of trips not destined or originating in an urban area. Access to adjacent land is not prohibited; however, mobility is the primary function of this facility, thus access should be strictly controlled.

3. Minor Arterial - Similar to a major arterial but designed to serve moderate volumes of traffic as well as provide connections to the major arterial system. Has a lower degree of travel mobility than a major arterial and allows more land access.

4. Major Collector - Serves internal traffic movement and connects localized area to the arterial system. Collectors serve short to moderate length trips. Land access is a function of this facility, provided it does not inhibit local traffic movement.

5. Minor Collector - Similar to that of a major collector except that it serves a more limited geographic area.

6. Local - Provides access to adjacent land uses. Average speeds and volumes are low and trips are usually short in length. Local streets are limited to servicing small local subareas.

In determining appropriate functional classifications for the Apopka area, three sources were reviewed. A functional classification system was then developed that is, for the most part, consistent with these three sources.

Map 3-2 depicts the functional and administrative classification of Apopka's major roadways. The classification of the two state facilities as major arterials (US 441 and SR 436) is consistent with FDOT and Orange County classification of principal arterials. All county facilities that have been designated by the FDOT as either "urban extension" or "intra urban" collectors have been classified as major collectors for purposes of this element.

The mileage of classified roads within the City of Apopka, as well as a percentage breakdown, is provided in **Table 3-1**. It is important to note that this table does not include mileage for local roads, nor does it include mileage for roads outside of the City limits. A community's local roads typically consist of 80 percent of the road system, but generally carry only 20 percent of the vehicle trips.

TABLE 3-1: ROADWAY FUNCTIONAL AND ADMINISTRATIVE CLASSIFICATION (CITY LIMITS ONLY)

Road	Miles	Percent
Major Arterial State Highway	16.6	25.3
Minor Arterial County	16.5	25.2
Major and Minor Collector		
County	9.6	14.7
County/City	3.5	5.3
City	19.3	29.5
Total	65.5	100.0

Source: City of Apopka Engineering, 2008

EXISTING TRAFFIC CHARACTERISTICS

In order to conduct the existing conditions analysis for Apopka's roadways, 2008 daily traffic volumes were collected from the FDOT, Orange County, Luke Transportation Engineering Consultants, and recently submitted traffic impact studies.

Table 3-2 lists, for all analyzed roadways, the daily traffic volume, the a.m. and p.m. peak-hour traffic volumes, the "K" factor (the percentage of daily traffic that occurs in the peak hour) and the "D" factor (the directional distribution).

In a typical urban area, p.m. peak-hour traffic volumes are generally higher than those experienced in the a.m. peak hour, with seven to ten percent of the daily traffic occurring in the p.m. peak hour. A review of the traffic characteristics noted in **Table 3-2** indicates that this is also the case for Apopka area roads. The p.m., peak-hour directional splits noted in this table typically range from 55 to 65 percent. Traffic volumes on major arterials in the area generally range from 25,000 to 45,000 vehicles per day (vpd). Traffic volumes on major collectors generally range from 3,000 to 15,000 vpd, and on minor collectors the daily volumes generally range from 500 to 5,000 vpd.

TABLE 3-2: EXISTING ROADWAY TRAFFIC CHARACTERISTICS

Class	Road Segment	Exist Lanes	Lgth.	Year	Source	Daily Volume	AM Peak Volume	"K" Factor	"D" Factor	PM Peak Volume	"K" Factor	"D" Factor
Major Arterials												
	US 441											
	Hermit Smith to Ply. Sorr Rd	4 LD	0.56	2008	LTEC	32,843	1,689	8.05%	63.90%	1,642	8.54%	58.60%
	Ply Sorr Rd to Lakeview Rd	4 LD	0.63	2008	LTEC	38,023	1,947	7.89%	64.90%	2,911	7.86%	58.60%
	Lakeview Rd to Errol Pkwy	4 LD	1.14	2008	LTEC	39,638	2,040	8.05%	64.00%	2,518	7.88%	57.40%
	Errol Pkwy to SR 429	4 LD	0.91	2008	LTEC	47,120	2,527	8.06%	66.50%	2,870	7.96%	61.70%
	SR 429 to Bradshaw Rd	4 LD	0.91	2008	LTEC	42,337	1,630	7.48%	51.50%	2,870	8.08%	51.20%
	Bradshaw Rd to Hawthorne Ave	5 LD	0.34	2008	LTEC	40,548	1,727	7.39%	57.60%	3,046	7.73%	52.50%
	Hawthorne Ave to Central Ave	5 LD	0.45	2008	LTEC	40,860	1,472	7.06%	51.00%	2,878	7.76%	53.50%
	Central Ave to Park Ave	5 LD	0.11	2008	FDOT	38,847	1,372	7.03%	50.20%	2,930	7.35%	52.10%
	Park Ave to Alabama St	5 LD	0.38	2008	FDOT	45,765	1,777	6.77%	57.40%	3,221	7.30%	52.30%
	Alabama St to SR 436	4 LD	0.38	2008	FDOT	50,045	2,009	6.93%	57.90%	2,017	7.50%	53.80%
	SR 436 to Sheeler Rd	4 LD	0.34	2008	LTEC	27,473	1,383	7.62%	66.10%	2,356	7.37%	58.60%
	Sheeler Rd to Pied-Wek Rd	4 LD	0.68	2008	LTEC	33,283	1,662	7.45%	67.00%	2,440	8.08%	63.50%
	Pied-Wek Rd to Sem Co Line	4 LD	0.88	2008	LTEC	39,406	2,183	8.04%	68.90%	3,327	8.44%	66.10%
	SR 436											
	US 441 to Thompson Rd	4 LD	0.47	2008	LTEC	31,427	1,296	7.20%	57.30%	1,330	8.36%	50.60%
	Thompson Rd to Pied-Wek Rd	4 LD	1.31	2008	LTEC	37,088	1,637	7.23%	61.00%	1,611	8.35%	52.00%
	Pied-Wek Rd to Sem Co Line	4 LD	0.5	2008	LTEC	53,464	2,434	7.42%	61.40%	2,514	8.59%	54.80%
Minor Arterials												
	CR 424 (Alabama St/ Apopka Blvd)											
	US 441 to 8th St	2L	0.37	2008	LTEC	4,900	220	8.18%	54.90%	554	11.31%	62.30%
	8th St to Sheeler Rd	2L	0.8	2008	LTEC	5,429	251	8.64%	53.50%	594	10.94%	66.70%
	Sheeler Rd to Lakeville Rd	2L	1.14	2008	LTEC	9,391	569	8.99%	67.40%	958	10.20%	67.80%

Class	Road Segment	Exist Lanes	Lgth.	Year	Source	Daily Volume	AM Peak Volume	"K" Factor	"D" Factor	PM Peak Volume	"K" Factor	"D" Factor
	Lakeville Rd to Pied-Wek Rd	2L	1.56	2008	LTEC	12,331	663	8.56%	62.80%	1,211	9.82%	67.20%
	CR 435 (Rock Springs Road)											
	Kelly Park Rd to Ponkan Rd	2L	2.05	2008	Orange	7,866	482	8.38%	73.10%	393	9.03%	55.40%
	Ponkan Rd to Welch Rd	2L	1.08	2008	Orange	21,817	1,126	7.98%	64.70%	1,201	8.98%	61.30%
	Welch Rd to Votaw Rd	5 LD	1.65	2008	LTEC	22,211	1,111	7.28%	68.70%	1,365	9.43%	65.20%
	Votaw Rd to Orange St	5 LD	0.63	2008	LTEC	22,388	912	6.94%	58.70%	1,155	8.52%	60.50%
	Orange St to US 441	5 LD	0.34	2008	Orange	24,129	1,384	7.93%	72.30%	1,069	7.90%	56.10%
	US 441 to M. Gladden Blvd	2L	0.4	2008	LTEC	12,203	527	7.92%	54.50%	570	8.45%	55.30%
	M.Gladden Blvd to Cleveland St	2L	0.94	2008	Orange	8,582	288	6.23%	53.80%	412	7.80%	61.60%
	Cleveland St to Keene Rd	2L	1.14	2008	LTEC	7,891	303	6.91%	55.60%	392	8.25%	60.20%
	Keene Rd to McCormick Rd	2L	1.63	2008	LTEC	10,444	398	7.26%	52.50%	487	8.52%	54.70%
	CR 437A (Ocoee-Apopka Rd/Central Ave)											
	Keene Rd to Boy Scout Rd	2L	1.48	2008	LTEC	5,071	282	10.00%	55.60%	322	10.49%	60.50%
	Boy Scout Rd to Bradshaw Rd	2L	0.91	2008	LTEC	4,999	283	10.42%	54.30%	303	10.16%	59.60%
	Bradshaw Rd to Central Ave	2L	0.61	2008	Orange	3,983	176	8.76%	50.40%	244	9.44%	64.90%
	M.Gladden Blvd to US 441	2L	0.45	2008	LTEC	3,586	132	6.47%	56.90%	197	9.98%	55.00%
	Piedmont-Wekiva Road											
	Welch Rd to Votaw Rd	2L	1.65	2008	LTEC	16,928	1,032	8.18%	74.50%	1,058	9.33%	67.00%
	Votaw Rd to SR 436	5 LD	0.74	2008	Orange	24,174	1,406	7.93%	73.30%	1,530	9.29%	68.10%
	SR 436 to Pied Lakes Blvd	5 LD	0.87	2008	LTEC	26,553	1,224	7.50%	61.40%	1,500	9.17%	61.60%
	Pied Lakes Blvd to US 441	5 LD	0.51	2008	LTEC	25,503	1,239	7.56%	64.30%	1,395	8.96%	61.00%
	US 441 to CR 424	2L	0.51	2008	Orange	19,948	725	7.25%	50.10%	1,006	8.28%	60.90%
	Plymouth-Sorrento Road											
	Ponkan Rd to US 441	2L	2.5	2008	LTEC	9,241	592	9.41%	68.00%	344	7.42%	50.10%
	Sheeler Road											
	SR 436 to US 441	2L	0.17	2008	LTEC	11,379	370	6.07%	53.50%	722	11.16%	56.90%

Class	Road Segment	Exist Lanes	Lgth.	Year	Source	Daily Volume	AM Peak Volume	"K" Factor	"D" Factor	PM Peak Volume	"K" Factor	"D" Factor
	US 441 to Apopka Blvd	2L	0.63	2008	LTEC	9,152	404	6.59%	67.00%	532	10.31%	56.40%
	Apopka Blvd to Keene Rd	2L	1.48	2008	LTEC	9,377	503	10.10%	53.10%	552	10.10%	58.30%
	Welch Road											
	Vick Rd to Rock Spgs Rd	2L	1.04	2008	LTEC	12,091	612	9.68%	52.30%	628	9.68%	53.70%
	Rock Spgs Rd to Thompson Rd	2L	1.36	2008	LTEC	16,445	726	8.60%	51.30%	743	8.80%	51.30%
	Thompson Rd to Pied-Wek Rd	2L	1.31	2008	Orange	15,550	1,034	9.01%	73.80%	921	9.27%	63.90%
County Collectors												
	Binion Road											
	Apk-Ocoee Rd to Boy Scout Rd	2L	2.75	2008	LTEC	3,713	245	9.86%	66.90%	255	11.02%	62.30%
	Boy Scout Rd to Boy Scout Blvd	2L	1.8	2008	LTEC	4,961	379	11.03%	69.30%	339	10.38%	65.80%
	Boy Scout Blvd to US 441	2L	0.81	2008	LTEC	3,929	340	11.68%	74.10%	250	10.28%	61.90%
	Boy Scout Road											
	Binion Rd to Ocoee-Apk Rd	2L	1.5	2008	LTEC	870	56	7.59%	84.80%	40	7.59%	60.60%
	Lakeville Road											
	Apopka Blvd to Wildwood St	2L	0.49	2008	LTEC	5,636	357	12.22%	51.80%	339	9.44%	63.70%
	Ponkan Road											
	Ply-Sorr Rd to Rock Spgs Rd	2L	3.2	2008	LTEC	4,277	252	9.52%	61.90%	247	10.12%	57.00%
	Thompson Road											
	Welch Rd to Votaw Rd	2L	1.59	2008	Orange	9,235	483	7.30%	71.70%	546	9.15%	64.60%
	Votaw Rd to SR 436	2L	0.76	2008	Orange	9,498	599	8.02%	78.60%	489	8.42%	61.10%
	Votaw Road											
	Park Ave to Thompson Rd	2L	1.31	2008	LTEC	7,594	291	7.64%	50.20%	528	10.81%	64.30%
	Thompson Rd to Pied-Wek Rd	2L	1.45	2008	LTEC	8,024	334	7.68%	54.20%	448	9.66%	57.80%
County - City Collector												

Class	Road Segment	Exist Lanes	Lgth.	Year	Source	Daily Volume	AM Peak Volume	"K" Factor	"D" Factor	PM Peak Volume	"K" Factor	"D" Factor
	Bradshaw Road											
	US 441 to Ocoee-Apk Rd	2L	1.04	2008	LTEC	2,626	169	10.51%	61.20%	162	9.67%	63.80%
	Hawthorne Avenue											
	US 441 to Ocoee-Apk Rd	2L	1.14	2008	LTEC	1,819	86	7.20%	65.60%	129	10.39%	68.30%
	Apk-Ocoee Rd to 13 St	2L	0.37	2008	LTEC	1,337	58	6.36%	68.20%	71	9.65%	55.00%
	Keene Road											
	Ocoee-Apopka Rd to Clarcona Rd	2L	0.45	2008	LTEC	2,762	139	9.74%	51.70%	135	9.78%	50.00%
	Sandpiper Road											
	Rock Spg Rd to Ustler Rd	2L	0.51	2008	LTEC	4,210	227	8.05%	67.00%	325	11.31%	68.30%
	Ustler Rd to Thompson Rd	2L	0.78	2008	LTEC	5,115	315	8.27%	74.50%	361	10.38%	68.00%
	Christiana Avenue											
	Monroe Ave to Votaw Rd	2L	0.63	2008	LTEC	2,285	224	12.78%	76.70%	229	12.78%	78.40%
	Cleveland Street											
	Park Ave to Sheeler Rd	2L	0.81	2008	LTEC	2,003	98	8.09%	60.50%	98	9.29%	52.70%
	Errol Parkway											
	Lake Francis Dr to Old Dixie Hwy	2L	1.48	2008	LTEC	7,166	465	8.09%	80.20%	429	8.90%	67.20%
	Jason Dwelley Parkway											
	Ponkan Rd to Kelly Park Rd	2L	0.81	2008	LTEC	1,277	96	11.12%	67.60%	99	12.69%	61.10%
	Lake Avenue											
	Martin St to Orange St	2L	0.94	2008	LTEC	1,746	124	10.25%	69.30%	119	10.82%	63.00%
	Orange St to US 441	2L	0.25	2008	LTEC	1,515	90	8.58%	69.20%	92	10.30%	59.00%
	Lake Francis Drive											
	Schopke Lester Rd to Errol Pkwy	2L	0.71	2008	LTEC	1,740	84	7.87%	61.30%	103	10.17%	58.20%
	Errol Pkwy to Vick Rd	2L	0.63	2008	LTEC	3,410	187	7.42%	73.90%	198	9.38%	61.90%
	Lester Road											
	Vick Rd to Lester Schopke	2L	0.37	2008	LTEC	2,823	181	8.71%	73.60%	161	9.17%	62.20%

Class	Road Segment	Exist Lanes	Lgth.	Year	Source	Daily Volume	AM Peak Volume	"K" Factor	"D" Factor	PM Peak Volume	"K" Factor	"D" Factor
	Rd											
	Lester Schopke Rd to Ply Sorr Rd	2L	1.36	2008	LTEC	1,782	95	9.88%	54.00%	87	9.43%	51.80%
	Maine Avenue											
	Martin St to Old Dixie Hwy	2L	0.77	2008	LTEC	2,266	123	10.33%	52.60%	219	14.61%	66.20%
	Marden Road											
	Keene Rd to Ocoee-Apopka Rd	2L	0.77	2008	LTEC	923	57	10.51%	58.80%	65	9.75%	72.20%
	Monroe Avenue											
	Park Ave to Alabama St	2L	0.44	2008	LTEC	5,137	425	10.03%	82.50%	491	12.91%	74.10%
	Alabama St to Sheeler Rd	2L	0.59	2008	LTEC	6,091	412	8.68%	77.90%	494	12.12%	66.90%
	Old Dixie Highway / Orange Avenue											
	Lakeview Rd to Errol Pkwy	2L	0.37	2008	LTEC	4,040	301	9.93%	75.10%	242	10.00%	59.90%
	Errol Pkwy to Bradshaw Rd	2L	1.36	2008	LTEC	8,178	649	11.01%	72.10%	473	10.01%	57.80%
	Bradshaw Rd to Hawthorne Ave	2L	0.3	2008	LTEC	6,271	492	10.14%	77.40%	381	10.08%	60.30%
	Schopke Lester Road											
	Lake Francis Dr to Old Dixie Hwy	2L	1.12	2008	LTEC	2,164	186	10.03%	85.70%	138	9.57%	66.70%
	Vick Road											
	Old Dixie Hwy to Martin St	2L	0.37	2008	LTEC	9,022	591	9.39%	69.80%	573	9.69%	65.60%
	Martin St to Welch Rd	2L	1.36	2008	LTEC	9,777	682	9.36%	74.50%	609	9.32%	66.80%
	Welch Rd to Lester Rd	2L	0.3	2008	LTEC	11,329	780	8.51%	80.90%	720	9.72%	65.40%
	Lester Rd to Ponkan Rd	2L	0.6	2008	LTEC	3,649	219	9.92%	60.50%	235	10.58%	60.90%

Sources: LTEC - Luke Transportation Engineering Consultants; Orange County Engineering; Florida Department of Transportation; City of Apopka
Notes: K Factor = Peak Volume / Daily Volume; D Factor = Directional Distribution

Capacity/Level of Service

To adequately evaluate existing transportation conditions and plan for future improvements, a roadway capacity must be determined for each facility that is to be analyzed. The capacity of a roadway is defined as the maximum number of vehicles that have a reasonable expectation of passing over or through a given roadway or intersection under prevailing roadway and traffic conditions. For the purpose of this study, daily capacities were obtained from methodology outlined in FDOT's "Level of Service Handbook".

Level of service (LOS) standards are qualitative measures that describe the operational conditions of a roadway. These LOS standards will be used for evaluating the existing and future transportation system and will no longer be used to measure transportation concurrency, as the City has been designated a Dense Urban Land and Transportation Concurrency Exception Areas. These standards indicate the quality of traffic flow which is measured by driver satisfaction. A number of factors influence the LOS including speed and travel time, traffic interruptions, the maneuverability of a facility, safety, driver comfort, convenience and operating costs. There are six designations for levels of service which define a facility type, ranging from "A" to "F," and defined in **Table 3-3**. LOS "A" describes free flow conditions, while LOS "F" describes forced flow, congested conditions.

TABLE 3-3: LEVEL OF SERVICE DEFINITIONS

Level of Service	Definition
A	Free flow condition. Speed is controlled by the driver's desires, speed limits, and physical roadway conditions, while traffic density is low. Any turning movements are made easily, and there is little or no restriction in maneuverability.
B	Stable flow condition. However, operating speeds are beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom; however, they may begin to feel somewhat restricted.
C	Stable flow condition. However, speeds and

maneuverability are more closely controlled by higher volumes. Traffic conditions are still tolerable for most drivers, and operating speeds are not unsatisfactory.

D Approaches unstable flow. Although operating speeds may still be maintained, delays begin to occur frequently due to high volumes. Drivers have little freedom to maneuver, and comfort and convenience are low. Conditions can be tolerated for short periods of time.

E Unstable flow condition. There may be stoppages of momentary duration. This level of service describes a roadway that is near or at full capacity (maximum volume). Speeds are slow, and there is very little driver comfort or independence. Accident potential is high.

F Forced flow condition. Operation at low speeds, where volumes are below capacity. This condition usually results from queues of vehicles backing up from restriction downstream. Stoppages may occur for long periods of time because of downstream congestion.

Source: Highway Capacity Manual, 2000, Transportation Research Board

EXISTING AIRPORTS

The Orlando Apopka Airport is located within the City limits on US 441 northwest of downtown Apopka. The privately-owned, public use airport provides general aviation services. For commercial flights, two international airports are located close to the City: the Orlando International Airport and the Orlando-Sanford Airport, both within 26 miles.

EXISTING RAIL FACILITIES

Apopka is served by the Florida Central Railroad for freight services. One line is located along US 441 to Orlando and the other travels along an easement through the City from the southwest to the northeast. The closest passenger rail service is provided by the AMTRAK Silver Service/Palmetto route, which offers daily service from Miami to New York City. The closest passenger rail station to Apopka is located in Winter Park, approximately 15 miles southeast of the City

EXISTING TRANSIT SERVICE

Transit service is provided by LYNX (Central Florida Regional Transportation Authority). Four routes presently service Apopka (Routes 17, 41, 44 and 405). These routes operate on approximately fifteen minute to one hour headways, with service beginning at 4:35 a.m. and ending at 12:35 a.m. Route 405 is a circulator within the Apopka area connecting residential to shopping and businesses. The routes have a central transfer stop (Apopka Superstop) at Central Avenue/7th Street. **Map 3-3** shows the existing LYNX transit Routes.

LYNX is the Community Transportation Coordinator for Orange County and provides services for the transportation disadvantaged. People who are unable to transport themselves or purchase needed transportation because of physical or mental disability, income status or age are considered transportation disadvantaged.

EXISTING INTERMODAL FACILITIES

LYNX provides a transit “Superstop” on West Central Avenue in downtown Apopka. This transfer station has additional bus bays for future expansion.

MODAL SPLIT AND VEHICLE OCCUPANCY RATES

Modal split is a term that describes the number or percentage of travelers using a particular type of transportation, generally for work trips. Vehicle occupancy rates are used to convert person trips to vehicle trips and are used in travel demand surveys. Census tables do not specify data at the city level for this type of statistic, so the Orlando-Kissimmee Metropolitan Statistical Area (MSA) is the closest level that applies to the City of Apopka. The average vehicle occupancy rate for the Orlando MSA is 1.129, according to the Orlando Urban Area Transportation Study (OUATS) model. **Table 3-3** shows a comparison of the Orlando-Kissimmee MSA modal split with that of Orange County, the state and the country, based on the 2000 census.

TABLE 3-4: MODAL SPLIT

	Orlando MSA	Orange County	Florida	United States
Car, truck or van – drove alone	81.4	79.9	79.4	75.5
Car, truck or van – carpooled	9.2	12.2	10.3	10.7
Public Transportation	1.6	2.5	2.0	5.0
Walked	1.2	1.4	1.5	2.8
Other means	2.1	1.5	2.3	1.8
Worked at home	4.6	2.5	4.5	4.1

Source: U.S. Census Community Survey, 2008

EXISTING BICYCLE AND PEDESTRIAN FACILITIES

The City coordinates bicycle/pedestrian planning with MetroPlan Orlando. A majority of the City's primary and secondary streets have five-foot sidewalks on both sides of the street and crosswalks are striped with reflective paint.

In addition to the local sidewalk system, a portion of the West Orange Trail rails-to-trails project is located in Apopka along Forest Avenue. Currently the trail is 19 miles in length, with the southern terminus in Oakland and the northern terminus in Apopka. The entire trail will eventually be a part of the 200-mile planned regional connection known as the Central Florida Loop.

ACCIDENT ANALYSIS

In addition to assessing the impact of traffic volumes on roadway facilities, accident crash data was reviewed to determine high crash locations as well as crash characteristics. The Apopka Police Department provided data that revealed the highest crash intersections from 2004 to 2008, as shown below:

Intersection	2004	2005	2006	2007	2008	Total
US 441 & CR 435	45	48	34	46	43	216
US 441 & Sheeler Road	35	43	47	56	32	213
US 441 & SR 429	39	34	34	52	30	189
US 441 & Bradshaw Road	26	32	28	23	12	121
US 441 & Piedmont Wekiva Road	20	24	24	20	18	106
US 441 & SR 436	15	11	14	16	12	68

Intersection	2004	2005	2006	2007	2008	Total
US 441 & Benbow Court	9	5	23	8	11	56
US 436 & Piedmont Wekiva Road	16	21	21	21	17	96
CR 435 & 3rd Street	14	14	13	17	9	67

PROGRAMMED AND PLANNED ROADWAY IMPROVEMENTS

Programmed and planned improvements for the Apopka area are listed in **Table 3-4**. Information for this table was obtained primarily from MetroPlan's Transportation Improvement Program (2009-20013). Programmed improvements are defined as projects which have funding committed towards construction within the next five years. Planned improvements have no financial commitment towards construction within the next five years. Instead, planned improvements include those which have funding towards some aspect of the project other than construction, as well as those that are in a governmental agency's long-range plans.

The most significant planned improvements are the proposed Wekiva Parkway and the extension of SR 414 John Land Expressway (Apopka Bypass) from Ocoee-Apopka Road to US 441. The first phase of this facility was constructed by the Orlando-Orange County Expressway Authority (OOCEA). Situated on the south side of Apopka, it serves as an alternative route for drivers utilizing US 441 that are not destined for Apopka. The expressway has only been open for a short time so traffic volumes and changes in traffic patterns are not available.

TABLE 3-5: PROGRAMMED AND PLANNED IMPROVEMENTS

Improvement Status	Road Segment	Improvement	Responsible Agency	Year	Comments
Programmed	Rock Springs Road – Ponkan Road to Kelly Park Road	Widen to 4-Lane	Orange County	2009	Under Construction
Programmed	Lester Road – Vick Road to Rock Springs Road	New 2-Lane	City of Apopka	2011	---
Planned	Apopka Bypass – North US 441 to Ocoee Apopka Road	New 4-Lane	OOCEA	---	Phase 2 – Construction only
Planned	Wekiva Parkway (Western Beltway – Park B) US 441 North	New 4-Lane	OOCEA	---	

Note: OOCEA denotes Orlando Orange County Expressway Authority

REGIONAL ROADWAY SYSTEM

A regional transportation system is generally made up of a network of interstates, limited-access toll/non-toll expressways and bridges, major federal and state highways, and public transit including buses and rail service. The primary purpose of the regional roadway and bridge facilities is for interstate commerce and to move commuter and other pass-through vehicles to their ultimate destinations as quickly and efficiently as possible. Apopka is located within the Orlando Metropolitan Area, which is served by the regional transportation system that includes Interstate 4, the Florida Turnpike, several limited access expressways, US 441, SR 436, county roads CR 424, CR 435 and CR 437A, a general aviation airport, freight rail service and the LYNX public transit system. Future alternative transportation modes may include the planned Northwest Corridor Commuter Rail as listed in the draft MetroPlan Orlando 2030 Long Range Plan and shown in **Map 3-4**.

The Orlando/Orange County Expressway Authority was authorized to develop plans for a loop expressway surrounding the Orlando metropolitan area to increase mobility and the quality of life in Central Florida. Construction began on the first of a number of toll roads that were to eventually form that loop system. With completion in 2000 of the latest segment of SR 429 - the Western Beltway located along the west side of Apopka - the loop is almost completed. The final segment, the Wekiva Parkway, is still in the planning stages and will be located north of Apopka heading east somewhere north of the Lake County line to Interstate 4, completing the entire loop expressway system. Other east/west toll roads have also been or will be constructed within the loop system to address high traffic volumes. **Map 3-5** shows the current and planned expressway system for the Orlando Metropolitan Area.

Until such time as the Wekiva Parkway is completed and connects Apopka to Interstate 4 to the northeast, the Western Beltway is the only “loop” segment that connects Apopka to Interstate 4, Florida’s Turnpike, and the East-West Expressway, all to the south. The first segment of the SR 414 John Land Apopka Expressway (the east/west toll road) was completed and opened in 2009.

ISSUES AND OPPORTUNITIES

An issue that affects the function of Apopka’s arterial roadways is allowing direct access to adjacent retail and office land

uses. The operational capacity of a roadway facility begins to break down when numerous curb cuts and median openings are allowed. The City has taken steps to limit access onto US 441 and SR 436 by requiring joint access driveways and limiting access only to collector and local roads that intersect with major arterials. However, there are still segments along these facilities with multiple access driveways due to earlier development.

There are opportunities available to the City of Apopka that can address these issues. First, the City completed a capacity enhancement study for US 441 for its entire length through the Apopka area. This study identifies actual available capacities based upon field conditions and not based upon generalized information. Also, SR 414 John Land Apopka Expressway will substantially alleviate congestion presently experienced on US 441 and SR 436. A portion of the expressway has been completed and opened to traffic and the remaining phase should be scheduled soon.

Second, the Wekiva Parkway is planned to connect north US 441 to Interstate 4 in Seminole County. A conceptual route has been selected that is considered the best available that can preserve sensitive environmental areas. There is only one interchange area planned in the Apopka area, thus preserving the desire to move traffic through the area.

Third, the City continues to update its transportation impact fee program. Funds collected can be used for improving roadways in the Apopka area. In addition, impact fees are being collected by Orange County in unincorporated areas adjacent to Apopka. Orange County and Apopka continually coordinate transportation issues in the area.

Finally, in 2009 the Florida Legislature and governor passed a bill (SB 360) designating certain jurisdictions as Dense Urban Land Areas (DULA). The City of Apopka is one of them. Recognizing that minimum acceptable level of service standards may not always be attainable in dense urban areas and requiring roadways to meet these standards may add to urban sprawl, DULAs are now exempt from transportation concurrency. It is the City’s intent to remove state mandated transportation concurrency and operate it as a matter of local law. Transportation concurrency exceptions and use of mobility strategies are fully operational. However, mobility funding and implementation schedule will be identified following the adoption of the City’s Mobility Plan, estimated July 9, 2011.

Transportation Coordination

The largest area of coordination for traffic management is with Orange County. Many of the higher facility roads in the City of Apopka (Arterials and Major Collectors) are Orange County roads. The City of Apopka coordinates counts and levels of service with Orange County on an annual basis. The City regularly checks available trips and participates in Orange County planning studies on roads within the City of Apopka's travel area. Utilizing available traffic counts allows the City to be current with the County.

Seminole County and Lake County roadways that continue into Orange County and the City of Apopka are also higher facility type roads. The City of Apopka reviews the adopted level of service, levels of service capacity volumes, and volumes on each roadway annually. As the City annexes property closer to each of these areas, the road, the appropriate adopted level of service, and service volumes are considered. Many of these roads are State Roads that must comply with Florida Department of Transportation standards. The City adheres to FDOT standards on these roadways.

The City of Ocoee shares two adjacent Orange County maintained roadways with Apopka: Ocoee-Apopka Road (CR 437) and McCormick Road. As the City annexes near the area, information is obtained from Ocoee and Orange County regarding the adopted level of service, service volumes, and volumes on the road.

Overall, the City of Apopka coordinates with all the adjacent counties and municipalities through regular communication and by attending meetings and workshops. City planning staff is very active in MetroPlan Orlando and with other committees such as the Wekiva Parkway Project Advisory Group. Traffic planning is coordinated through these working groups and relationships. The utilized methodology and assumptions are professionally accepted for measuring impacts on the transportation system.

As noted previously, the City of Apopka qualifies as a DULA and is therefore exempt from transportation concurrency. As adjacent jurisdictions and the County decide whether to establish their own local concurrency systems to replace the previously mandated system, or to eliminate transportation concurrency, the City of Apopka will continue to coordinate with them.

Impacts Related to the Local and Regional Transportation System

For a relatively small city such as Apopka there are several major expressways built or planned within its limits. Although these expressways move pass-through traffic through the City without much impact on the local facilities, access to and from the expressways results in some impacts to the local transportation system. These expressways are a positive addition to the City in terms of connecting Apopka with the region and reducing peak hour traffic congestion; however, the massive infrastructure associated with the Western Beltway has disrupted existing development patterns, caused adjacent land use patterns to change and affected the aesthetics and character of the western section of the City. The same issues are expected with the construction of the remaining segment of the John Land Apopka Expressway. The conceptual corridor recommended for the proposed Wekiva Parkway may cause impacts on some existing, older residential and commercial areas of Apopka.

Within the Apopka City limits there are relatively few minor arterial/major collector roads to channel traffic to the larger expressways and to the major streets where employment and commercial activities are located. Many of these roadway facilities have only two lanes. The design of residential developments, which feed traffic onto these minor arterials and major collectors, tend to favor “dead-end” street systems that don’t connect to neighboring residential and/or commercial developments. With few choices for access to the collector or arterial roads, larger and more inefficient intersections are required, which cause time delays and congestion.

The only way to reduce congestion on regional roadways is to keep “local” traffic off of them as much as possible. For this to happen Apopka must provide an effective local roadway network that meets the day-to-day needs of its residents and visitors. Traffic generated by new development in Apopka along US 441 and south will be able to access the regional transportation network with relative ease, since there are many interchanges and access points. Effects on the local roadway network will be mitigated by this to some extent, as long as arterial and major collector roads are designed effectively.

Impacts of Development on the Transportation System

The traditional response to congestion has been to add more lanes to existing highways and bridges and to build new ones; however, it is becoming increasingly difficult to undertake

major highway expansions because of funding constraints, increased development, increased right-of-way and construction costs, and opposition from local groups. Therefore, it makes more sense to focus on how to operate existing capacity more efficiently to get more out of existing facilities.

In order to address the impacts of development on the regional and local transportation system, the City must promote development patterns and transportation design that improves connectivity, favors alternative modes such as transit and cycling, and improves walkability. This type of transportation system tends to reduce the volume of automobile traffic, all of which also enhances the quality of the local trips. Each of these factors must be implemented in a way that complements the others in order to fundamentally change the course from automobile-oriented to one that offers a full-range of multi-modal transportation opportunities.

- Change Land Use Patterns

  Higher residential densities and a mixture of land uses are concepts that at first glance might seem factors that would make traffic congestion worse in a community. However, studies indicate that residents of higher density urban areas make fewer automobile trips and more than twice as many pedestrian and transit trips as the national average. Land use effects on travel behavior tend to be cumulative. As an area becomes more urbanized (denser, more mixed, less parking), automobile ownership and use decline and more travel takes place by walking, cycling and public transit.

- Change the Way Streets are Designed

  When designing roadways that serve local transportation needs, the entire right-of-way must be considered as part of the design. This means the inclusion of pedestrian and bicycle lanes/paths, on-street parking if appropriate, medians and pedestrian-friendly crosswalks. Frequently, transportation systems and networks are planned and operated in an uncoordinated manner – both within and between jurisdictions. Providing efficient connections between different transportation modes is key to achieving a functioning multimodal system. Roads, sidewalk and bicycling facilities should be designed in a way that allows maximum integration with each other and with transit facilities.

- Develop a Pedestrian and Bicycle Master Plan

  For most cities, public improvements that make walking and bicycling more attractive options are possible, but there is often no evaluation of these needs during the planning process. As a result, other infrastructure improvements often do not address walkability and may perpetuate existing problems. A pedestrian and bicycle master plan can help focus time and attention on improvements to pedestrian and bicycle traffic.

  Walking and cycling conditions are affected by the quantity and quality of sidewalks, crosswalks and paths, pedestrian system connectivity, the security and attractiveness of pedestrian facilities, and support features such as bike racks. Improved walking and cycling conditions tend to increase non-motorized and transit travel, and reduce automobile travel. A short walking or cycling trip often substitutes for a longer motorized trip.

- Provide Safe and Comfortable Public Transit Facilities

  Creating an environment conducive to the development of a balanced transportation system requires the circulation system to be engineered to functionally accommodate all modes. Designing for the functional requirements of transit vehicles means creating suitable facilities in which the vehicles can operate properly and passengers can wait in comfort. Such facilities should be developed as street designs are developed and private developments are approved. To accommodate and enhance transit opportunities, amenities in the form of attractive transit stops and shelters, loading spaces for transit buses, and bicycle and pedestrian connections are needed

- Alter Trip Patterns/Provide Alternatives to Single Occupancy Vehicles

  In order to cut automobile trips – particularly trips during peak travel times that involve one person driving alone - innovative alternatives are needed that affect the demand for travel. These alternatives are generally employer-based and, as such, not solutions that can be addressed by the City. However, the City should support the ongoing efforts of MetroPlan Orlando to engage regional employers in discussion and pilot programs that address such issues as flexible work hours and telecommuting, both

effective methods to reduce daily automobile trips for employees, as well as carpooling programs and public transit.

Transportation Right-of-Way and Corridor Master Plan

In order to address future roadway needs, the City should consider preparing a Transportation right-of-way and corridor plan. Corridor preservation is a broad strategy for the long-term planning and management of important roadways. The master plan will include techniques the City can use to protect existing transportation corridors or planned corridors from inconsistent development.

Downtown Redevelopment

The City conducted downtown redevelopment workshops on September 12, 2005 and March 6, 2006, to garner input from the public on proposed redevelopment efforts within the downtown area. In December 2006, the City Council created a downtown development overlay zoning district within and adjacent to the eastern boundary of the CRA. The concept of the redevelopment efforts was prepared in the March 2006 Downtown Community Redevelopment Plan and a result of visioning workshops.

Roadways in the Community Redevelopment Area are of average to above-average condition; however, there is a section of 5th Street from Washington Avenue to Hawthorne Avenue that is not paved, and portions of Lake Avenue are in need of roadway improvements, including curbs, gutters, resurfacing, and sidewalks. Traffic congestion on US 441 in the CRA has increased over the past 20 years and is projected to continue to do so into the future. In an effort to decrease congestion on US Hwy. 441 (Main Street), a driveway study would be able to determine needed driveway improvements. Some of the improvements could be shared driveways between businesses or moving driveways to side streets, where feasible.

The City has completed a Redevelopment Plan for Downtown Apopka that identifies recommended land use patterns and transportation improvements. For the downtown area where higher residential densities and mixed use patterns are recommended, the City may want to consider adopting strategies, other than building more or wider roadways, to mitigate traffic impacts. In cooperation with the efforts of the downtown redevelopment and with the planned Northwest Corridor Commuter Rail, the City's future downtown redevelopment should include Transit Oriented Design

(TOD) principles. These TOD principles would help decrease congestion on existing roadways and overall commuting times. Components and principles of TOD include the following but not limited to:

- Walkable design with pedestrian as the highest priority.
- Train station as a major feature of the town center.
- A regional node containing a mixture of uses in close proximity including office, residential, retail, and civic uses.
- High density, high quality development within a 10-minute walk circle surrounding the train station.
- Collector support transit systems including trolleys, streetcars, light rail, and buses, etc.
- Designed to include the easy use of bicycles, scooters, and rollerblades as daily support transportation systems.
- Reduced and managed parking inside 10-minute walk circle around town center/train station.
- Integrated Land-Use Planning.
- Community spaces, plazas, activities and attractive design.

FUTURE CONDITIONS ANALYSIS

The development of a comprehensive transportation system is ultimately based upon the travel patterns that are anticipated from existing and future development. Travel patterns from land use development must not only be considered for the specific area being studied, but also for the entire metropolitan region. For the Apopka area, a substantial amount of travel information is available from MetroPlan Orlando. In determining the need for future transportation facilities in Apopka, consideration was given to the regional travel patterns.

FUTURE TRAVEL DEMAND

Travel demand is a function of existing and future land use projections based on existing and anticipated development activities, population and employment density, vehicle availability, transit service quality, roadway capacity and historical trends. In order to ensure that the modeling process is reliable, the year 2000 or "base year" traffic conditions were modeled and checked against observed traffic flows. The City hired a consultant to develop a sub-area model that updated the OUATS utilizing the latest land use data, highway network and census for the year 2000. The OUATS model was expanded to include a portion of the area networks in Lake, Volusia and Polk counties. This allows for enhanced accuracy in the areas near the fringe of the old model, where Apopka is located. With the new model, the roadway network represents and reflects the existing travel patterns in the Apopka area.

After obtaining the year 2000 socio-economic (S/E) database from MetroPlan Orlando, the City refined the Traffic Analysis Zones (TAZ's) in the Apopka area. The S/E database identifies population, employment, dwelling unit and hotel/motel unit information for each TAZ.

Future S/E databases were developed by MetroPlan Orlando and City staff through a process of reviewing existing development patterns, future land use maps and probable development scenarios. **Table 3-5** lists the socioeconomic data estimates and projections for 2010, 2015, 2020 and 2025 for the entire study area. As shown in this table, between 2005 and 2025, a 44 percent growth in dwelling units and a 35 percent growth in employment is anticipated. This growth is less than projected in the City's 2002 Transportation Element; however, it is still substantial. The growth projections acknowledged the opening of SR 414, the John Land Expressway/Apopka Bypass, as well as the

anticipated development projects expected as a result of the construction of the Wekiva Parkway.

TABLE 3-6: SOCIOECONOMIC DATA SUMMARY

	Year					
	2005	**2010**	**2015**	**2020**	**2025**	**2030**
Production Values						
Single Family DUs	21,795	24,215	26,636	29,056	31,477	44,573
Multi Family DUs	6,760	7,385	8,010	8,635	9,535	13,510
Total DUs	28,555	31,600	34,646	37,691	41,012	58,083
Attraction Values						
Industrial	4,147	4,526	4,905	5,284	5,663	7,877
Commercial	11,174	12,032	12,889	13,747	14,604	20,255
Service	14,715	16,104	17,493	18,882	20,271	28,132
Total	30,036	32,662	35,287	37,913	40,538	56,264

Source: City of Apopka, Ghyabi & Associates.

2030 LEVEL OF SERVICE ANALYSIS

Prior to the projection of future roadway conditions, the 2000 traffic conditions were replicated in order to validate the transportation modeling tool. The modeling software used for the analysis was FSUTMS, a TRANSPLAN-based program and process used statewide. The FSUTMS incorporates the gravity model in the trip distribution process. Socioeconomic data is used to estimate the number of vehicle trip ends. Trip ends are then assigned throughout the study area by linking travel between trip origins and trip destinations (productions and attractions). The summary of trips by road segments results in an estimate of traffic using each road segment.

The socioeconomic database described in **Table 3-5** was utilized to determine appropriate trip production and attraction equations by trip purpose, which resulted in computer-generated traffic volumes for the year 2000. These volumes were compared to actual traffic counts to determine the accuracy of the model. Slight adjustments were made to the model to more accurately reflect actual traffic volumes. After calibration of the transportation computer model for 2000, traffic projections were developed for 2025.

For the year 2025, vehicle trip assignments were analyzed on the area network, including both programmed and planned improvements. Two planned improvements that will impact Apopka are the completion of SR 429, from John Land Expressway (SR 414 Extension) to US 441, and the completion of the Wekiva Parkway, from US 441 to I-4. These two freeways will connect to each other and complete a loop roadway network around the Orlando Metropolitan Area.

Because MetroPlan Orlando is in the process of updating the OUATS model to 2030, the City of Apopka utilized historical traffic count trends to predict the growth from 2025 to 2030. The resulting traffic demand estimates for 2030 were then compared to each roadway's service volume to determine which roadways face future problems.

Although some of the traffic growth is due to external traffic (vehicles traveling through the study area, but without an origin or destination within the study area), a portion of the growth is due to increased traffic within the study area. This causes traffic to be diverted to collector roadway facilities.

Table 3-6 presents the analysis for the 2025 network volumes and the 2030 projected volumes. Based upon the projected traffic volumes, a number of road facilities are anticipated to operate at or below their respective capacity, as described below:

Road Segments Projected to Operate **at** capacity

US 441	from Errol Parkway to SR 429
US 441	from Bradshaw Road to Hawthorne Avenue
US 441	from Hawthorne Avenue to Central Avenue
SR 436	from Piedmont Wekiva Road to Seminole County Line
Welch Road	from Rock Springs Road to Thompson Road
Welch Road	from Thompson Road to Piedmont Wekiva Road

Road Segments Projected to Operate **Below** capacity

US 441	from Hermit Smith Road to Plymouth Sorrento Road
US 441	from Central Avenue to Park Avenue
US 441	from Park Avenue to Alabama Street
US 441	from Alabama Street to SR 436
CR 435	from US 441 to M. Gladden Boulevard
CR 435	from Keene Road to McCormick Road
Sheeler Road	from SR 436 to US 441

TABLE 3-7: 2030 LEVEL OF SERVICE ANALYSIS

Class	Road Segment	Lanes	2025 Daily Volume	2030 Daily Volume	LOS Std	Capacity @ LOS	2030 V/C	2030 LOS
Major Arterials								
	SR 429							
	Ocoee Apopka Rd to Binion Rd	4 LD	28,727	30,882	C	55,200	0.56	B
	Binion Rd to US 441	4 LD	34,625	37,222	C	55,200	0.67	B
	SR 451 (Old SR 429 Section)							
	South of US 441	4 LD	18,062	19,417	C	55,200	0.35	A
	US 441							
	Hermit Smith to Ply. Sorrento Rd	4 LD	58,213	62,579	D	60,700	1.03	F
	Ply Sorrento Rd to Lakeview Rd	4 LD	54,260	58,330	D	62,500	0.93	C
	Lakeview Rd to Errol Pkwy	4 LD	50,019	53,770	D	62,500	0.86	C
	Errol Pkwy to SR 429	4 LD	57,055	61,334	D	62,500	0.98	D
	SR 429 to Bradshaw Rd	5 LD	40,114	43,123	D	62,500	0.69	C
	Bradshaw Rd to Hawthorne Ave	5 LD	31,887	34,279	D	43,400	0.79	D
	Hawthorne Ave to Central Ave	5 LD	33,774	36,307	D	43,400	0.84	D
	Central Ave to Park Ave	5 LD	49,589	53,308	D	43,400	1.23	F
	Park Ave to Alabama St	5 LD	42,706	45,909	D	43,400	1.06	F
	Alabama St to SR 436	4 LD	46,793	50,302	D	43,400	1.16	F
	SR 436 to Sheeler Rd	4 LD	20,376	21,904	D	44,200	0.5	B
	Sheeler Rd to Pied-Wek Rd	4 LD	35,245	37,888	D	44,200	0.86	C
	Pied-Wek Rd to Seminole Co Line	4 LD	36,400	39,130	D	61,800	0.63	C
	SR 436							
	US 441 to Thompson Rd	4 LD	43,319	46,568	D	67,100	0.69	B
	Thompson Rd to Pied-Wek Rd	4 LD	43,581	46,850	D	88,300	0.53	B
	Pied-Wek Rd to Seminole Co Line	4 LD	60,637	65,185	D	66,300	0.98	D
	SR 414 Extension (Apopka Bypass)							
	Keene Rd to Park Ave	4 LD	21,948	23,594	C	52,000	0.45	B
	Park Ave to SR 429	4 LD	28,838	31,001	C	52,000	0.6	B
	Wekiva Parkway							
	US 441 to Kelly Park Rd	4 LD	26,100	28,058	C	55,200	0.51	B
	Kelly Park Rd to Lake County Line	4 LD	24,911	26,779	C	55,200	0.49	B
Minor Arterial								
	CR 424 (Alabama Ave / Apopka Blvd)							

Class	Road Segment	Lanes	2025 Daily Volume	2030 Daily Volume	LOS Std	Capacity @ LOS	2030 V/C	2030 LOS
	US 441 to 8th St	2L	3,315	3,481	E	16,900	0.21	B
	8th St to Sheeler Rd	2L	3,072	3,226	E	16,900	0.19	B
	Sheeler Rd to Lakeville Rd	2L	12,965	13,613	E	16,900	0.81	C
	Lakeville Rd to Hiawassee Rd	2L	14,660	15,393	E	18,590	0.83	C
	CR 435 (Rock Springs Rd – Park Ave)							
	Kelly Park Rd to Ponkan Rd	5 LD	15,955	16,753	E	35,700	0.47	B
	Ponkan Rd to Welch Rd	5 LD	22,186	23,295	E	35,700	0.65	B
	Welch Rd to Votaw Rd	5 LD	24,700	25,935	E	35,700	0.73	B
	Votaw Rd to Orange St	5 LD	23,033	24,185	E	35,700	0.68	B
	Orange St to US 441	5 LD	21,408	22,478	E	35,700	0.63	B
	US 441 to M. Gladden Blvd	2L	19,079	20,033	E	16,900	1.19	F
	M.Gladden Blvd to Cleveland St	2L	13,517	14,193	E	16,900	0.84	D
	Cleveland St to Keene Rd	2L	7,692	8,077	E	16,900	0.48	C
	Keene Rd to McCormick Rd	2L	31,461	33,034	E	16,900	1.95	F
	CR 437A (Ocoee-Apk Rd/Central Ave)							
	Keene Rd to Boy Scout Rd	2L	8,308	8,724	E	27,000	0.32	C
	Boy Scout Rd to Bradshaw Rd	2L	9,445	9,917	E	27,000	0.37	C
	Bradshaw Rd to Central Ave	2L	4,328	4,544	E	27,000	0.17	B
	M.Gladden Blvd to US 441	2L	1,837	1,929	E	27,000	0.07	A
	Piedmont-Wekiva Road							
	Welch Rd to Votaw Rd	3L	14,308	15,023	E	22,400	0.67	D
	Votaw Rd to SR 436	5 LD	29,612	31,093	E	35,700	0.87	C
	SR 436 to Pied Lakes Blvd	5 LD	31,825	33,416	E	35,700	0.93	C
	Pied Lakes Blvd to US 441	5 LD	33,168	34,826	E	35,700	0.98	D
	US 441 to CR 424	4L	27,503	28,878	E	35,700	0.81	B
	Plymouth-Sorrento Road							
	Kelly Park Rd to Ponkan Rd	2L	5,490	5,765	E	27,000	0.21	B
	Ponkan Rd to US 441	2L	6,560	6,888	E	27,000	0.26	B
	Sheeler Road							
	SR 436 to US 441	2L	17,395	18,265	E	17,750	1.03	F
	US 441 to Apopka Blvd	2L	12,744	13,381	E	16,900	0.79	C
	Apopka Blvd to Keene Rd	2L	7,868	8,261	E	16,900	0.49	C
	Welch Road							
	Vick Rd to Rock Springs Rd	2L	5,793	6,083	E	15,000	0.41	C
	Rock Springs Rd to Thompson	2L	25,569	26,847	E	27,000	0.99	E
	Thompson Rd to Pied-Wek Rd	2L	19,736	20,723	E	27,000	0.77	E
County Collectors								
	Binion Road							

Class	Road Segment	Lanes	2025 Daily Volume	2030 Daily Volume	LOS Std	Capacity @ LOS	2030 V/C	2030 LOS
	Apopka - Ocoee Rd to Boy Scout Rd	2L	5,988	6,287	E	27,000	0.23	B
	Boy Scout Rd to Lakeview Dr	2L	8,234	8,646	E	27,000	0.32	C
	Lakeview Dr to US 441	2L	225	236	E	27,000	0.01	A
	Boy Scout Road							
	Binion Rd to Apopka - Ocoee Rd	2L	3,589	3,768	E	15,600	0.24	C
	Lakeville Road							
	Apopka Blvd to Wildwood St	2L	8,486	8,910	E	27,000	0.33	C
	Ponkan Road							
	Ply-Sorr Rd to Vick Rd	2L	3,149	3,306	E	27,000	0.12	B
	Vick Rd to Rock Springs Rd	2L	4,091	4,296	E	27,000	0.16	B
	Thompson Road							
	Welch Rd to Votaw Rd	2L	8,516	8,942	E	27,000	0.33	C
	Votaw Rd to SR 436	2L	10,227	10,738	E	27,000	0.4	C
	Votaw Road							
	Park Ave to Thompson Rd	2L	8,632	9,064	E	15,600	0.58	C
	Thompson Rd to Pied-Wek Rd	2L	9,481	9,955	E	15,600	0.64	D
County - City Collectors								
	Bradshaw Road							
	US 441 to Apopka - Ocoee Rd	2L	3,760	3,948	E	15,600	0.25	C
	Hawthorne Avenue							
	US 441 to Apopka - Ocoee Rd	2L	3,002	3,152	D	15,600	0.2	C
	Apopka - Ocoee Rd to 13th St	2L	2,185	2,294	D	15,600	0.15	C
	Keene Road							
	Apopka – Ocoee Rd to Clarcona Rd	2L	6,107	6,412	E	16,900	0.38	C
	Rock Spring Rd to Ustler Rd	2L	3,178	3,337	E	15,600	0.21	C
	Ustler Rd to Thompson Rd	2L	4,202	4,412	E	15,600	0.28	C
City Collectors								
	6th Street							
	Park Ave to Alabama St	2L	5,749	6,036	D	10,000	0.6	C
	Christiana Avenue							
	Monroe Ave to Votaw Rd	2L	3,285	3,449	E	14,600	0.24	C
	Cleveland Street							
	Park Ave to Sheeler Rd	2L	1,007	1,057	E	14,600	0.07	C
	Errol Parkway							
	Lake Francis Dr to Old Dixie Hwy	2L	1,732	1,819	D	14,600	0.12	C
	Jason Dwelley Parkway							

Class	Road Segment	Lanes	2025 Daily Volume	2030 Daily Volume	LOS Std	Capacity @ LOS	2030 V/C	2030 LOS
	Ponkan Rd to Kelly Park Rd	2L	2,841	2,983	E	14,600	0.2	C
	Lake Avenue							
	Martin St to Orange St	2L	2,524	2,650	D	14,600	0.18	C
	Orange St to US 441	2L	1,238	1,300	D	14,600	0.09	C
	Lake Francis Drive							
	Schopke Lester Rd to Errol Pkwy	2L	1,217	1,278	D	14,600	0.09	C
	Errol Pkwy to Vick Rd	2L	2,747	2,884	D	14,600	0.2	C
	Lester Road							
	Rock Springs Rd to Vick Rd	2L	8,478	8,902	E	14,600	0.61	C
	Vick Rd to Lester Schopke Rd	2L	7,220	7,581	E	14,600	0.52	C
	Lester Schopke Rd to Ply Sorr Rd	2L	7,302	7,667	E	14,600	0.53	C
	Maine Avenue							
	Martin St to Old Dixie Hwy	2L	4,581	4,810	D	14,600	0.33	C
	Marden Road							
	Keene Rd to Apopka – Ocoee Rd	2L	3,000	3,150	E	14,600	0.22	C
	Monroe Avenue							
	Park Ave to Alabama St	2L	3,868	4,061	D	14,600	0.28	C
	Alabama St to Sheeler Rd	2L	7,097	7,452	D	14,600	0.51	C
	Old Dixie Highway							
	Lakeview Rd to Errol Pkwy	2L	2,412	2,533	E	18,200	0.14	B
	Errol Pkwy to Bradshaw Rd	2L	6,656	6,989	E	18,200	0.38	C
	Bradshaw Rd to Hawthorne Ave	2L	6,897	7,242	E	18,200	0.4	C
	Schopke Lester Road							
	Lake Francis Dr to Old Dixie Hwy	2L	3,372	3,541	E	14,600	0.24	C
	Vick Road							
	Old Dixie Hwy to Martin St	2L	7,295	7,660	E	18,200	0.42	C
	Martin St to Welch Rd	2L	5,975	6,274	E	18,200	0.34	B
	Welch Rd to Lester Rd	2L	3,142	3,299	E	18,200	0.18	B
	Lester Rd to Ponkan Rd	2L	554	582	E	18,200	0.03	A

Sources: LTEC - Luke Transportation Engineering Consultants; Orange County Engineering; Florida Department of Transportation; City of Apopka

Notes = * denotes best achievable LOS with road characteristics V/C - Volume to Capacity ratio

n/a - not available

RECOMMENDED TRANSPORTATION NETWORK

The previous sections of this element have presented existing and anticipated traffic projections in the Apopka area. Road segments anticipated to operate at, or below, recommended capacity have been identified and potential improvement opportunities have been discussed. This section presents the recommended transportation network for 2030. **Map 3-6** depicts the proposed functional classification of roadways, while **Map 3-7** identifies the proposed traffic circulation network.

2030 Transportation Network

The analysis provided in this element for the 2030 time period indicated several anticipated capacity deficiencies. Even with the proposed Western Beltway and US 441 Bypass in place, several roads are anticipated to operate over capacity.

To address deficiencies, alternative transportation networks were reviewed, along with area land use studies completed for the City. Land use is an important part of projecting future transportation needs. The improvements identified as being needed by the year 2030 are identified in **Table 3-7**. With these improvements in place, it is anticipated that all classified roads within the defined planning area will operate at acceptable capacity.

It is important to note that several of the improvements shown in this element for the time period analyzed are outside of the City limits and are not City-controlled facilities. The intent of showing these facilities is to show a recommended network that can be coordinated with Orange County. It is also important to note that improvements noted in this element may not be consistent with those shown in the Orange County Comprehensive Plan. Policies are provided in this plan to resolve those discrepancies.

TABLE 3-8: RECOMMENDED 2030 ROAD IMPROVEMENTS

Roadway	Segment	Improvement
Wekiva Parkway	US 441 to North (I-4)	New 4 Lane Toll Road
SR 429 Extension	Ocoee Apopka Rd to West US 441	New 4 Lane Road
US 441	Hermit Smith Rd to Plymouth Sorrento Rd	Widen to 6 Lanes
Plymouth Sorrento Road	US 441 to Kelly Park Rd	Widen to 4 Lanes
Lester Road	Vick Rd to CR 435	Extend 2 Lane Road
CR 435 (Park Avenue)	US 441 to M. Gladden	Widen to 4 Lanes
CR 435 (Park Avenue)	Keene Rd to McCormick Rd	Widen to 4 Lanes
CR 437 A (Ocoee-Apopka Rd)	Boy Scout Rd to CR 435	Widen to 4 Lanes
Welch Road	Piedmont Wekiva Rd to CR 435	Widen to 4 Lanes
Sheeler Road	US 441 to Apopka Blvd	Widen to 4 Lanes
Apopka Blvd	Sheeler Rd to Piedmont Wekiva Rd	Widen to 4 Lanes
Boy Scout Road	Binion Rd to CR 437A	Widen to 4 Lanes
Rogers Road	Lester Rd to Ponkan Rd	New 2 Lane Road
Bradshaw Road	US 441 to CR 437A	Widen to 4 Lanes
	CR 437A to Cleveland Street	New 4 Lane Road
Highland Avenue	13th St to Cleveland St	New 2 Lane Road
Welch Road	CR 435 to Vick Rd	Widen to 4 Lanes
	CR 435 to Thompson Rd	Widen to 4 lanes
Vick Road	Dixie Hwy to Martin St	Widen to 4 Lanes
	Martin St to Lake Francis Dr	Widen to 4 Lanes
	Lake Francis Dr to Lester Rd	Widen to 4 Lanes
	Lester Rd to Ponkan Rd	Widen to 4 Lanes
	Ponkan Rd to Mt. Stirling Ave	New 2 Lane Road
John's Road	Binion Rd to Bradshaw Rd	New 2 Lane Road
East-West Collector Road	Binion Rd to Lake Marshall Rd	New 2 Lane Road

Recommended Functional Classifications

A future functional classification map is provided for the 2011 time period on **Map 3-5**, and the proposed laneage is noted on **Map 3-6**. Proposed functional classifications and laneage are noted for roads within the City limits as well as outside. The intent of showing classifications and laneage outside of the City limits is to assist the City in properly designating roads during future annexations, as well as to coordinate future joint planning activities with Orange County.

Transit Service

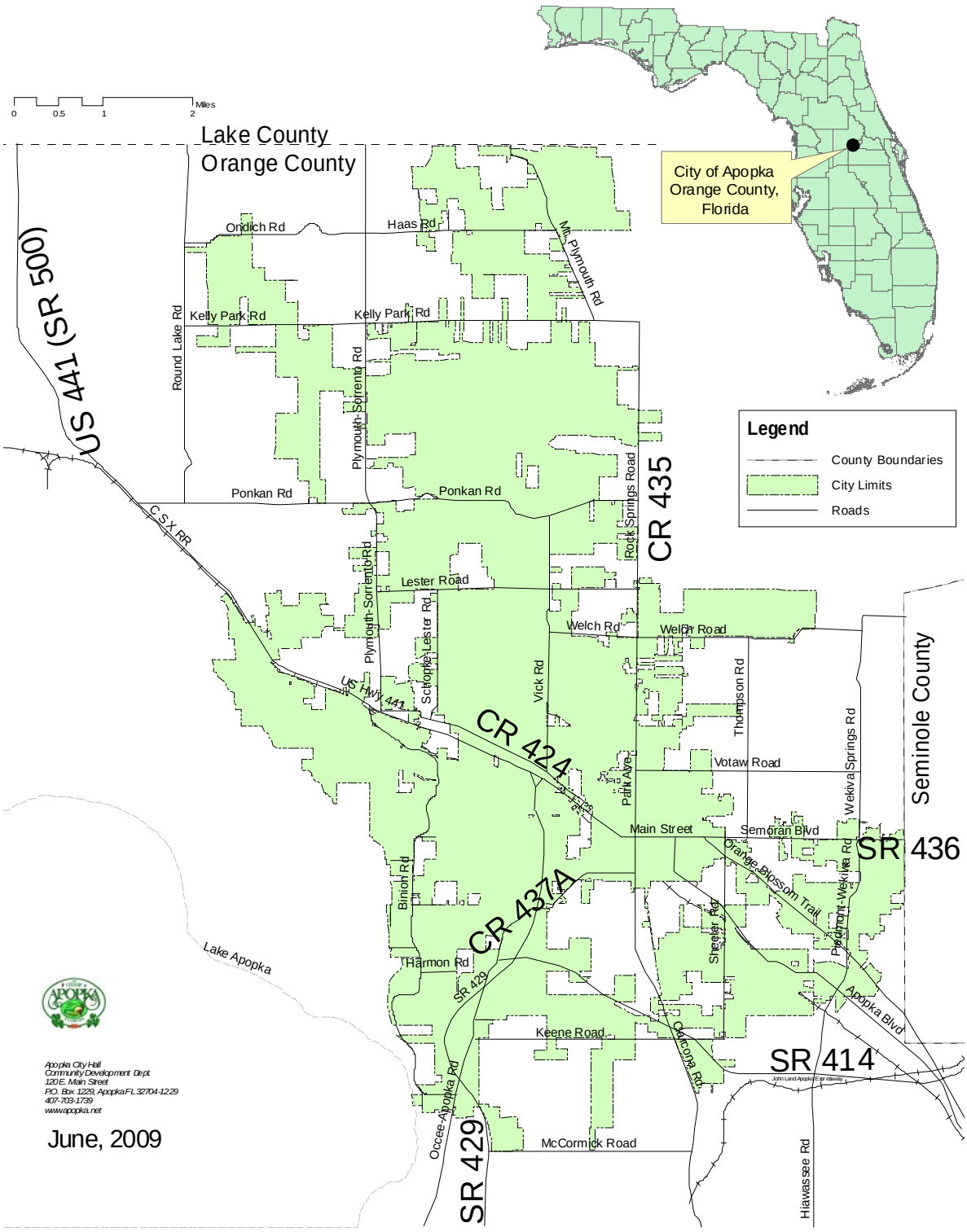
Transit service for the City of Apopka is provided by LYNX. Four routes presently service Apopka (Routes 17, 41, 44 & 405) – three regional and one local circulator. It is recommended that a transit survey be conducted of Apopka residents and businesses to determine the potential of localized transit service, which

includes service between residential neighborhoods, shopping facilities and recreational facilities. In addition, it may be feasible to enhance regional transit service in the Apopka area in conjunction with the provision of park-and-ride facilities

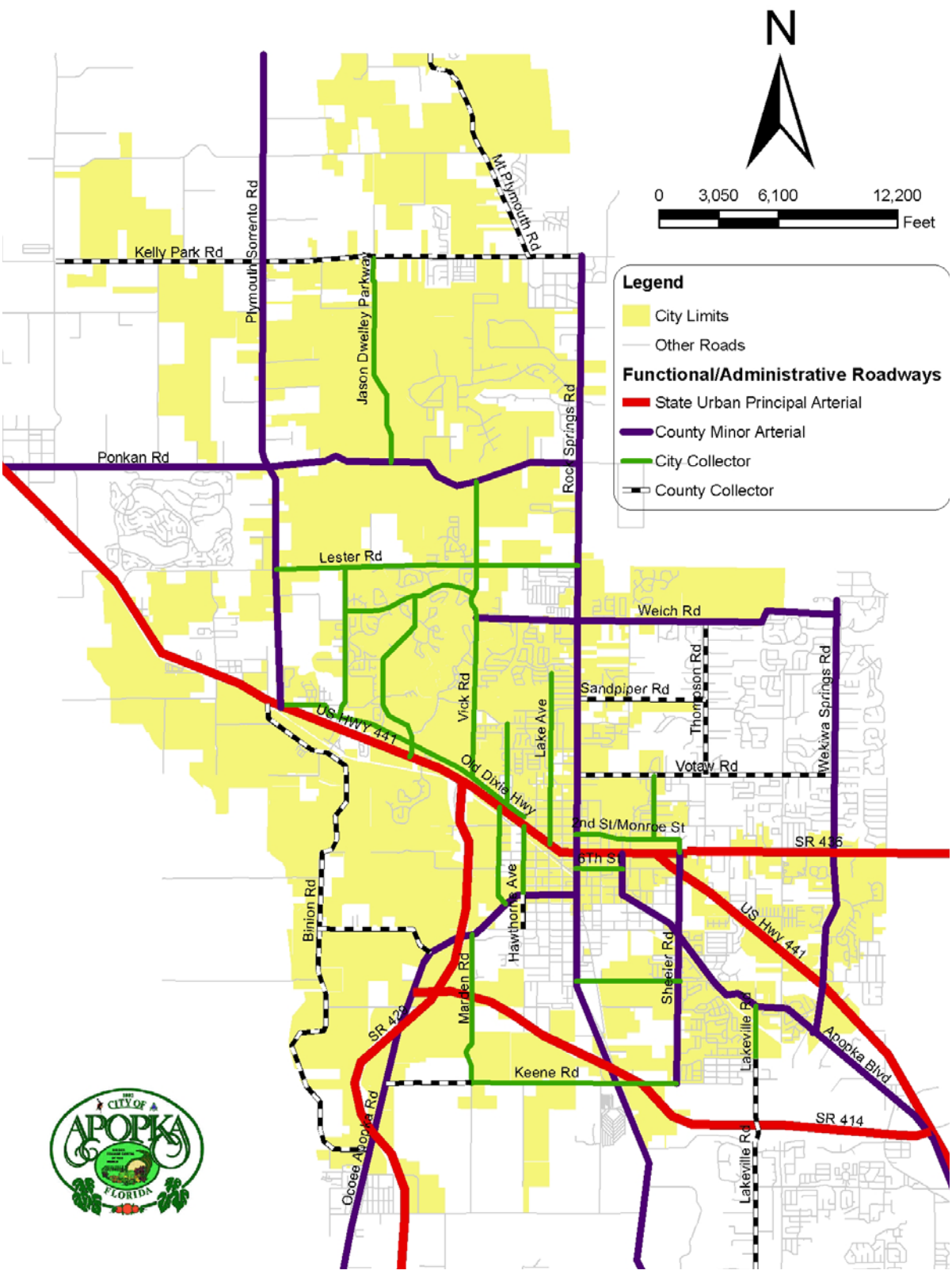
Proposed Bicycle and Pedestrian Facilities

The City will continue coordinating with all regional bicycle and pedestrian planning efforts, primarily through membership on the BPAC and other transportation planning committees. **Map 3-8** shows the existing and planned bicycle and pedestrian facilities.

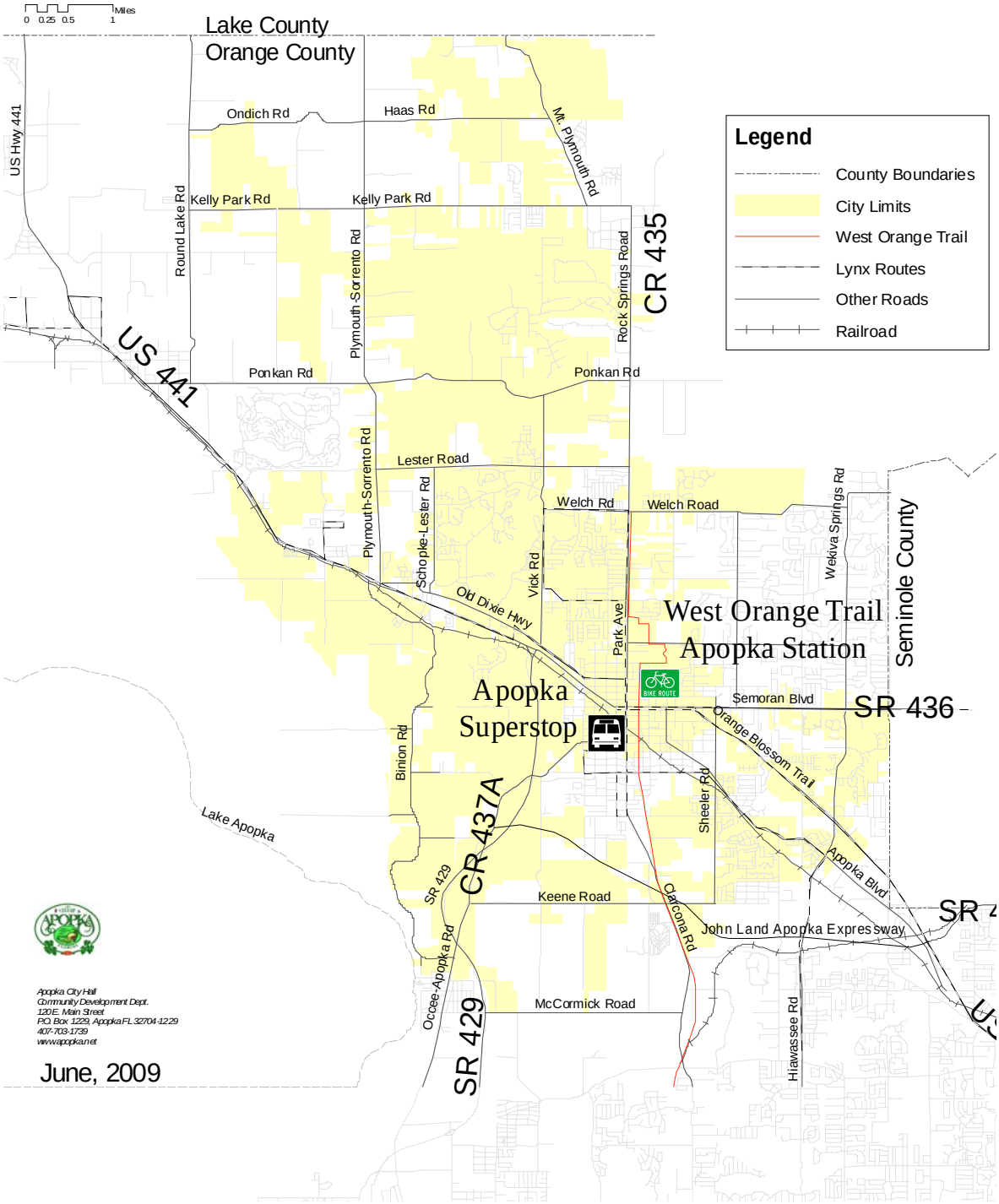
MAP 3-1: APOPKA GENERAL LOCATION



MAP 3-2: EXISTING ROADWAYS FUNCTIONAL AND ADMINISTRATIVE CLASSIFICATION



MAP 3-3: EXISTING MASS TRANSIT ROUTES AND WEST ORANGE TRAIL



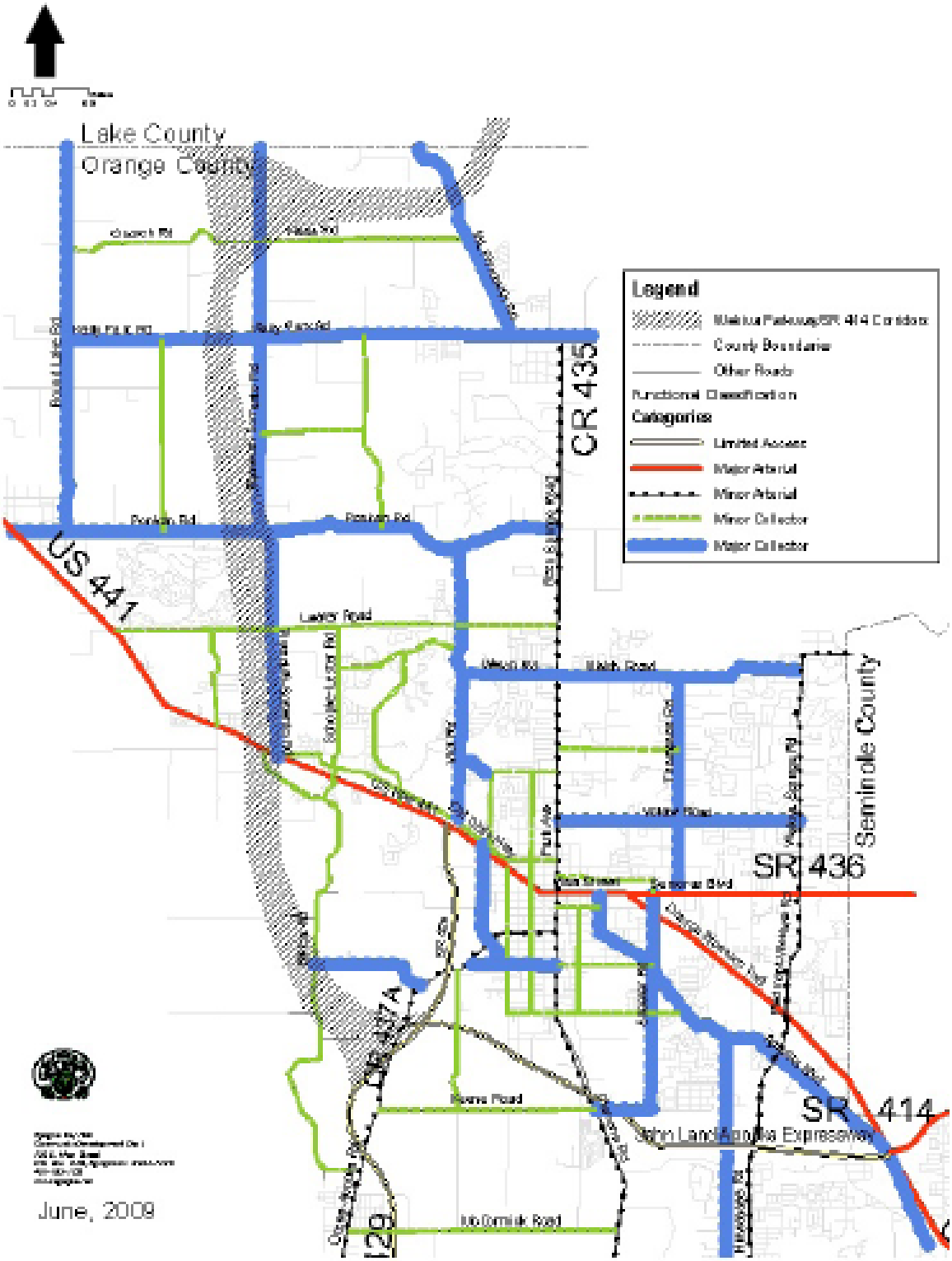
MAP 3-4: REGIONAL TRANSIT SYSTEM PLAN

Source: MetroPlan Orlando 2030 Long Range Plan (draft)

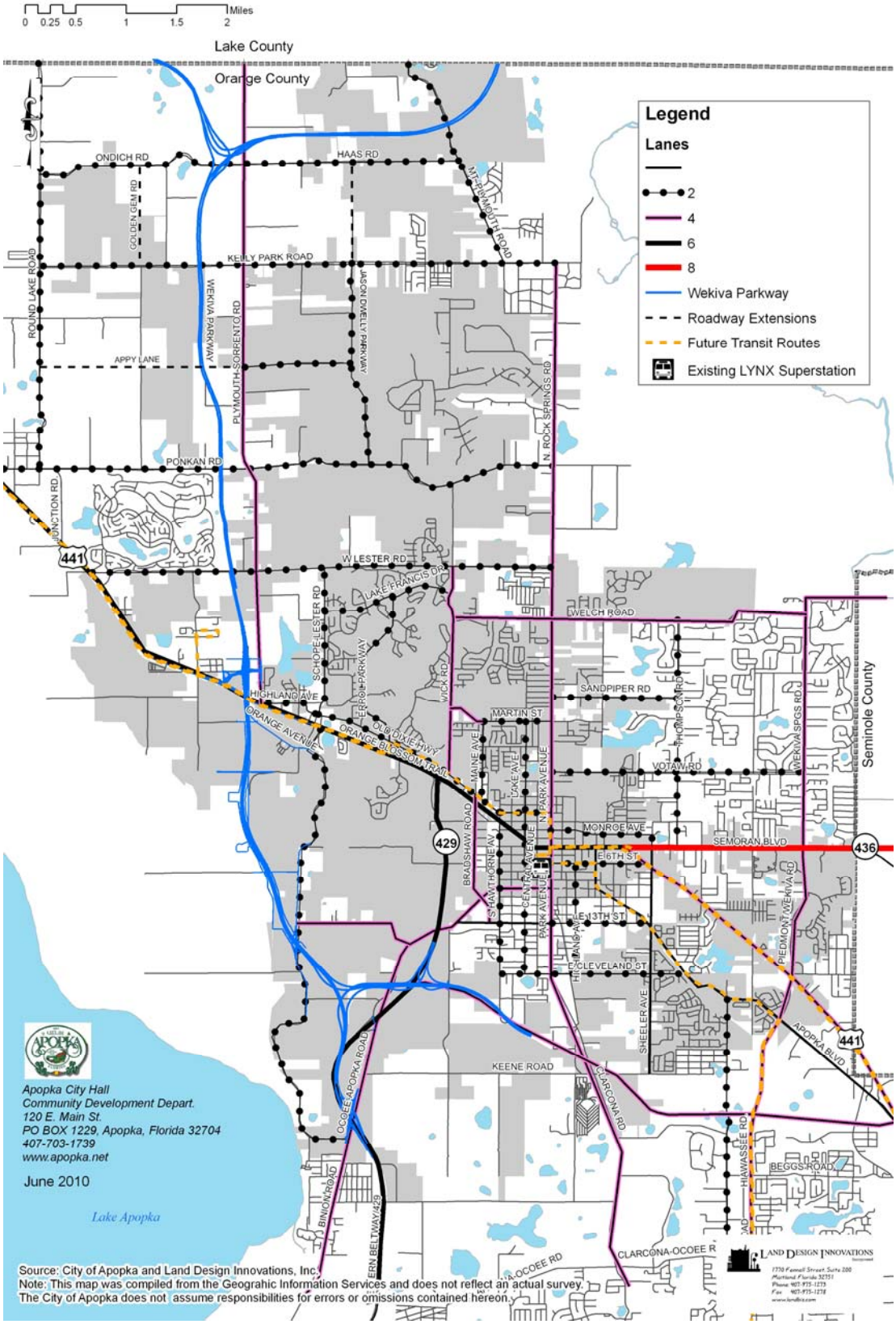
MAP 3-5: REGIONAL ROADWAY SYSTEM

Source: Apopka Community Development Department, 2008

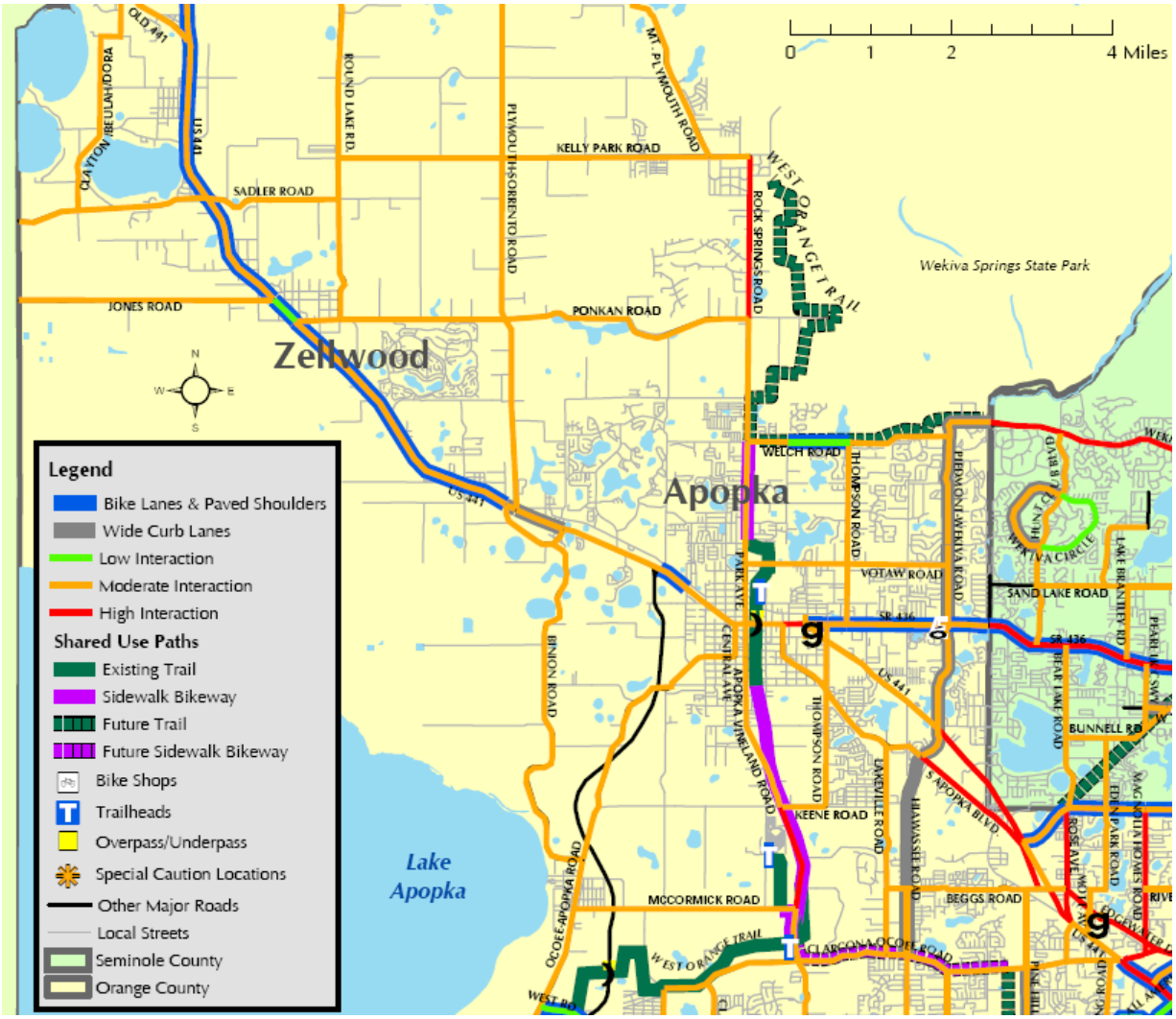
MAP 3-6: PROPOSED 2030 FUNCTIONAL CLASSIFICATION MAP



MAP 3-7: 2030 FUTURE TRANSPORTATION MAP



MAP 3-8: BICYCLE AND PEDESTRIAN FACILITIES



GOALS, OBJECTIVES AND POLICIES

GOAL

The City of Apopka shall promote the continued development of a financially feasible, safe and energy-efficient multi-modal transportation system that is integrated functionally and aesthetically into the surrounding land use framework and enhances the mobility needs of the Apopka area.

Objective 1

The City of Apopka shall coordinate with adjacent jurisdictions and all applicable transportation planning agencies to develop a system of multi-modal transportation facilities, as an alternative to automobile-oriented development that meets existing and future mobility needs of residents.

Policy 1.1

The City has been designated a “Dense Urban Land Area” (DULA) and is exempt from state-mandated transportation concurrency. The City shall monitor transportation as a matter of local law as addressed in this Comprehensive Plan.

Policy 1.2

Land use and transportation strategies to support and fund mobility within the Citywide Transportation Concurrency Exception Area (TCEA) are established in this element.

Policy 1.3

The City of Apopka shall coordinate with the Central Florida Regional Transportation Authority (LYNX) to assess the feasibility of expanding local and regional public transit services based upon existing and proposed major trip generators and attractors, safe and convenient public transit terminals, land uses and accommodation of the special needs of the transportation disadvantaged.

Policy 1.4

Within one year after completion of the Town Center Master Plan, the City shall consider the feasibility of establishing a Transit-Oriented District (TOD) within its downtown area to better coordinate implementation of the master plan.

Policy 1.5

Where feasible, the City of Apopka shall coordinate efforts between the regional transit provider and private development in designating park-and-ride facilities.

Policy 1.6

The City shall seek grant monies for the development of a Bicycle and Pedestrian Master Plan.

Policy 1.7

The City of Apopka shall support the efforts of Metroplan Orlando and the East Central Florida Regional Planning Council to provide bike facilities for new and reconstructed roadway facilities, where feasible.

Policy 1.8

The City of Apopka shall continue to participate on the MetroPlan Orlando Regional bicycle technical committee

Policy 1.9

The City of Apopka shall support and assist the Tri-County Chapter of “Rails to Trails” and Orange County’s effort in acquiring abandoned railroad right-of-way and other properties necessary within the City for the construction of bicycle trails.

Policy 1.10

The City shall support the planned extension of the West Orange Trail to connect to the Seminole County and Lake County trail systems and has identified the trail in the Future Transportation Map series.

\Policy 1.11

By July 2011, the City shall determine the feasibility of incorporating bicycle-friendly facilities into the City's arterial and collector roadway network as follows:

1. The City shall evaluate the right-of-way/pavement width characteristics of all existing arterial and collector roads by December 2011 to determine which roads could safely and feasibly incorporate striped bicycle lanes, signed bicycle routes or other such bicycle facilities.

2. During the annual budgeting process beginning in 2012, the City shall develop a five-year capital improvements schedule for incorporating bicycle facilities into the resurfacing or reconstruction programs for applicable roads using the following criteria:

    - Where sufficient pavement width exists, the City shall provide a designated bicycle lane with a minimum of four feet on roads adjacent to curb and gutter (per Chapter 8 of the Florida Department of Transportation Plans Preparation Manual)and a minimum with of five feet on roads having no curb and gutter. Vehicle lanes shall meet or exceed the minimum width standards.

    - When it is not feasible for the area intended for bicycle travel to meet the minimum width standards, a bicycle lane will not be designated. However, the width of vehicle lanes may be set at minimum standards with the outside lane made as wide as possible.

Policy 1.12

The City shall include sidewalks alongside roadways scheduled for improvements in its Capital improvement Program.

Policy 1.13

The City of Apopka shall, by July 2011, update its Transportation Master Plan, which shall include a transportation corridor right-of-way component. The plan shall be based on the mobility indicators established by the City and shall provide for coordination and provisions

for population density, land uses, trip generators and attractors.

Objective 2

The City of Apopka shall develop and maintain a transportation system that, for planning purposes, should be evaluated based on ~~adheres to established~~ level of service standards ~~Upon adoption of this plan, the level of service standards described~~ established in Policy 2.1 ~~shall become the roadway Level of Service standards for the city, in accordance with the requirements of Chapter 9J-5, Florida Administrative Code and Chapter 163, Part II, Florida Statutes~~.

Policy 2.1

~~Through adoption of this Transportation Element, and the maximum service volumes established in Table 4-4,~~ For planning purposes only, the City of Apopka shall establish that all roads should operate at LOS "E" or better on a ~~following~~ daily and peak hour basis ~~Level of Service standards for roads~~ within the city.~~:~~

- ~~All city "local" facilities shall operate at LOS "CE" or better on a daily and peak hour basis.~~
- ~~All city collector facilities (minor and major) shall operate at LOS "DE" or better on a daily and peak hour basis.~~
- ~~All county minor arterial and collector facilities that are within the city and are not designated as backlogged shall operate at LOS "E" or better on a daily and peak hour basis.~~
- ~~All state principal arterial facilities that are within the city and not classified as backlogged or constrained within a proposed Special Transportation Area shall operate at LOS "DE" or better on a daily and peak hour basis.~~
- ~~All backlogged and constrained facilities shall operate according to the standards set forth in Policies 2.3 and 2.4.~~

Objective ~~2~~3

The City of Apopka shall coordinate with Orange County, MetroPlan Orlando and FDOT to develop an efficient, interconnected roadway network that addresses regional and local traffic circulation needs while respecting environmentally

sensitive lands and the character of surrounding neighborhoods.

Policy ~~2~~3.1

To assess roadway functionality and conditions within the City of Apopka, the City shall continue to conduct regularly scheduled peak hour traffic counts for major arterial, minor arterial and major collector facilities. The most recent traffic count data from FDOT, Orange County and traffic impact studies submitted with development plans shall be utilized and supplemented with additional counts by the City as needed. For state-maintained principal arterials, adherence to specific studies may enhance and supplement roadway capacity analysis.

Policy ~~2~~3.2

The City of Apopka shall seek citizen participation for proposed widening of existing roads or the construction of new roads that are classified as minor collectors or higher.

Policy ~~2~~3.3

Prior to January 2012, the City of Apopka shall coordinate with Orange County to resolve discrepancies of transportation analysis for existing and 2030 conditions, as well as discrepancies in road improvements that have been identified in this element. In addition to the monthly meeting of the MPO Technical Transportation Committee, in which both the City and Orange County participate, the City of Apopka will conduct annual meetings with Orange County to review City and county changes to roadway improvement plans. The City of Apopka will recommend modifications to the county plan and provide information on roadway improvement projects recommended in the City's comprehensive plan.

Policy ~~2~~3.4

By December 2013, the City shall investigate the feasibility of alternative improvements to the existing roadway system, City-wide, such as: intersection improvements, synchronization of traffic signals, traffic calming measures, installing of auxiliary lanes, redesign or realignment of roadways, intelligent transportation initiatives, and improving public transit facilities and

programs.

Policy ~~2~~3.5

Downtown redevelopment master plan efforts and land uses shall coordinate transportation linkage from employment centers and residential areas to the Lynx Super Stop and other transit facilities.

Policy ~~2~~3.6

In order to address the reduction of greenhouse gas emissions, energy conservation and energy-efficient design, the City shall coordinate with MetroPlan Orlando and the ECFRPC to establish transportation demand management programs and transportation system management strategies to modify peak hour travel demand, reduce the number of vehicle miles traveled per capita, improve roadway system efficiency and enhance safety.

Objective ~~3~~4

To discourage urban sprawl, the City of Apopka shall coordinate transportation system improvements through the adopted Future Land Use Map to support existing and projected population densities, housing and employment patterns; and ensure that land development is consistent with existing and proposed transportation facilities.

Policy ~~3~~4.1

The City of Apopka shall designate the Transportation Element as the official Master Transportation Plan for Apopka. The Future Transportation Map series establishes the functional classification of the City's roadway system and its relationship to airports, freight and passenger rail lines, public transit and pedestrian/bicycling facilities within the City limits.

Policy ~~3~~4.2

The City of Apopka shall promote, through the implementation of programs such as mixed-use land development, projects that support reduced travel demand, shorter trip lengths and balanced trip demand.

Policy ~~3~~4.3

By December 2011, the City shall update the Land Development Code (LDC) to include requirements for new commercial developments adjacent to bus stops to provide separated and/or buffered pedestrian ways (e.g. sidewalks, crosswalks) connecting the bus stop to proximate building entrances.

Policy ~~3~~4.4

The City shall require new residential developments with greater than 100 units to provide pedestrian cross-connection walkways to adjacent arterial or collector roadways, taking into account surrounding land uses such as schools, parks, and shopping centers.

Policy ~~3~~4.5

The City will cooperate with transportation agencies and adjacent counties to help ensure the construction of the Wekiva Parkway and associated improvements. The City encourages limited access highway stormwater systems for aquifer recharge, wetland and habitat restoration and as irrigation in lieu of groundwater.

Policy ~~3~~4.6

Within one year after the interchange location is established, the City of Apopka shall adopt an interchange land use plan for any property located within one-mile of a proposed interchange for the Wekiva Parkway. The interchange land use plan shall address appropriate land uses and compatible development, secondary road access, access management, right-of-way protection, vegetation protection, water conserving landscaping, and the height and appearance of structure and signage.

Policy ~~3~~4.7

The City of Apopka shall, when feasible, include the costs of landscape buffer and aesthetic design measures scheduling capital improvements projects for construction of on new road or the of road widening projects through residential neighborhoods.

Policy ~~3~~4.8

The City shall pursue grant opportunities for median landscaping and road beautification.

Policy ~~3~~4.9

The City shall require that new development and redevelopment consider measures that address access management and traffic-calming. Such measures may include the use of curved streets and cul-de-sacs and limited entrances and exits to the subdivision.

Policy ~~3~~4.10
The City shall include landscaping and streetscaping as roadway design components in order to enhance the function of the road for all users.

Policy ~~3~~4.11

The City shall support the development of a financially feasible commuter rail line connecting Apopka to Tavares and Orlando.

Policy ~~3~~4.12

The City shall support the principles of Transit-Oriented Design (TOD), especially within the downtown redevelopment and Town Center areas, and will require proposed developments that are located in the vicinity of planned transit and commuter rail stations to incorporate TOD elements in their site plans.

Policy ~~3~~4.13
The City shall coordinate with LYNX in the following areas:

1. Identify appropriate locations for transit routes, stops, and facilities, taking into consideration affordable housing developments, employment centers and educational or public facilities;

2. Identify locations for park and ride facilities, including the possibility of public/private partnerships or private development of these facilities;

3. Promote regional transit service within the Apopka area by, at minimum, making regional transit service

information available to residents at specified City facilities.

4. Ensure that the design of transit stations and facilities includes security measures and accommodates people with disabilities or special needs

4. Promote integration of bicycle and transit facilities including bicycle racks on buses and locating bus stops that are accessible to trails or bicycle routes.

Policy ~~3~~4.14

The City shall incorporate consideration of transit facilities in the City's site plan review process, including bus stops, bus stop facilities, and transfer facilities. This review process will be coordinated with the regional transit provider.

Policy ~~3~~4.15

The City of Apopka shall require the construction of sidewalks abutting new developments where sidewalks are presently deficient, and shall coordinate with FDOT and Orange County to construct sidewalks where needed, with priority given to linking neighborhoods to schools and community shopping centers

Policy ~~3~~4.16

The City shall coordinate the siting of new, or expansion of existing, airports with the future land use and conservation elements.

Policy ~~3~~4.17

The City shall provide for the mitigation of adverse structural and non-structural impacts from development activities of the airport or associated facilities upon natural resources located within the airport or upon adjacent natural resources and land uses.

Policy ~~3~~4.18

The City shall protect the airport from encroachment of incompatible land uses.

Objective ~~4~~5

The City of Apopka shall coordinate the development of a financially feasible transportation system with the plans and programs of Orange County, MetroPlan Orlando, the Orlando – Orange County Expressway Authority, the Central Florida Transportation Authority, the Florida Statewide Passenger Rail Commission and the FDOT adopted work program consistent with the Florida Transportation Plan.

Policy ~~4~~5.1

Transportation improvements identified in this element shall be incorporated into the City's 5-year capital improvement program on a phased basis.

Policy ~~4~~5.2

The City of Apopka shall coordinate with Orange County, the Florida Department of Transportation and the Orlando-Orange County Expressway Authority in identifying funding sources for road improvements identified in this element for the Apopka area.

Policy ~~4~~5.3

The City of Apopka shall continue to fund road improvement projects through a City-wide impact fee or mobility fee program. The fee rates shall be analyzed and shall be updated at least every five years.

Policy ~~4~~5.4

By July of 2011, the City shall evaluate the establishment of mobility fees to fund mobility strategies and replace the transportation impact fee structure.

Policy ~~4~~5.5

The City of Apopka shall participate on Orange County technical committees in identifying county transportation impact fee projects needed within the Apopka area during each update of the Orange County impact fee program.

Policy ~~4~~5.6

The City of Apopka shall provide procedures for

coordinating with the private development community in the funding and implementation of functionally classified roads identified in this element.

Policy ~~4~~5.7

In the evaluation of alternative road improvements, the City of Apopka shall give priority to alternatives that promote expansion of the Apopka area's collector road system and minimize the need to add lanes to existing roads.

Policy ~~4~~5.8

Prior to approving funding for new road construction projects adding capacity, the City shall first investigate the feasibility of alternative improvements to the existing roadway system such as intersection improvements, multimodal capacity improvements, synchronization of traffic signals, traffic calming measures, installation of auxiliary lanes and the redesign or realignment of roadways.

Policy ~~4~~5.9

The City shall continue to support the construction of the John Land Apopka Expressway (Maitland Boulevard Extension), the Wekiva Parkway and associated projects.

Policy ~~4~~5.10

The City of Apopka shall remain active in transportation planning efforts of the Metropolitan Planning Organization through participation on the MPO's Transportation Technical Committee and Policy Board.

Policy ~~4~~5.11

The City of Apopka shall participate in the public participation and review process provided for the Florida Department of Transportation five-year work program by providing comment on FDOT proposed projects in the Apopka area.

Policy ~~4~~5.12

The City of Apopka shall participate in the public

participation and review process provided for Orlando-Orange County Expressway Authority road projects in the Apopka area.

Policy ~~4~~5.13

The City of Apopka shall participate in safety groups that review and improve pedestrian and intersection problems by participation on various safety meetings.

Policy ~~4~~5.14

The City of Apopka shall coordinate with local and regional public transit providers to provide for safe and efficient public transit terminals and transit services where appropriate, and to provide for the accommodation of special needs of the transportation disadvantaged.

Policy ~~4~~5.15

During the review of the City's transportation network, the City shall analyze any extra-jurisdictional impacts on roadways outside of the corporate City limits including, but not limited to Plymouth Road, State Road 46, State Road 436 and US Highway 441.

Objective ~~5~~6

The City of Apopka shall protect existing rights-of-way from building encroachment and require the reservation of future rights-of-way to the extent permitted by law, to provide for transportation needs within the City.

Policy ~~5~~6.1

The City of Apopka shall adopt typical right-of-way standards for functionally classified roads in accordance with FDOT standards. Variation from the specified typical standards will require approval from the Development Review Committee. Deviation from typical standards will be permitted in areas where redevelopment and historic preservation is being promoted, such as the Apopka Central Business District.

Policy ~~5~~6.2

The City shall develop a priority listing of future rights-of-way needed for the purpose of orderly and economical land acquisition to implement the roadway network illustrated on the four Small Area Conceptual Master Plans discussed in the Future Land Use Element for the purpose of orderly and economical land acquisition.

Policy ~~5~~6.3

The City shall:

1. Require developers to provide for required rights-of-way.

2. Maintain a listing of roadways requiring additional rights-of-way.

3. Require dedication of necessary rights-of-way at time of development.

4. Require building setbacks to adequately protect rights-of-way.

5. Include right-of-way standards and procedures in the LDC.

Policy ~~5~~6.4

Public transit in designated public transportation corridors shall be promoted where appropriate, based on coordination with MetroPlan Orlando and other applicable transit authorities.

Policy ~~5~~6.5

The City of Apopka shall support construction of the Wekiva Parkway through the limitation of development approvals within the proposed alignment, to the extent permitted by law.

Objective ~~6~~7

The City of Apopka shall work toward the implementation of a transportation system that allows for the movement of vehicular traffic on a network that adheres to minimum transportation

planning and engineering design criteria.

Policy ~~6~~7.1

The City of Apopka shall limit access points on principals and minor arterials and collectors through a reduction of median and curb cuts, joint access requirements and use of service roads. FDOT criteria will be incorporated into the City's LDC.

Policy ~~6~~7.2

The City shall continue to require traffic impact studies for development that is projected to generate 400 or more gross daily trips. The Development Review Committee may require a traffic impact study of developments generating less than the daily and peak hour thresholds on a case by case basis.

Policy ~~6~~7.3

New roadway design standards shall, at minimum, be in accordance with those presented in *"A Policy on Geometric Design of Highways and Streets"* (AASHTO, 2004) *"Manual on Uniform Traffic Control Devices"* (FHWA, 2003), and *"Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways"*, State of Florida, FDOT, 2006. Deviation from standards identified in these manuals shall require approval by the Development Review Committee.

Policy ~~6~~7.4

The City shall require the provision of pedestrian and vehicular access to all parts of new development projects. The City of Apopka shall regularly review the Land Development Code to ensure measures are included that enhance the safety of pedestrians and motorists by designing and upgrading systems that reduce conflicts and hazardous conditions. Such measures include crosswalks at intersections, pedestrian actuated features at signalized intersections and curb cut sidewalk ramps. Measures which address vehicular access shall include requirements for safe and convenient on-site traffic flow and parking for new development projects.

Policy ~~6~~7.5

For minor and major collector city facilities, the typical cross section for new and reconstructed roads shall allow for the safe movement of bicycle traffic. The Orange County Parks and Trails Master Bicycle Plan will be reviewed annually to ensure consistency with the Apopka Comprehensive Plan. In addition, the City will continue to cooperate with Orange County in implementing the planned Rails to Trails Bicycle Way by protecting corridors planned within the City.

Policy ~~6~~7.6

The City of Apopka will continue to coordinate with the FDOT to provide emergency vehicle signal preemption control for US 441.

Policy ~~6~~7.7

The City of Apopka shall not accept the transfer of administrative or maintenance responsibilities of county roads that do not meet minimum city design criteria, as specified in the LDC.

Policy ~~6~~7.8

Future developments within the Northwest, West, Plymouth and Expressway Study Areas should be encouraged to follow the grid pattern when proposing new roads to improve traffic flow and connectivity.

Policy ~~6~~7.9

The City of Apopka shall coordinate with the Florida Department of Transportation, MetroPlan Orlando and other governmental agencies to facilitate local traffic to use alternatives to the Florida Intrastate Highway System (FIHS) to protect its interregional and intrastate functions. These techniques shall be included in the updated Transportation Master Plan.

Objective ~~7~~8

The City of Apopka shall coordinate vehicular, public transit and bicycle/pedestrian access to airports and rail facilities with the facilities shown on the transportation map series.

Policy ~~7~~8.1

The City shall coordinate roadway, transit and bicycle/pedestrian improvements with the future needs of airports and passenger rail lines.

Policy ~~7~~8.2

The City shall coordinate with MetroPlan Orlando, the Apopka-Orlando Airport, LYNX and the Florida Statewide Passenger Rail Commission to develop strategies to address intermodal terminals and access to airport and rail facilities.

Objective ~~8~~9

The City of Apopka shall support mobility City-wide through strategies that address alternative modes of transportation by providing context-appropriate sidewalks, bikeways, transit facilities, parking management and improvements that will contribute to specific and identified mobility needs within the City. Mobility strategies and standards shall be used in the interim prior to the adoption of the City's Mobility Plan, estimated by July 9, 2011.

Policy ~~8~~9.1

Transportation concurrency exceptions on roadways shall not exempt development from meeting policy requirements established to address mobility needs within the City.

Policy ~~8~~9.2

Although development is exempt from transportation concurrency, new development or redevelopment must submit a Traffic Analysis Impact Study to determine impacts of the development, if the development is projected to generate 400 or more gross daily trips.

Policy ~~8~~9.3

The City shall require the provision of transportation modifications that are necessary due to traffic safety and/or roadway operating conditions. Any such modification shall not count towards meeting the mobility standards required for that development.

Policy ~~8~~9.4

Proposed development generating more than 1,000 net, new average daily trips and located within one (1) mile of an SIS or FIHS interchange shall include an interchange ramp study that assesses potential impacts to SIS and FIHS facilities.

Policy ~~8~~9.5

Funding mobility strategies shall be provided through developer contribution to the maximum extent feasible, mobility fees, the County, state and federal government and other outside sources such as grant funds.

Policy ~~8~~9.6

The following table provides the net new average daily trip generation thresholds for the corresponding minimum required amount of mobility standards for a development.

Net, new average daily trip generation	**Number of Mobility Standards which must be met**
0 to 9	Zero (0)
10 to 49	At least 1 Mobility Standard
50 to 99	At least 3 Mobility Standards
100 to 399	At least 5 Mobility Standards
400 to 999	At least 7 Mobility Standards
1,000 to 4,999	At least 12 Mobility Standards
5,000 or greater	At least 18 Mobility Standards and either be on an existing transit route or provide funding for a new transit route.

Policy ~~8~~9.7

Development or redevelopment shall be required to meet the following Mobility Standards, at the developer’s expense,

based on the development's trip generation and proportional impact on roadway facilities.

a) Intersection and/or signalization modifications to improve level of service and safety and address congestion management. This may include, but is not limited to: signal timing studies, fiber optic inter-connection for traffic signals, roundabouts, OPTICOM signal preemption, and/or implementation of Intelligent Transportation System (ITS) features such as state of the art traffic signal controllers, dynamic message signs and traffic monitoring cameras designed to maximize the efficiency of the roadway network by reducing congestion and delay.

b) Addition of dedicated turn lanes into and out of the development.

c) Construction of bus shelters and/or the addition of bus shelter lighting using solar technology designed and constructed to the Central Florida Regional Transportation Authority (LYNX) specifications.

d) Construction of bus turn-out facilities.

e) Provision of bus pass programs provided to residents and/or employees of a development. The bus passes must be negotiated as part of a contract with the Central Florida Regional Transportation Authority, and approved by the City.

f) Payments to the City, with satisfactory conditions will be transferred to the Central Florida Regional Transportation Authority, which either increase service frequency or add new bus service.

g) Construction of off-site public sidewalks to complete sidewalk connectivity. Sidewalk construction required to meet the Land Development Code requirements along property frontages shall not count as meeting this Mobility Standard.

h) Widening of existing public sidewalks to increase pedestrian mobility, comfort and safety.

i) Deeding of land for the addition and construction of bicycle lanes to City specifications.

j) Provision of ride sharing or van pooling programs.

k) Provision of park and ride facilities.

l) Funding of streetscaping/landscaping (including pedestrian scale lighting, where relevant) on public right-of-ways or medians.

m) Buildings with architectural features that provide significant shading and weather protection (e.g. canopies, awnings, colonnades) over sidewalks to promote pedestrian mobility.

n) Provision of additional bicycle parking over the minimum required by the Land Development Code. The bicycle parking shall be located convenient to the entrance of primary buildings and covered, where practicable.

o) Removal of non-conforming signage, billboards, and signage that impedes pedestrian movement at the site.

p) Enhancements to the City's system of greenways, bike paths, and trails which increase the system's utility for multi-modal transportation. Such enhancements may include, but not be limited to:

1. Trail amenities such as benches, directional signage, or safety systems;
2. Bicycle parking at entry points or connecting with transit lines;
3. Land acquisition for expansion or better connectivity of the trail system;
4. Additional entry points to the trail system;
5. Bridges spanning creeks or wetland areas; and/or,
6. Appropriate trail surfacing.

q) Development of, or participation in, a Transportation Demand Management (TDM) program that provides funding or incentives for transportation modes other than single occupant vehicle to reduce Vehicle Miles Traveled (VMT). Such TDM programs shall utilize a methodology approved by the City and may require performance monitoring and reporting.

r) Develop the project at or near maximum densities and intensities with transit-supportive building and site design.

s) New roadway facilities that provide a more interconnected transportation network in the City and/or provide alternate routes to reduce congestion. These types of facilities include, but are not limited to State and County arterials and collectors, and may include projects outside the limits of the City that can be demonstrated to be a direct benefit to the City's transportation system.

t) Developers may deed land for right of way and/or construct roadway extensions to City specifications.

u) Addition of lanes on existing road facilities, where acceptable to the City.

v) An innovative transportation-related modification, VMT reduction program or Mobility Standard submitted by the developer, where acceptable to and approved by the City.

Policy ~~8~~9.8

The developer may choose to provide one or more Mobility Standard(s) off-site with the City's approval. The Mobility Standard(s) chosen shall be subject to the final approval of the City during the plan approval process. Mobility Standards shall relate to the particular site, transportation conditions, special characteristics and needs of the specific area where the development is located.

Policy ~~8~~9.9

The City shall amend the Concurrency Management section and any other relevant sections of the Land Development Code to reflect the adoption of the Mobility Standards and include funding for alternative transportation improvements.

Policy ~~8~~9.10

Developments approved prior to the adoption of the Mobility Standards shall be required to provide any transportation improvements, modifications or mitigation required as part of the development plan approval unless an amendment is made to the development plan and the previously approved improvements, modifications, or mitigation are inconsistent with current design standards or other adopted policies. Amendments to development plans made after the adoption of the Mobility Standards shall be required to meet the mobility policies.

Policy ~~8~~9.11

On an annual basis, the City shall monitor and evaluate the impacts of approved development on adjacent city or adjacent county-maintained roads and share that information with the adjacent city or county.

Policy ~~8~~9.12

The City shall evaluate the effectiveness of the TCEA every seven years as part of the Evaluation and Appraisal Report (EAR).

Policy ~~8~~9.13

The City shall monitor the success of the Mobility Strategies using the following performance measures. Evaluation of these performance measures shall occur with the next Evaluation and Appraisal Report of the City of Apopka Comprehensive Plan. Any recommendations to refine the mobility strategies shall occur through EAR-based amendments.

Mobility Strategy	**Performance Measure***	**Target***
Support alternative modes of transportation	Transit shelters in the City	Increase number of bus shelters by 1 per year
Support alternative modes of transportation	Sidewalk coverage near transit stops in the City	Increase percentage of sidewalks by 10 percent by next EAR on roadways within ¼ mile of bus stops
Urban design and land use mix	Dwelling units near non-residential land use	Increase percentage of dwelling units within ¼ mile of non-residential land uses by 5 percent by next EAR
Urban design and land use mix	Accidents involving pedestrians and bicyclists in the City	Reduce annual number of accidents involving pedestrians and bicyclists in the City
Transportation Demand Management	Persons participating in ridesharing or vanpooling programs	3% annual increase of participants
Transportation	Number of	3% annual increase

Mobility Strategy	Performance Measure*	Target*
Demand Management	businesses/employers offering flexible work schedules	of participants
Transportation Demand Management	Implementation of transit pass programs and number of participants (businesses and individual)	5% annual increase after implementation
Transportation Demand Management	Number of bus turn-out facilities (at locations desired by LYNX)	1 per 3 years as coordinated with LYNX
Transportation Demand Management	Number of improved and/or new bus shelters on LYNX routes within the City	1 improved and/or new shelter each year
Transportation network connectivity	Amount of sidewalks added and/or expanded to the network in the City	500 linear feet of sidewalk per year
Transportation network connectivity	Linear feet of streetscaping/landscaping which enhances the pedestrian environment	500 feet per year
Transportation network connectivity	Number of crosswalks in the City	1 per project generating > 5,000 net new daily trips
Transportation network connectivity	Traffic counts and queue lengths at SIS and FIHS ramps located in or near the City	The City shall coordinate with FDOT to monitor traffic counts and queue lengths at SIS and FIHS ramps located in or near the City annually.
SIS and FIHS Facilities	Number of bicycle stalls/lockers and related amenities for projects within the City	1 bicycle stall/locker for every 100 vehicle parking spaces provided within the City for redevelopment and new development
Bicycle Facilities Enhancement	Linear feet of bicycle lanes and related facilities in the City	Bicycle lanes and related facilities including bicycle

Mobility Strategy	Performance Measure*	Target*
		provisions at intersections as part of programmed street resurfacing and/or rehabilitation (where feasible)
Multi-Modal Transportation	Change in ridership, including boardings/alightings for LYNX routes within the City	1% annual increase
Multi-Modal Transportation	Change in headways for LYNX routes within the City	10-minute minimum headway decrease every 5 years
Multi-Modal Transportation	Commuter Rail ridership (change in ridership will be reported in subsequent years after the implementation of the service)	3% annual increase each year after implementation
Multi-Modal Transportation	Apopka Commuter Rail Station boardings/alightings	3% annual increase each year after implementation
Multi-Modal Transportation	Proposed trip generation from redevelopment/new developments versus actual traffic counts on adjacent roadways	Achieve a 5% reduction in actual traffic counts versus trip generation projections
Multi-Modal Transportation	Change in daily and peak hour traffic volumes on US 441	Achieve less than 1% annual increase

* Performance measures and targets may be subject to further consideration (i.e., if these performance measures and targets cannot be supported by reasonably available data or additional measures are identified that may also be appropriate).

City of Apopka

Comprehensive Plan 2030

Infrastructure Element

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INFRASTRUCTURE ELEMENT

INTRODUCTION

PURPOSE AND SCOPE

The purpose of the Infrastructure Element is to provide for necessary public facilities and services correlated to future land use projections. This element addresses potable water, sanitary sewer, stormwater management and solid waste facilities provided by the City of Apopka within its corporate limits or within an established service area. This element also identifies areas of prime or high natural groundwater aquifer recharge areas and the City's programs to protect the function of these areas.

For the purposes of the Infrastructure Element, the population projections used to estimate future demands on the facilities are developed for the entire area located within the utility service area. An explanation of the methodologies used is provided in the Future Land Use Element.

REGULATORY FRAMEWORK

The enforcement of potable water, sanitary sewer and stormwater management infrastructure falls under the regulatory framework of three government agencies - the Florida Department of Environmental Protection (FDEP), the St. Johns River Water Management District (SJRWMD), and the Florida Department of Health (FDOH).

Florida Department of Environmental Protection (FDEP)

To assure that public water systems supply drinking water which meets minimum requirements, the federal government enacted PL 93-523, the "Safe Drinking Water Act." The Florida Legislature enacted the "Florida Safe Drinking Water Act," sections 403.850-4 03.864, Florida Statutes (F.S.). Chapter 62-550, Florida Administrative Code (F.A.C.), sets the drinking water standards, monitoring requirements and treatment techniques to be met by public water systems and the testing protocol required for certified laboratories.

According to Chapter 403, F.S. unless exempted by rule or statute, any facility or activity that discharges wastes into waters of the state or which will reasonably be expected to be a source of water pollution must obtain a permit from the FDEP. Generally, persons who intend to collect, transmit, treat, dispose or reuse wastewater are required to obtain a wastewater permit. A wastewater permit issued by the FDEP is required for both operation and certain construction activities associated with domestic or industrial

wastewater facilities or activities. A FDEP permit must also be obtained prior to construction of a domestic wastewater collection and transmission system.

Wastewater facilities that are authorized to discharge to surface water are subject to the FDEP's federally authorized National Pollutant Discharge Elimination System (NPDES) permitting requirements. However, many of these NPDES facilities also discharge to groundwater. The remaining facilities are authorized solely as groundwater discharges through land-application, beneficial reuse of reclaimed water or deep well injection.

St. Johns River Water Management District (SJRWMD)

The rules in Chapter 40C-20, F.A.C., establish a general consumptive use permitting program for certain water uses whose adverse impact, either singly or cumulatively, on the water resources of the District is determined to be minimal. Consumptive uses of waters which are non-exempt, which do not exceed 500,000 gallons per day calculated as an annual average, and which do not qualify for a general permit by rule under section 40C-2.042, F.A.C., or a noticed general permit under Chapter 40C-22, F.A.C., require a standard general permit under this chapter.

Florida Department of Health

Section 381.261, F.S., gives general supervision and control over all private water systems and public water systems not covered or included in the Florida Safe Drinking Water Act to the Department of Health (DOH). The DOH interprets this as meaning that it has supervision and control of all water systems which meet all of the four exception criteria and which also have at least 15 service connections or which regularly serve at least 25 individuals daily at least 60 days out of the year. The DOH also interprets Section 381.261, F.S., as meaning that it has supervision and control of all water systems that have less than 15 service connections or which regularly serve less than 25 individuals daily at least 60 days out of the year, or at least 25 individuals daily less than 60 days out of the year.

UTILITY SERVICE AREA

The City of Apopka provides potable water and sanitary sewer collection, treatment and distribution to its municipal limits and to lands outside of the City boundary within its utility service area that includes adjacent unincorporated areas. The current boundary of the water service area is shown in **Map 4-1** while the sanitary sewer service area is shown in **Map 4-2**. The utility service area boundary was established in the "City of Apopka/Orange

County Amended and Restated Water, Wastewater, and Reclaimed Water dated December 16, 2004. The agreement also allows for the expansion of the service area should the City limits expand beyond the area delineated. Other exceptions dealing with existing service and the ability to provide service are incorporated into the interlocal agreement. The County may also serve utility customers within the Adjacent Territorial Area even after they are annex into the City of Apopka. Currently there is a small area that is served by the County within the City limits. Water demands for this area are not calculated within the City of Apopka calculations because they are calculated within Orange County calculations. The agreement does not address stormwater management and solid waste services. The City of Apopka does not reserve future water and sewer capacity for specific uses within the City or in the Orange County portions of the utility service area. Capacities in the water and sewer system are allocated by the City as applications are received for capacity irrespective of the applicant's location within the utility service area.

POTABLE WATER SUB-ELEMENT

INTRODUCTION

The traditional source of drinking water for Central Florida has been the Floridan aquifer, an artesian aquifer that covers approximately 100,000 square miles and supplies the state with its potable water. As with all sources of fresh water, the Floridan aquifer is a limited resource. Due to the unprecedented growth seen throughout the state, four of the five water management districts have acknowledged there is soon to be a significant shortage between the potable water demand and available supply.

As a result, the Florida Legislature enacted bills in 2002, 2004 and 2005 that essentially require conformity between all future land use planning and water supply planning. Based on the most recent legislation, all local governments were required to revise their comprehensive plans after the approval of the regional water supply plan. The city's water supply facilities work plan has been updated and addresses the future needs of the City through 2030.

EXISTING WATER SYSTEM CONDITIONS

OPERATIONAL RESPONSIBILITY

The City of Apopka owns, operates and maintains five water plants having an interconnected water distribution system. The City's water system has two important purposes including the provision of water for human consumption and the provision of water for fire fighting purposes. The City Public Services Department is responsible for the operations and maintenance of the central public water system

SERVICE AREA AND PREDOMINANT USERS

The utility service area for Apopka's water system is described in the Introduction to this element and shown in **Map 4-1**.

The City serviced approximately 47,570 water customers in 2006. **Table 4-1** identifies the water use by customer type in 2008, with residential use the largest consumer. **Table 4-2** lists the predominant potable water users in 2008 in the utility service area.

TABLE 4-1: 2008 WATER USE BY CUSTOMER TYPE

Type of User	Water Consumption mgal	Water Consumption mgd	Percentage of Total Consumption
Single Family Residential	2095.109[1]	5.74	80.0%
Multi-Family	33.096	0.09	1.3%
Commercial	385.385	1.06	14.7%
Irrigation	107.547[2]	0.29	4.0%
Totals	**2621.137**[3]	**7.18**	**100.0%**

SOURCE: CITY OF APOPKA DECEMBER 17, 2009

[1]Includes Residential Irrigation Demand
[2]Represents Multi-Family and Commercial Irrigation
[3]By the end of 1st Quarter 2008 the City Completed the Automated Meter Reading (AMR) Change Out Program with the Exception of Some Large Meters

TABLE 4-2: 2008 PREDOMINANT WATER USERS

User	Water Consumption mgal
Zellwood Station Association	111.498
Triquint	35.724
Willow Lake Apartments	28.346
Piedmont Lakes Middle School	15.179
Palmetto Bay Associates AKA: Orange North Apartments	10.756
Palm Key Apartments	9.545
Cocoa Cola	8.342
Wolfe Lake Middle School	7.961
World O'Suds Laundry	7.261
Apopka High School	7.008
Totals	**242.620**

Source: City of Apopka December 17, 2009

PUBLIC WATER SYSTEM FACILITIES

The City's public water system has three major components: 1) water production; 2) treatment; and 3) pumping. The locations of the City's water plants are shown in **Map 4-1**. The system is comprised of five water plants and the associated storage and distribution facilities. The City provides all potable and reclaimed water within the utility service area.=
The largest water plant located within the Apopka City limits is the Jack G. Grossenbacher Water Plant, which was expanded and upgraded in 1986 and is located near Park Avenue just north of the intersection with Martin Street. The other water plant located within the City's municipal boundaries is the Sheeler Oaks Water Plant, which is located in the Sheeler Oaks subdivision and was constructed in 1984. The City constructed its newest water plant, the Myrtle Rogers Womble Water Plant (previously known as the Northwest Water Plant) in 1999, which is located at 3100 Pitman Road in the northwestern part of the City.

With the purchase of Plymouth Regional and Mount Plymouth Lakes water facilities from Orange County, two additional water plants were added to the Apopka system. The Plymouth Regional water plant is located in the western portion of the utility service area and currently serves a few small residential communities as well as commercial and industrial users along West Orange Blossom Trail. The Mount Plymouth Lakes water plant is located in the northeastern portion of the service area and currently serves several small residential communities near the Wekiva Springs State Park.

Table 4-3 summarizes the facilities at each of the City's water plants. All raw water is obtained from deep wells except one well at Grossenbacher Water Plant, the three wells at Plymouth Regional and the two wells at Mount Plymouth. All of the water plants operated by the City provide chlorination treatment for disinfection. Like most wells drilled into the Floridan aquifer in the central Florida area, hydrogen sulfide is present in the City's well water. The Myrtle Rogers Womble, Mount Plymouth, Sheeler Oaks and Grossenbacher plants provide aeration and detention treatment for hydrogen sulfide removal. Water is pumped out of the wells, through an aeration device and into the storage tanks. Water is pumped from the storage tanks into the water distribution system by the high service pumps.

TABLE 4-3: SUMMARY OF EXISTING WATER FACILITIES

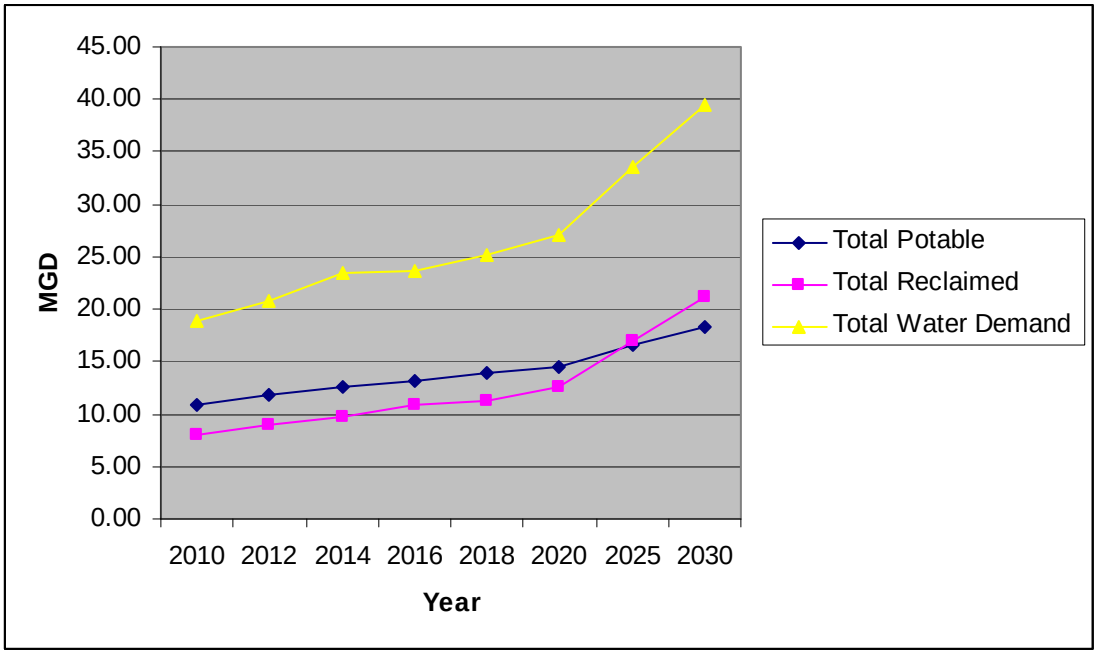
Plant	Rated Well Pump Capacity (gpm)	Well Casing Size (in)	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Total High Service Firm Pumping Capacity (gpm)	Type of Storage	Storage Capacity (mgal)	Treatment
Myrtle Rogers Womble	3,500 3,500	24 24	2,500 2,500	5,000	2,500	Ground	1.0	Aeration Chlorination
Grossenbacher	1,000 3,500 3,500	12 20 20	2,400 3,500 3,500 3,500	12,900	9,400	Ground	0.5 1.0	Aeration Chlorination
Sheeler Oaks	2,500 2,500	18 18	1,950 1,950 1,500 1,250	6,650	4,700	Ground	1.0	Aeration Chlorination
Plymouth Regional	400 500 500	8 14 14	1,800 1,800 400 400	4,400	2,600	Ground	0.75	Chlorination
Mount Plymouth	1,000 1,000	12 10	1,000 1,000 1,000 580	3,580	2,580	Ground	0.5	Aeration Chlorination
Total System	**23,400**			**32,530**	**21,780**		**4.75**	

Storage is an important component of the City's water system. The Grossenbacher plant has 1.5 million gallons of storage capacity, the Sheeler Oaks Plant has 1.0 million gallons of storage and the myrtle Rogers Womble Plant has 1.0 million gallons of storage. Plymouth Regional has 0.75 million gallons and Mouth Plymouth Lakes has a 0.50-million gallon storage capacity. All of the City's storage capacity is provided by reinforced concrete tanks. The water in these tanks is available for emergency conditions such as fire flow demands and for operational purposes. There are a total of six ground storage tanks within the City’s distribution systems with a combined capacity of 4.75 million gallons.

The City's water plants are interconnected by pipes in the distribution system. If a single plant is temporarily out of service, water can generally be supplied to that plant's service area from the other water plant. The City has a Consumptive Use Permit (CUP) issued by the St. Johns River Water Management District for withdrawal of groundwater in the amount of 10.358 million gallons per year, which equates to an average withdrawal rate of 3,780.70 million gallons per day (mgd). Per the Water Supply Facilities Work Plan, 2008, the City has a CUP from the District for its potable water system. The CUP has been recently negotiated to combine Permit numbers 3217, 50172, and 100495 under one CUP numbered 3217. The City's CUP is currently approved by SJRWMD on a year-to-year basis until the review process and final approval is completed. The projected average day demand rate during calendar year 2008 was 7.307 mgd. The renewal of the CUP is under review by the SJRWMD.

Water plants are designed to supply and treat the maximum daily flow of water. Generally, the capacity of a water plant is determined by well capacity or treatment capacity. The capacity of the City's water plants is presently determined by well capacity. The City's total estimated well capacity in 2008 was 23,400 gpm or 33.70 mgd. The maximum daily flow recorded in2009 was 14.677 mgd. **Figure 4 1** provides a summary of the maximum daily flows.

FIGURE 4 - 1: WATER DEMAND SUMMARY



The high service pumps located at each water plant are used to maintain water pressure by pumping water into the distribution system. High service pump capacity is usually rated by assuming that the largest pump is out of service. This is done to provide a better degree of reliability for the water system. In addition to normal demands for water, the high service pumps must also be capable of sustaining emergency water demands for fire fighting purposes. Emergency power generators are located at each of the water plants to provide limited capacity during a power outage.

The quality of the water produced by the City is monitored by the Florida Department of Environmental Protection (FDEP). At regular intervals, the City submits monitoring reports to the FDEP in accordance with state regulations.

The expected service life for the reinforced concrete structures and buildings at the water plants is 30 to 50 years depending on the level of maintenance provided. The expected service life for the mechanical equipment such as the high service pumps is 15 to 20 years depending on the level of maintenance provided. Some equipment items may have to be replaced more frequently as part of routine maintenance.

DISTRIBUTION SYSTEM

The existing water distribution system contains pipes ranging in diameter from three inches to 36 inches, fire hydrants and isolation valves. Generally, water mains installed in recent years have been 6 inches or larger in diameter. Ductile iron (DIP, high density polyethylene (HDPE) and polyvinyl chloride (PVC) are the pipe materials that are currently used for the City's water mains.

The service life for water mains is variable and depends on pipe material, soil conditions, construction methods and other factors. Generally, the majority of the pipes that compose the City's water system are expected to have a remaining useful life of 20 to 50 years.

OPERATION AND MAINTENANCE

Proper operations and maintenance are essential to providing a safe and reliable water system. The City's water facilities are operated and maintained under the supervision of operators who are certified by the State of Florida.

City crews routinely exercise valves in the water distribution system by opening and closing the valve through several cycles. Valves that do not operate freely are repaired or replaced. Routine flushing of water pipes is another technique the City uses to obtain better performance from the water distribution system. Cleaning the pipes by flushing removes materials that may restrict flow.

UNACCOUNTED-FOR WATER

Unaccounted-for water is the difference between the volume of water pumped into the water distribution system and the volume of water billed. For medium-sized water systems, a commonly accepted range for unaccounted-for water is 10 to 15 percent of the total water pumped. During 2009, the average daily volume of water that was pumped into the water distribution system was 7.571 million gallons. However, the average daily volume of water billed (household and commercial/industrial) and used by unmetered services such as fire protection and utility main flushing during 2009 was 6.905 million gallons. The unaccounted for water in 2009 was 0.666 mgd. This level of unaccounted-for water falls within the accepted range.

There are several potential reasons for unaccounted-for water including the following:

- Non-metered illicit connections;

- Leakages in the water distribution system; and

- Improperly working water meters.

Although unaccounted-for water falls within the acceptable range, the City has taken the following steps to improve the accountability of water:

- Institution of a leakage detection program;

- Institution of an automatic meter reading (AMR) meter change-out programs for all users;

- Annual calibration of the flow meters at the water plants; and

- Elimination of non-permitted connections.

There are tangible benefits to reducing unaccounted-for water. If it is discovered that pipeline leakage is a major component of the unaccounted-for water and that there are cost-effective repairs to eliminate the leakage, then significant water recovery potentially can be realized. This recovered water can then be used to satisfy future water demands.

In 2007, the City took further steps to address potential customer water leaks and other unaccounted-for water anomalies by implementing access to the user's account with a two-year history record. The City replaced the "touch-and-read" meters with advanced technology automatic meter reading (AMR) radio meters. Utility customers can review billing records in real time to evaluate water consumption, thereby encouraging water conservation practices.

WATER CONSERVATION

Water conservation can be beneficial in several ways. These include:

- Prolonged ability of existing water treatment and distribution facilities to meet future needs; and

- Potential reduction in the volume of water entering the sewer system, which prolongs the ability of wastewater collection, treatment and reclamation facilities to meet future needs.

Water conservation can be accomplished using a variety of techniques. Generally, a water conservation plan is prepared that identifies the most cost-effective water conservation measures for

a particular situation. Some of the most common water conservation measures include the following:

- Public education programs on wise water use and conservation, including public education programs on the use of drought tolerant landscape materials;

- Retrofitting existing homes and buildings with flow limitingevices;

- Requiring new construction to use water saving plumbing fixtures; and

- Structuring water rates so that excessive users of water are penalized.

The City supports the need to conserve water resources and has submitted a formal water conservation plan as part of the CUP requirements. In May 2008, the City adopted its landscape ordinance to include water-wise irrigation practices and the application of Florida-friendly landscape practices.

AQUIFER RECHARGE AND WELL HEAD PROTECTION

The City relies on the Floridan aquifer for water supply, thus, protection of recharge areas and the protection of groundwater quality are prime concerns of the City. The Floridan aquifer is primarily recharged by rainfall. Direct rainfall and stormwater runoff migrates downward through the porous soils to replenish the groundwater. Recharge areas typically are characterized by well drained soils, which also tend to be well suited for development. However, development potentially restricts recharge capacity by covering the land with impervious surfaces such as roads, parking lots and buildings. The City has adopted SJRWMD’s regulation for groundwater recharge requirements.

Generally, wellhead protection is concerned with regulating potential sources of groundwater contamination in the vicinity of water supply wells. Some business activities require the use of chemicals and the disposal of wastes. There is a potential for groundwater contamination by the improper use of chemicals and/or the improper disposal of chemicals and wastes. The City has adopted an ordinance to regulate land use and/or business activity in the vicinity of water supply wells to minimize potential threats to the quality of the groundwater.

FINANCING AND IMPLEMENTING WATER SYSTEM EXPANSION

Historically, the City's water distribution system has been expanded in accordance with the 2005 Water Master Plan Update.

Generally, expansions that are needed by new growth have been paid for by the developer. If a water main must be extended to serve a new development project and it is considered cost effective, the City may enter into a pipe oversizing agreement with the developer to have the water main constructed at the size called for in the water master plan. Typically, under such oversizing agreements, the City pays only for the difference in the cost of materials between the pipe size needed to serve the development project and the pipe size called for in the master plan.

All costs associated with the water distribution system within a development site are the responsibility of the developer and must be designed and constructed in accordance with the Apopka Land Development Code (LDC). The City takes ownership and the maintenance of the on-site facilities after they have been dedicated to the City by the developer.

The City collects impact fees from developers to pay for the design and construction of new water treatment facilities. Fees are also collected by the City to set water meters and activate service. Operations and maintenance costs for the water system are recovered through the City's water rate structure.

POTABLE WATER DATA AND ANALYSIS

EVALUATION OF THE EXISTING WATER DISTRIBUTION SYSTEM

The City's Fire Department has a goal of providing fire flows of 4000 gpm in light commercial and 6000 gpm in heavy commercial or industrial areas. The Fire Department monitors the fire flow capacity of the water distribution system through a fire hydrant testing program.

Fire flows are an important parameter that must be considered when establishing design criteria for new water system facilities. Generally, they are determined using guidelines published by the Insurance Service Office (ISO), a fire insurance rating organization.

EXISTING LEVEL OF SERVICE

A convenient method for the expression of the level of service for the water system is in terms of gallons furnished per person. **Table 4-4** contains the methodology that was used to develop an estimate of the level of service provided in 2004, 2005 and 2006 the level of service average was 153 gallons per capita per day (gpcd). It is important to note that flows expressed as gpcd include water use by all categories including residential; commercial/industrial/office; public use and unaccounted for water.

TABLE 4-4: SUMMARY OF EXISTING PER CAPITA WATER FLOWS

(a)	(b)	(c)	(d)	(e)	(f)
Year	**Average No. Residential Units (1)**	**Estimated No. of Persons Per Residential Unit**	**Estimated No. of Persons Served (c)x(b)**	**Estimated System Average Daily Flow (mgd) (2)**	**Per Capita Flow (e/d) (gpcd) (2)**
2007	20,088	2.80	56,246	8.537	152
2008	18,691	2.80	52,335	8.202	157
2009	18,774	2.80	52,567	7.565	144
				Average	151

(1) Includes multi-family units. Represents an estimate of the average number of residential units connected to the water system
(2) Includes Residential, commercial/industrial, common area irrigation, fire, water utility and unaccounted water demands

Source: City of Apopka Public Service Department

DEVELOPMENT OF FUTURE LEVELS OF SERVICE

The future level of service provided by the City's water system will be influenced to some degree by the following:

- The effects of conservation on water consumption,

- The consumption of water by commercial, office and industrial users, and

- The amount of unaccounted for water.

EXISTING RESIDENTIAL WATER USE

Based on water usage in 2006, approximately 85.80 percent of the water pumped was used for residential purposes. Thus, residential use was approximately 132 gpcd during 2006. It is anticipated that water conservation will decrease the rate of usage in the future. The City will continue implementation of the water conservation plan. **TABLE 5** shows the projected future residential demands for water.

TABLE 4-5: PROJECTED POTABLE WATER SUPPLY SOURCES

Year	Average Daily Flows			Maximum Daily Flows		
	Projected Flow ADF (MGD)	Existing Floridan Aquifer Supply (MGD)	Other Supplies Needed (MGD)	Projected Flow MDF (MGD)	Existing Floridan Aquifer Supply (MGD)	Other Supplies Needed (MGD)
2010	10.925	33.7	0	27.313	33.7	0
2013	12.114	33.7	0	30.285	33.7	0
2015	12.912	38.74	0	32.280	38.74	0
2020	14.542	38.74	0	36.355	38.74	0
2025	16.607	48.82	0	41.518	48.82	0
2030	18.279	48.82	0	45.698	48.82	0

Source: Water Supply Facilities Work Plan, 2010

Table 4-6 summarizes the methodology used to project residential water consumption. The projections in **Table 4-6** are based on the following assumptions:

- Consistent with the SJRWMD water use criteria for public supply.
- Lower than historical per capita use rates, based on past planning efforts.
- Consistent with the City's commitment for the use of reclaimed water and alternative sources of water irrigation.
- Reflection of the trend toward more aggressive water conservation initiatives.

TABLE 4-6: SUMMARY OF WATER USAGE

	2010	2015	2020	2025	2030
Residential Water Use (MGD)	8.230	9.740	10.970	12.550	13.840
Commercial/Industrial Office Water Use (MGD)	1.312	1.553	1.749	2.001	2.206
Irrigation Urban Landscape or Common Areas (MGD)	0.082	0.097	0.110	0.126	0.138
Water Utility (MGD)	0.160	0.189	0.213	0.243	0.268
Unaccounted for Water (MGD)	0.721	0.853	0.960	1.097	1.207
Zellwood Station (MGD)	0.420	0.480	0.540	0.590	0.620
Projected Average Daily Flow (MGD)	10.925	12.912	14.542	16.607	18.279
Projected Maximum	27.313	32.280	36.355	41.518	45.698

Daily Flow (MGD)					
Projected Peak Hourly Flow (4 x ADF) (MGD)	43.700	51.680	58.168	66.428	73.116

Source: Water Supply Facilities Work Plan 2008

COMMERCIAL/INDUSTRIAL/OFFICE WATER USE PROJECTIONS

In order to project water use in this category, it was necessary to develop rates that express water usage. Based on the 2010=Water Supply Facilities Work Plan, approximately 1.312=mgd of water was projected in 2010 for this category which counts for 12 percent of the total average daily flows. For planning purposes, we assume the same percentage flows for Years 2010, 2015, 2020, and 2030. An extrapolation from projections of building square footage for the planning period indicate that approximately how much square feet of building area were occupied in the City during 2008. Therefore, commercial, industrial and office users consumed water at an approximate rate of 211 gallons per thousand square feet (400,000 gallons per day vs 1,900 thousand square feet). For planning purposes, a rate of 200 gpd/1,000 square feet was selected to project water usage in the Commercial/Industrial/Office (C/I/O) category.

Generally, businesses have financial incentives to minimize water consumption. Water conservation helps to reduce the cost of their operation and to minimize the amount of wastewater they generate. A reduction in water use due to water conservation in the C/I/O category has not been incorporated into the water use projections.

UNACCOUNTED-FOR WATER

Unaccounted-for water must also be included in the water use projections. In 2009 unaccounted for water was 0.666 mgd out of a total of 7.571 =mgd or 8.80 percent. The percent unaccounted water is very low; therefore, it was assumed that the percentage of unaccounted for water will remain the same over the planning period as follows:

Year	Unaccounted-for Water
2015=	6.61 %
2020	6.60 %

Source: Table 2A, June 2010, CUP Application

FUTURE DEMAND FACTORS

The maximum daily flow (MDF) and peak hourly flow (PHF) are

important flow parameters for a water system. As previously mentioned, the City's water production and high service pump capacities must be equal to or greater than the MDF and the PHF, respectively. Typically, as a water system enlarges, the MDFs and PHFs will not be as pronounced when compared to the average daily flow (ADF). Therefore, the factors that were used to project maximum daily and peak hourly flows decrease slightly through the planning period as follows:

Year	MDF (MGD)	PHF (MGD)
2010	27.313	43.700
2015	32.280	51.680
2020	36.355	58.168
2025	41.518	66.426
2030	45.698	73.116

TOTAL WATER USAGE PROJECTIONS

Water use projections for the utility service area must consider residential use, commercial/industrial/office use, unaccounted-for water, public use and the demand factors. For 2010, the projected daily flow for water utility use was approximately 0.160 mgd. Water Utility use refers to water that is used by the water and fire departments. It will be assumed that water utility use will stay constant at 1.46% of ADF throughout the 20-year planning period. **Table 4-6** is a summary of the water usage projections for the utility service area.

DISCUSSION OF FUTURE LEVELS OF SERVICE - WATER

Projected levels of service for the planning period are summarized in **Table 4-7**. The projected levels of service are from 177 in 2010 to 137 in 2030. The decreasing trend in level of service is a direct effect of the estimated impact of water conservation on water demands through the planning period. The levels of service listed in Table 4-7 were used in the preparation of the update to the water master plan. Therefore, the City's future water system has been designed, on a conceptual basis, to provide the projected levels of service found in **Table 4-7**. Accordingly, it appears that the targeted level of service for the utility service area would be 154 gpcd by 2020 and further reduced to 137 gpcd by the year 2030.

The minimum level of service adopted by the City of Apopka will have to be evaluated in the future. As the comprehensive plan is implemented by the City, the level of service will be reviewed and adjusted as necessary to stay current with the best available planning data.

TABLE 4-7: SUMMARY OF PROJECTED LEVELS OF SERVICE*,

Year	(a) Total Estimated Population Served	(b) Projected Average Daily Flow (mgd)	(c) Projected Level of Service (gpcd) (b)10^6- (a)
2010	59,196	10.505	177
2015	74,894	12.059	161
2020	90,633	14.002	154
2025	111,086	16.017	144
2030	129,304	17.659	137

SOURCE: Table 2A, June 2010 CUP Application
*Does not include Zellwood station

FUTURE POTABLE WATER FACILITIES

WATER TREATMENT PLANTS
Based on the update to the water master plan, one additional water plant will be needed to serve the utility service area by 2030. The proposed southwest plant was identified to serve the southwest part of the utility service area. The projected capacities of the water plants (as described in **Table 4-3**) which will serve the utility service area through 2030 as listed below:

Water Plant	2030 Projected Capacity (mgd)
Jack G. Grossenbacher	23.616
Sheeler Oaks	9.576
Myrtle Rogers Womble (Northwest)	20.160
Southwest	25.200
Plymouth Regional	16.704
Mount Plymouth Lake	0.728

Source: Public Service Department, 2010
* Based on Year 2035, per Master Plan data

The City of Apopka water treatment plants have maximum treatment capacity (well capacity) of 23,400 gpm or 33.7 mgd, which will potentially serve AADF demands beyond 2030. Additional capacity upgrades to transmission, distribution and storage facilities will be occurring during the next ten years.

The City plans to construct the Southwest Water Plant by the year 2016 consisting of one well, two high service pumps (HSP)and one

ground storage tank (GST). In 2021, the City will be adding one well and one HSP. The total Southwest WTP improvements for 2030 will be shown as two 3,500 gallon per minute (GPM) wells, three 3,500 GPM HSP's and two 1.5 million gallon (MG) GST's.

The City's 2030 storage capacity requirements have been estimated based on providing a total volume equal to four hours of fire flow (1,500 gpm * 4 hrs = 0.36 mgal) plus operational storage for a total of 10.226 mgal. Operational storage is defined as the volume equal to the difference between the maximum day flow and the peak hour flow over an eight hour period [(89.972 mgd -56.294 mgd) / 3 = 10.226 mgal)].

Based on the water flow projections, the following schedule for phasing the expansion of existing plants and construction of new plants appears to be appropriate, as shown in **Table 4-8**. As the City implements the comprehensive plan, the scope and scheduling of plant improvements should be adjusted as necessary to stay current with the best available planning date.

TABLE 4-8: EXISTING WATER PLANTS PHASING PLAN

Water Plant	Existing Capacity (mgd)	Phase 1 Capacity (mgd)	Year Phase 1 Complete	Phase 2 Capacity (mgd)	Year Phase 2 Complete	Phase 3 Capacity (mgd)	Year Phase 3 Complete
Jack G. Grossenbacher	18.576	0	0	- -	- -	5.040	2030
Sheeler Oaks	7.2	0	0	- -	- -	0	0
Myrtle Rogers Womble (Northwest)	7.2	4.320	2010	- -	- -	8.640	2030
Southwest	0	0	0	8.64	2015	10.080	2030
Plymouth Regional	6.336	4.608	2010	- -	2015	5.760	2030
Mount Plymouth Lake	5.155	0.864	2010	- -	2015	3.744	2030

Source: Apopka Public Service Department, 2010

WATER DISTRIBUTION MAINS

Based on the Update to the Water Master Plan, over 46 miles of water mains ranging in diameter from 6 inches to 36 inches will have to be constructed to serve the projected needs of the utility service area through the planning period. A list showing priorities of water main projects through 2030 was made to provide service to the areas where growth is expected to occur. As the City implements the comprehensive plan, the scope and scheduling of water distribution improvement will be adjusted as necessary to stay current with the best available planning data. There is currently no elevated storage serving the distribution system. Generally, pipes 12 inches in diameter and smaller are of polyvinyl chloride (PVC) construction whereas larger pipes are constructed from ductile iron. Improvements to the distribution/transmission system have generally followed the recommendations outlined in the most recent master plan, with the timing of specific projects dependent on development patterns.

SANITARY SEWER SUB-ELEMENT

INTRODUCTION

The purpose of the Sanitary Sewer Sub-Element is to provide for necessary sanitary sewer facilities and services correlated to future land use projections. The collection and disposal of wastewater is necessary for the protection of public health, safety and welfare. Congress enacted the Clean Water Act (CWA) in 1948, which established the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Congress significantly reorganized and expanded the act in 1972 and made more amendments in 1977. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry. The CWA has also set water quality standards for all contaminants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, without a permit. The EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or excavated ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not require an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

SANITARY SEWER EXISTING CONDITIONS

OPERATIONAL RESPONSIBILITY

The City of Apopka owns, operates and maintains a public sanitary sewer system, including a wastewater treatment plant, called City of Apopka Water Reclamation Facility (WRF). The City’s Public Services Department is responsible for the operations and maintenance of the central public sanitary sewer system

SERVICE AREA AND PREDOMINANT USERS

The utility service area for Apopka’s sanitary sewer system is described in the Introduction to this element and shown in **Map 4-2**. The City provided 13,036 individual sanitary sewer connections in 2008 – 12,528 connections for domestic users and 508 for other users.

WASTEWATER COLLECTION SYSTEM

The City's wastewater collection system consists of gravity sewers, lift stations and force mains. The gravity sewers typically convey wastewater by gravity flow to lift stations. The lift stations contain pumps that pump the wastewater through pipes (i.e. force

mains) to other lift stations for repumping or directly to the treatment plant.

The key components of the City's existing collection system include the following:

1. The Errol Main Lift Station and 14-inch diameter force main. These facilities serve the entire Errol Estates development in the northwestern section of the utility service area.
2. The 24-inch diameter gravity sewer connecting the Errol force main to the Bradshaw Road Lift Station.
3. The Forest Avenue Lift Station. This lift station pumps about 30% of the wastewater currently being conveyed to the City of Apopka Water Reclamation Facility (WRF).
4. The 18-inch diameter force main connecting the Forest Avenue Lift Station to the WRF.
5. The 20-inch diameter force main along Cleveland Street and the Cleveland Street Regional lift station. This force main and regional lift station intercepts several force mains that transmit wastewater from the southeastern section of the utility service area.
6. The Bradshaw Road Lift Station pumps about 30% of the wastewater being conveyed to the City of Apopka WRF.

The Forest Avenue Lift Station is located at the site of the City's former wastewater treatment plant, which was replaced by the City of Apopka WRF located on Cleveland Street. The Forest Avenue Lift Station was installed to pump wastewater approximately two miles through an 18-inch diameter force main to the City of Apopka WRF.

Presently, there are 47 lift stations that pump into the 24-inch gravity sewer that feeds into the Bradshaw Road Lift Station. These lift stations range in capacity from the Bradshaw Road Lift Station, with a design capacity of 2,156 gallons per minute (gpm), to the Northwest Recreation Complex Lift Station, with a design capacity of 78 gpm.

There are 11 lift stations that connect to the 18-inch force main between the Forest Avenue Lift Station and the City of Apopka WRF. These lift stations range in design capacity from the 114 gpm Royal Oak Estates Lift Station to the 1500 gpm Cleveland Street Regional Lift Station. Other key force mains in the City's collection system include:

1. 12 inch force main from the Orange North Lift Station along Old Dixie Highway,
2. 12 inch force main along Sheeler Road between U.S. 441 and Cleveland Street,
3. 12 inch force main along Piedmont Wekiva Road, Old Apopka Road and Cleveland Street,
4. 12 inch force main along Park Avenue between Lake McCoy Drive

and Oak Street,

5. 12 inch force main along Binion Road, Orange Avenue and Apopka-Ocoee Road,

6. 14 inch force main along Vick Road from connection to Errol Main Lift Station to Lester Road and an 18 inch force main from Lester Road to Ponkan Road, and

7. 16 inch force main along Park Avenue from Lake McCoy Drive to just north of Welch Road.

8. The 20 inch force main along Bradshaw Road to Ocoee-Apopka Road, 13th Street, South Lake Avenue and Cleveland Street to the WRF.

9. The 12 inch force main along US 441 from Hones Ave. to Hermit Smith Rd. to General Electric Rd. to W. Orange Ave.

10. The 12 inch force main along Rock Springs Rd. from Kelly Park Rd. to Lift Stations No. 60.

11. The 12 inch force main from Zellwood Station along Yothers Rd. to Schopke Lester Rd.

12. The 12 inch force main on Ponkan Rd. from Ponkan Pines Rd. to Rock Springs Rd.

13. The 16 inch force main on W. Keene Rd. from Ocoee Apopka Rd. to Clarcona Rd. to the WRF.

14. The 12 inch force main along S. Binion Rd. from Ocoee Apopka Rd. to W. Orange Ave. to General Electric Rd.

The majority of the City's gravity collection system consists of 8-inch diameter pipe. This is the minimum size of gravity sewer allowed under Apopka's Land Development Code.

The service life for force mains and gravity sewers is variable and depends on pipe material, soil conditions, construction methods and other factors. Generally, the majority of the pipes that compose the City's wastewater collection system are expected to have a remaining useful life of 20 to 50 years.

INFILTRATION AND INFLOW

Infiltration/Inflow (I/I) refers to sources of water other than wastewater that enter the wastewater collection system and are not desirable since it consumes collection and treatment capacity. Infiltration is groundwater that enters a wastewater collection system through broken pipes, leaky pipe joints and leaky manholes. Infiltration generally does not become evident until the rainy

season when the groundwater table rises. Inflow refers to stormwater runoff that enters the wastewater collection system through leaky manhole covers and non-permitted stormwater connections. Inflow problems generally are indicated when treatment plant flow increases dramatically following a rainfall event.

Based on the data reviewed during preparation of the City's Wastewater Collection System Master Plan, it was estimated that I/I represents about ten percent or less of the flow recorded at the treatment plant. This percentage is not alarming when viewed on a system wide basis; however, isolated areas within the collection system may be the source of the majority of the I/I. The City identifies problem areas by closely monitoring lift station run times. Lift stations that operate for unusually long periods after rainfall events generally are suspected of receiving I/I. Sewer system evaluation measures such as smoke testing and televising are also undertaken in suspected collection systems to further document problem areas.

WASTEWATER TREATMENT FACILITIES

The City of Apopka's Water Reclamation Facility (WRF) and effluent spray field site is located southeast of the City limits near the intersection of Cleveland Street and Old Apopka Boulevard. The WRF was originally constructed and placed into operation in 1972, and at that time replaced an older City facility near Forest Avenue. The older facility along Forest Avenue has been taken out of service. The current City of Apopka WRF was originally permitted for a capacity of 2 million gallons per day (mgd).

The design of the new plant incorporated many of the same treatment processes that were included in the original plant that has been taken out of service. However, the new plant employs one additional process called sand filtration. The filtration process was needed so the plant could comply with the water quality standards assigned by the state to treated wastewater or reclaimed water that is used for irrigation on areas that are accessible to the public such as parks, lawns and golf courses. The new plant was designed to meet the following standards:

- secondary standards for BOD5 removal,

- removal of total suspended solids to a concentration of 5 mg/l or less, and

- high level disinfection.

The City's 1990 wastewater treatment plant expansion project included the construction of dewatering facilities for treatment of residuals (i.e. sludge) and increased the treatment capacity to 4.0

MGD. As the name implies, dewatering removes water from the residuals which reduces its volume and makes it easier to handle and transport. The City has negotiated an agreement with an independent hauler who will transport the residuals for disposal on an off-site location. The residuals are applied to agricultural land for use as a soil conditioner and fertilizer. Also completed as part of the plant expansion project, was a rehabilitation of the original plant.

The shallow groundwater beneath the land application site is monitored by the City in accordance with FDEP regulations. Generally, the quality of the groundwater flowing away from the land application site has been equal to or better than background water quality. The shallow groundwater table is confined in this area and therefore separated from the underlying Floridan aquifer. The Floridan aquifer is the chief supply of potable water in the Apopka area.

In June 2001 the City completed a construction project to expand the City of Apopka WRF. The construction project expanded the facility and increased the treatment capacity to 4.5 mgd. At this time, the design is ongoing to expand the capacity of the Apopka WRF to 8.0 mgd. The project construction should begin in 2010 and be completed by the end of 2011.

The expected service life for the reinforced concrete structures for the wastewater treatment plants is 30 to 50 years depending on the level of maintenance that is practiced. The expected service life for the mechanical equipment at the two plants is 15 to 30 years depending on the level of maintenance provided to the equipment. Some equipment items may have to be replaced more frequently as part of routine maintenance.

RECLAIMED WATER SYSTEM

The City's reclaimed water program is known as Project ARROW. ARROW is an acronym that stands for Apopka Regional Reuse of Water. The following facilities have been constructed by the City as part of Project ARROW.

Apopka WRF

1. - three prestressed concrete storage tanks with a total capacity of 4 million gallons,

2. - lined storage ponds with a capacity of 25 million gallons, and

3. - a reclaimed water pumping station with a total capacity of 10,800 gpm.

The City is currently providing reclaimed water for both commercial and residential consumption.

Commercial accounts include golf courses, nurseries, schools, landscape medians and City recreational facilities. Residential accounts currently include 11 subdivisions. Consumption for all the City reclaimed water customers averages 3.55 MGD.

The City has installed two upper Floridan aquifer wells to augment the reuse distribution system during periods of high demand. These wells are permitted through FDEP and SJRWMD. The SJRWMD has approved 1.5 mgd annual average withdrawal for these two wells. Currently, the City is completing the construction of a third augmentation well which should be operational in 2010.

The City of Apopka furnishes reclaimed water to a number of users through its Project ARROW (Apopka Regional Reuse of Water) distribution network. The Apopka Water Reclamation Facility (WRF) is currently the only source of reclaimed water for the City's system. The City has a reclaimed water pump station at the WRF and a re-pump station in the northern part of its service area. The North Pump Station is located adjacent to the Myrtle Rogers Womble WTP.

The Apopka WRF provides advance secondary treatment along with high level disinfection to produce reclaimed water that is suitable for use on public access areas like golf courses and home lawns. The Apopka WRF is permitted for a capacity of 4.5 million gallons per day (mgd). The City has received their Florida Department of Environmental Protection (FDEP) permit to expand the WRF to a capacity of 8.0 mgd. The WRF site has two wells that the City uses to supplement the supply of reclaimed water. The WRF has 4 million gallons (mg) of covered storage tank capacity and 25 mg of storage pond capacity. The construction of a third reuse augmentation well has recently received City Council approval.

The North Pump Station functions as a re-pump station for reclaimed water. During the day when demands for reclaimed water are low, the storage tank on the pump station site is filled by the reclaimed water transmission system from the WRF. During the early morning hours when irrigation demands increase, the North Pump Station pumps reclaimed water from the storage tank to the transmission system. The North Pump Station currently has a 2 mg ground storage tank (GST). The construction of a second 2 mg GSTs has recently received City Council approval.

The City has other storage facilities within its reclaimed water system. The Rock Springs Ridge Golf Course features a storage pond with 20 mg of holding capacity. In addition, the City recently completed construction of a storage pond with approximately 117 mg of capacity at its Northwest Recreation Center. This storage pond receives a combination of reclaimed water and stormwater runoff. **Table 4-9** summarizes the City's pumping and storage facilities.

TABLE 4-9: SUMMARY OF FACILITIES EXISTING RECLAIMED WATER PUMPING AND STORAGE FACILITIES

Facility	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Ground Storage (mg)	Pond Storage (mg)
Apopka WRF	1,400 1,400 1,400 1,400 2,600 2,600	10,800	1 1 2	16 9
North Pump Station	3,750 3,750	7,500	2 2[1]	
Rock Springs Ridge Golf Course				20
NW Recreation Center[1]				120
Total System		18,300	6	165

[1] This storage facility is currently under construction.

The current reclaimed water distribution system, not including on-site piping at the pump stations, consists of pipes ranging in diameter from 4-inch to 30-inches. Generally, pipes 12-inches in diameter and smaller are of polyvinyl chloride (PVC) construction whereas larger pipes are constructed from ductile iron. Improvements to the distribution/transmission system have generally followed the recommendations outlined in the most recent master plan, with the timing of specific projects dependent on development patterns. **Table 4-10** lists the various lengths of pipe in the system.

TABLE 4-10: RECLAIMED WATER DISTRIBUTION/TRANSMISSION SYSTEM

	Total
Size, in	**Length, ft**
4	38,400
6	152,800
8	68,700
10	12,400
12	73,900
14	3,900
16	2,300
18	2,900
20	35,400
24	3,900
30	16,100

(1)Current through August 2006.

The proposed City of Apopka North Shore Reclaimed Water Pump Station is located in the southwestern section of the City's service area. Originally conceived as just a pump station, the City of Apopka is now engaged in a project to assess the feasibility of using water from the North Shore of Lake Apopka as a supplemental water source for the reclaimed water system (see below). The master planning of this pump station was included in the City of Apopka 2005 Reclaimed Water System Master Plan Update, dated August 2005 and prepared by Boyle Engineering Corporation. The North Shore Reclaimed Water Pump Station is proposed to eventually consist of the following:

- Surface Water Treatment System
- Two 3 million gallon pre-stressed concrete tanks
- One concrete block building to house electrical equipment (with air conditioning), chemical feed storage area and chemical feed pumps.
- Five VFD driven pumps each rated at approximately 4,500 gallons per minute (gpm) at full rated speed.
- Emergency generator system to power at least two pumps
- Plant site work
- Plant yard piping, electrical and controls systems

- Miscellaneous other improvements

Timing of individual aspects of this project will occur as needed over the next 20 years.

Large scale users of water will continue to play a major role in the City's reclaimed water system for many years to come. However, it is realized that the City's customer base could potentially change overnight due to a business failure or a catastrophic freeze. Project ARROW must be dynamic, flexible, creative and self perpetuating. These characteristics are evident as the City begins planning Project ARROW's future.

The City is committed to the development of dual water distribution systems so that reclaimed water can be beneficially used in residential areas. The term "dual water system" refers to water distribution that involves the use of two pipes or mains. One piping system distributes potable water and the second piping system distributes reclaimed water. The City Code requires developers to install dual water systems where reclaimed water is available. If reclaimed water is not available the City may choose to extend a pipeline to the developer's property. Future treatment plant expansions also will incorporate the necessary treatment technologies to produce reclaimed water that is acceptable for beneficial reuse.

The City’s existing SJRWMD CUP permits the use of groundwater to augment the City’s reclaimed water distribution system. The City is currently planning to pursue several projects to augment the City’s reclaimed water supply, including surface water and the collection of stormwater into lined ponds. When these resources are available the City plans to divert the groundwater previously used for reclaimed water augmentation to satisfy the City’s potable groundwater needs. It is projected that the Floridan aquifer will supply about 15.788 mgd in 2010, 17.771 mgd in 2013 and 14.542 mgd in 2020. These Floridan aquifer supplies will be used to satisfy the City’s potable and reclaimed water system demands. As shown in **Table 4-11**, the reclaimed demand for the City is expected to increase over the next twenty years.

TABLE 4-11: RECLAIMED WATER DEMAND

Year	Projected Service Population	Projected Average Daily Residential Demand (mgd)	Projected Average Daily Commercial & Other Demands (mgd)*	Projected Total Average Daily Reclaimed Water Demand (mgd)
2010	15,532	3.899	4.112	8.011
2013	22,596	4.949	4.479	9.428
2015	27,305	5.406	4.664	10.079
2020	39,580	7.006	5.575	12.581
2025	57,170	10.119	6.920	17.039
2030	73,568	13.002	8.246	21.248

*Includes common area landscape, commercial, water utility use, unaccounted water and Zellwood station.

OPERATION AND MAINTENANCE

Proper operation and maintenance are essential to providing a safe and reliable wastewater system. The City's wastewater collection, treatment and reclamation facilities are operated and maintained under the supervision of operators who are certified by the State of Florida.

The wastewater system relies on mechanical equipment such as pumps; therefore, it is critical that all lift station pumps, treatment equipment and other facilities be in good working condition. The City ensures that this equipment stays in good working condition through its preventative maintenance program.

Use of Septic Tanks within the Utility Service Area

Septic tank systems provide on-site wastewater treatment for both residential and small-scale commercial development. Septic tanks discharge to a drainfield, where the effluent percolates into the soil. Accordingly, soil permeability and the localized depth to the water table are the limiting factors on septic tank performance. There are approximately 2,932 septic systems in operation within the Apopka utility service area.

Rule 64E-6, F.A.C. states that drainfields shall not be installed in soils with textures finer than sand, loamy sand, or sandy loam (when the soil moisture content is above the point at which the soil changes from semi-solid to plastic) to prevent soil smear and excessive soil compaction. **Table 4-12** lists suitable soils and **Map 4-4** shows the distribution of the soils suitable for septic tank disposal systems in the utility service area. The suitability for

the use of septic tanks is determined by Orange County in accordance with Rule 10D-6, F.A.C., which contains the standards for on-site sewage disposal systems as developed by the Department of Health.

TABLE 4 12: SOIL TEXTURE LIMITATIONS FOR SIZING OF DRAINFIELDS

U.S. Department of Agriculture Soil Textural Classification	Soil Texture Limitation (Percolation Rate)	Comments
Sand; Coarse Sand not associated with a seasonal water table of less than 48 inches; and Loamy Coarse Sand	Slightly Limited (Less than 2 min/inch)	
Loamy Sand; Sandy Loam; Coarse Sandy Loam; Fine Sand	Slightly Limited (2-4 min/inch)	
Loam; Fine Sandy Loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand; Sandy clay loam	Moderately Limited (5-10 min/inch)	
Clay Loam; Silty Clay Loam; Sandy Clay; Silty Clay, Silt	Moderately limited (Greater than 15 min/inch but not exceeding 30 min/inch)	
Clay; Organic Soils; Hardpan; Bedrock	Severely limited (Greater than 30 min/inch)	Unsatisfactory for standard subsurface system
Coarse Sand an estimated wet season high water table within48 inches of the bottom of the proposed drainfield; Gravel or Fractured Rock or Oolitic Limestone	Severely limited with (Less than 1 min/inch and a water table less than 4 feet below the drainfield)	Unsatisfactory for standard subsurface system

Source: *Chapter 64E-6 FAC*

The City has no authority to require areas within the county that are on septic tanks to connect to the sanitary sewer system. Rule 64-E, F.A.C requires that lot sizes be adequate and specifically does not permit use of septic tank systems if subdivisions are developed with a net density of two units per acre (1/2 acre lots) or greater.

The City currently has an estimated 134 private wells and 2,932 septic tank systems in use within the utility service area. Private wells and septic tank systems are not regulated by the City as they are reviewed by the Orange County Health Department.

Those areas shown in **Map 4-4** generally exhibit soil conditions that are compatible with septic tanks and existing septic tanks are predominantly located within these areas. Presently, there are no locations within the utility service area where septic tanks are

known to be failing. If septic tanks begin to fail within the unincorporated areas of the City's Utility Service Area, then the City and the county will develop a mutually acceptable plan to resolve the problem.

SANITARY SEWER FACILITIES NEEDS ANALYSIS

The City has master planned sanitary sewer facilities to effectively manage growth. Each new development is required to provide the infrastructure needed to support its respective development as well as add the development's proportional share of upgrades to the system as described in the City's Wastewater Master Plan. Currently, the City is completing the planning and design to expand it the capacity of the City's WRF to 8.0 mgd.

Currently, there are no private wastewater treatment facilities within the City limits of Apopka. However, there area four private wastewater treatment facilities within the City's utility service area boundary, but outside the City's limits. At present, the City has no plans to acquire and operate the private wastewater treatment facilities.

LEVEL OF SERVICE (LOS) STANDARD

The level of service (LOS) standard adopted by the City in 1990 was 100 gallons per capita per day (gpcd). Based on historical records, the average daily demand per capita has decreased since 1990 due to improved maintenance of facilities and conservation practices. Existing data suggests that the City's appropriate level of service for sanitary sewer capacities is 90 gpcd. Therefore, the City will adopt a reduced LOS standard of 81 gpcd.

FUTURE WASTEWATER FACILITIES

OPERATION AND MAINTENANCE OF SANITARY SEWER FACILITIES

The City's wastewater collection, treatment and reclamation facilities are operated and maintained under the supervision of operators who are certified by the State of Florida. The existing wastewater facilities currently exhibit no significant deficiencies. Minor deficiencies of the system include infiltration/inflow, which occurs when groundwater enters a wastewater collection system through broken pipes, leaky pipe joints and leaky manholes or because of stormwater runoff that enters the collection system through leaky manhole covers and illicit storm sewer connections to the wastewater collection system.

The City has its own video camera to perform video inspection of sewer lines. City crews perform line cleaning and video inspections on a daily basis. The City's lift stations are equipped

with SCADA and telemetry equipment which can notify City personnel in the event of a lift station failure. Eight of the City's pump stations are equipped with emergency standby generators. The remaining 99 existing pump stations are equipped with receptacles which permit the connection of a portable standby power generator. The City visits each pump station daily and frequently gives thorough mechanical and electrical inspection and preventive maintenance.

FUTURE SANITARY SEWER FACILITIES NEEDS

During preparation of the City's Wastewater Master Plan, the concept of expanding the existing wastewater treatment plant to serve the utility service area was developed. Expansion of the existing facility has several advantages as follows:

- eliminates the need for duplicate plant staff.

- does not require construction of duplicate facilities such as operations buildings, maintenance buildings and Motor Control Center (MCC) buildings.

- less expensive in capital and operations costs.

- land is readily available on-site to accommodate expansion; thereby, eliminating the legal and planning side of acquiring a new site for another treatment facility.

Based on population projections for the utility service area and utilizing the LOS standard of 90 gpcd, the City projects that the existing and planned sanitary sewer facilities will accommodate anticipated new development. **Table 4-13** provides a summary of the current and projected wastewater flows and the associated level of service.

TABLE 4-13: PROJECTED WASTEWATER FLOWS

Wastewater System	2010	2020	2030
Service Population	43,733	77,167	111,811
Adopted LOS (gpcd)	90	90	90
AADF (mgd)	3.936	6.945	10.063
Permitted WWTP Capacity (mgd)	4.5	8.0	8.0
Surplus (Deficiency)	0.564	1.055	(2.063)

Source: City of Apopka, 2009

It is estimated that the service population connected to the City sewer system will be 43,733 in 2010. It is expected that residences currently served by either Chalet North Mobile Home Park

wastewater treatment facilities, Rock Springs Mobile Home Park wastewater treatment facilities or septic tanks will continue to use those facilities through 2030.
Based on wastewater flow projections it appears that the City's next treatment plant expansion will be needed between 2020 and 2030. Design of the new facilities will have to be started in near year 2020.

It has been assumed that all future wastewater disposal capacity will be derived through beneficial reuse. However, there will continue to be a need for alternate disposal and reclaimed water storage facilities when weather conditions do not permit irrigation.

The scope and scheduling of plant improvements will be adjusted as necessary to stay current with the best available planning data.

STORMWATER MANAGEMENT SUB-ELEMENT

INTRODUCTION

The purpose of the Stormwater Management Sub-Element is to provide for necessary public facilities and services that will control the quantity and quality of stormwater runoff; preserve the quality of the surface waters that receive stormwater runoff; and protect lives and property from the threat of flooding.

Stormwater runoff is recognized as a major polluter of our nation's surface waters. This concern prompted Congress to include stormwater discharges under the National Pollution Discharge Elimination System (NPDES) contained in Section 402 of the Clean Water Act of 1987. The City of Apopka is required to obtain an NPDES permit for stormwater and complies with the NPDES requirements outlined in the permit.

Floodplain management is also important. When a lake, river or stream swells due to heavy rainfall, the floodplain accepts the augmented volume of water, where it is stored until it gradually discharges. Any attempt to fill in portions of the floodplain for development will ultimately reduce the capacity of the floodplain to store water, leading to an increased risk of flooding, increased erosion and possible property damage due to higher stream velocities. Wetland vegetation that may be indigenous to a flood plain is also important because it helps to naturally clean and treat stormwater runoff.

STORMWATER MANAGEMENT EXISTING CONDITIONS

Stormwater management systems are typically comprised of a series of interconnected channels, conduits, inlets, culverts, bridges and storage facilities that convey runoff through a watershed area (basin) to its outfall. The appropriate management of stormwater involves:

- Treatment of stormwater runoff prior to discharge into surface waters;

- Stormwater discharge rate and volume attenuation to ensure that post-development runoff does not exceed pre-development runoff; and

- Where applicable, the design of stormwater management facilities shall promote recharge to the underlying aquifer system. The Aquifer Recharge Sub-Element more fully addresses these design issues.

DRAINAGE FEATURES AFFECTING THE CITY

The natural surface water drainage system in the vicinity of Apopka generally consists of a large number of landlocked basins that may be either lakes or historically dry depressions, each with relatively small drainage areas. Normal rainfall events generate runoff that is directed to these depressions either by naturally occurring swales and conveyance channels, or through man-made conveyance systems constructed as part of the City's drainage system. For the most part, these depressions are not connected. During extreme rainfall events like those associated with tropical storms or hurricanes, there may be some inter-basin connections.

The City’s downtown area sits on a broad ridge with elevations reaching 150 feet above mean sea level (MSL). The surrounding terrain generally slopes northeast toward the Wekiva River at elevation 25 feet above MSL and southwest to Lake Apopka at elevation 65 feet above MSL. As noted, very little flow occurs between the closed basins, and therefore little direct runoff reaches the Wekiva River system or Lake Apopka. One exception is the drainageway associated with Greenwood Cemetery. Runoff is directed to the ravine at this site, through a man-made conveyance system then surface flows are directed to the north under Votaw Road to Lake McCoy. Under tropical storm conditions this lake could discharge to a normally dry depression known as Lake Coroni; and possibly to Lake Prevatt, which is connected to the Wekiva River and is classified as an Outstanding Florida Waters.

REGULATORY FRAMEWORK

The protection of surface water quality and the regulation of stormwater management is the responsibility of municipalities, counties and the state under the umbrella of federal law. Specifically to protect the quality of surface waters, the federal government enacted Section 208 of the Water Pollution Control Act for stormwater management. Additionally, Section 405 of the Federal Clean Water Act required that the Environmental Protection Agency (EPA) establish permit regulations for stormwater discharge, thus creating the National Pollutant Discharge Elimination System (NPDES) permit program. As of May 1, 2003, federal regulations required that all small construction activities disturbing one to five acres apply for an NPDES construction general permit.

The State of Florida addresses surface water management in Chapter 62-40 of the Florida Administrative Code (F.A.C.), defining state permitting requirements and stormwater management responsibilities. Section 62-40, F.A.C. states: “The Department (Environmental Protection) and the Districts (Water Management Districts),

pursuant to Section 373.418, F.S., shall, when adopting rules pertaining to stormwater management systems, specify design and performance criteria for new stormwater management systems which shall be designed to achieve an 80% reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards." The code also states that stormwater management systems "shall be designed to achieve at least 95% reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards in Outstanding Florida Waters."

Enforcement of stormwater management regulations within the City of Apopka falls under the SJRWMD, the Florida Department of Transporation (FDOT), Orange County and the City of Apopka. Depending on the location of a project, it is conceivable that permits could be required from three of the four agencies.

St. Johns River Water Management District (SJRWMD)

The SJRWMD operates under the rules of Chapter 40C-42, F.A.C., which govern stormwater management systems that are designed and constructed or implemented to control discharges necessitated by rainfall events. These systems may incorporate methods to collect, convey, store, absorb, inhibit, treat, use or reuse water to prevent or reduce flooding, over drainage, environmental degradation and pollution, or otherwise affect the quality and quantity of discharges. The SJRWMD has jurisdiction in regards to stormwater ponds, floodplain management and finished floor elevations within their district. In addition, if development projects have 4,000 square feet or more of impervious surface, the water management district requires an Environmental Resource Permit.

Requirements for Issuance of Permits. In order to obtain a standard general or individual environmental resource stormwater permit, an applicant must give reasonable assurance that the stormwater management system:

- Will not result in discharges from the system to surface and ground water of the state that cause or contribute to violations of state water quality standards.
- Will not adversely affect drainage and flood protection on adjacent or nearby properties not owned or controlled by the applicant,
- Will be capable of being effectively operated and maintained, and
- Meets any applicable surface water management basin criteria contained in Chapter 40C-41, F.A.C.

Peak Discharge (Stormwater Attenuation). The post-development peak discharge rate must not exceed predevelopment rates for the mean annual 24-hour storm for systems serving both of the following:

- New construction area greater than 50% impervious (excluding water bodies)
- Projects for the construction of new developments

The post-development peak rate of discharge must not exceed the predevelopment peak rate of discharge for the 25-year frequency storm in other areas.

Volume. For systems discharging to land-locked lakes adjacent to properties under more than one ownership the post-development volume of direct runoff shall not cause an increase in the total pre-development flood stage. This can be accomplished through retention with percolation or, if the soil conditions are not sufficient for percolation, then through wet or dry detention for a duration sufficient to mitigate adverse impacts on flood stages. In determining the volume of direct runoff, a 25 year, 96-hour duration storm is to be used.

Storage and Conveyance. Floodways and floodplains, and levels of flood flows or velocities of adjacent streams, impoundments or other watercourses must not be altered to adversely affect the off-site storage and conveyance capabilities of the water resource.

- A system may not cause a net reduction in flood storage within a 10-year floodplain except for structures elevated on pilings or traversing works. Traversing works, works or other structures shall cause no more than a one-foot increase in the 100 year flood elevation immediately upstream and no more than one tenth of a foot increase in the 100 year flood elevation 500 feet upstream. A system will not cause a net reduction in flood storage within a 10-year floodplain if compensating storage is provided outside the 10-year floodplain.
- A system may not cause a reduction in the flood conveyance capabilities provided by a floodway except for structure elevated on pilings or traversing works. Such works or other structures shall cause no more than a one foot increase in the 100 year flood elevation immediately upstream and no more than one tenth of a foot increase in the 100 year flood elevation 500 feet upstream.

Water Quality. State water quality standards must not be violated.

Hydrologic Basins. The City of Apopka lies within two hydrologic

basins - the Oklawaha River Hydrologic Basin and the Wekiva River Hydrologic Basin. The boundaries are shown in **Map 4-3**. In addition to the criteria described above, the SJRWMD requires that systems in specific hydrologic basins meet additional criteria.

- Oklawaha River Hydrologic Basin

  Storm Frequency: The system shall meet applicable discharge criteria for 10 year and 25 year frequency storms. On-site storage and outlet capacity should be designed for the 25-year storm. Outlet capacity design should be checked and further refined, if necessary, for the 10-year storm.

  Runoff Volume: For systems utilizing pumped discharges, the post-development discharge volume during the four-day period beginning the third day of the four-day duration storm may not exceed the pre-development discharge during the same period.

- Wekiva River Hydrologic Basin

  Runoff Volume: Projects or portions of projects in the most effective recharge areas must retain three inches of runoff from the directly connected pervious area within the project area or applicants may demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Those soils determined by the Soil Conservation Service (SCS) to be in the type "A" Hydrologic Soil Group (HSG) shall be considered to be most effective recharge areas.

  Erosion and Sediment Control Plan: An erosion and sediment control plan must be submitted as part of the permit application for a project which is wholly or partially located within a water quality protection zone or serves a project with a total land area equal to or exceeding 120 acres. A water quality protection zone shall extend one half mile from the Wekiva River, Little Wekiva River north of State Road 436, Black Water Creek, Rock Springs Run, Seminole Creek and Sulphur Run, and shall also extend one quarter mile from any wetland abutting an Outstanding Florida Water.

Florida Department of Transportation (FDOT)

FDOT has jurisdiction of stormwater management ponds and drainage conveyance facilities that are adjacent to or drain directly to FDOT road rights-of-way and drainage facilities. FDOT also constructs and maintains the necessary stormwater systems to control the quantity, quality and rate of drainage run-off generated by FDOT facilities. FDOT operates under an assumption that off-site (private property or other non-FDOT property)

stormwater runoff management has occurred prior to reaching the road right-of-way. However, when it is not feasible to maintain drainage from other properties separate from FDOT property and rights-of-way, FDOT promotes joint use and/or regional facilities to serve all affected parties.

Section 334.044, F.S., sets forth the powers and duties of the FDOT to develop and adopt uniform minimum standards and criteria for the design, construction, maintenance, and operation of public roads. This includes the ability of the FDOT to specify the design of open channels, to require minimum standards for the design of FDOT storm drain systems, and to develop standards and procedures for the hydraulic design of cross drains including culverts, bridge-culverts and bridges.

Orange County

Orange County has jurisdiction over the connection of any stormwater facility or structure to county-owned stormwater conveyance, retention and wet or dry detention facilities. As such, new development or redevelopment that requires new driveways onto county roads or impacts county roads and stormwater systems must obtain county approval.

City of Apopka

All new development or redevelopment projects within the City limits must obtain stormwater management approval from the City. The City is also responsible for maintaining its stormwater management structures and facilities. The City of Apopka's Land Development Code regulates stormwater management as follows:

- The post-development peak rate of discharge must not exceed the pre-development peak rate of discharge for the 25-year, 24-hour storm (8.6 inches).
- Pollution abatement will be accomplished by retention or detention with filtration of one-half inch of runoff from the developed site.
- When the project discharges to land-locked lakes that have no positive outfall, on-site stormwater facilities shall be designed to detain the 25-year, 96-hour design storm (12.0 inches).
- Storm sewer system design is to be based upon a 10-year frequency event.
- The minimum size of pipe to be used in a storm sewer system is 15 inches in diameter.

OPERATION AND MAINTENANCE OF STORMWATER FACILITIES

The City maintains drainage ditches, storm sewer pipes, catch basins and other similar facilities. Generally, the City does not accept the responsibility to maintain retention ponds, which is the responsibility of the property owner or a homeowners association. Without proper maintenance, retention ponds can potentially become ineffective as well as eyesores. While many privately owned facilities receive the proper amount of maintenance, there are some which do not get adequately maintained. When private retention ponds are not well maintained, the City must provide maintenance due to complaints from citizens.

STORMWATER MANAGEMENT FACILITIES NEEDS ANALYSIS

GENERAL

The City's drainage master plan was updated in April 2009. Stormwater management is a regional issue that transcends political boundaries. The study area for the drainage master plan included the City's utility service area. Analysis conducted outside the City limits was primarily focused on future regionalization of stormwater management facilities. Specific infrastructure improvements have not been recommended for stormwater management outside the City limits.

Located within the corporate limits of the City of Apopka, there are drainage facilities that serve county, state, and federal roadways. Generally, these facilities have been designed to handle the stormwater runoff generated by the immediate drainage basin in which the road is located. It is the policy of the agencies that are responsible for these roads, that connections to their drainage facilities shall not adversely affect capacity. Therefore, best management practices must be employed to mitigate potential adverse impacts.

DRAINAGE BASINS

The City is divided into 15 major drainage basins. The major drainage basins were then further sub-divided into 130 sub-basins.

Drainage divides between major basins and sub-basins were determined from USGS topographic maps. The drainage basins are shown in **Map 4-4**. Of the 130 sub-basins that were analyzed, it was determined that 61 of the sub-basins have positive outfalls and the remaining 69 sub-basins are landlocked.

OPERATIONAL IMPROVEMENTS TO DRAINAGE SYSTEMS

Several improvements which were addressed in the previous drainage maser plan have been completed. These improvements

included the Railroad Drainage Basin Project and the Lake Avenue Drainage Well Project. The recently updated drainage master plan has identified one problem area which needs to be addressed by the City. This present problem area includes the Lake Avenue/Main Street Drainage Basin Project. Flooding occurs in the vicinity of Lake Avenue and Main Street during heavy rains. Recommended improvements for correcting this flooding problem include installation of two manholes, two junction boxes, and approximately 1,800 feet of 30-inch drainage pipe.

STORMWATER UTILITY

The City Council adopted a stormwater utility in 1992. The revenues are used to fund drainage capital improvements and other programs relating to stormwater.

REGIONAL STORMWATER MANAGEMENT FACILITIES

At the present time, most of the commercial and residential projects developed in the City involved the construction, operation and maintenance of a stormwater management facility by a single entity or owner. Regionalization of stormwater management involves facilities which are designed to serve multiple projects within a specific drainage basin. Regionalization of stormwater provides a more uniform approach to resource management within a drainage basin.

Regionalization of stormwater facilities provides several positive aspects as listed below:

- more effective and standardized operation and maintenance of (O&M) stormwater facilities that are under the control of one entity, rather than scattered small facilities operated by private entities who may not be experienced in stormwater management,

- reduced maintenance costs at centralized facilities due to fewer number of facilities, reduced personnel travel time, and possible use of larger, more efficient maintenance equipment,

- master planning of an entire basin for stormwater conveyance facilities rather than piecing small systems together,

- improved water quality with the potential for treatment of runoff from developed areas not previously treated,

- more efficient use of individual land parcels,

- regional facilities could be designed to create opportunities for additional uses such as parks, preservation of unique habitat or

other recreational/green space uses, and

- positive impact on permitting and coordination with St. Johns River Water Management District, through master planning of each basin and the District working with one entity.

For largely undeveloped areas, the regional facilities could be constructed and then the developers charged for their share of the capital costs as they connect to the system. The main disadvantage with this arrangement is that the City would have to carry the financial burden until the area develops. The possibility may exist for a regional system to be phased, but this would take close coordination with the regulatory agencies. Capacity would have to be available prior to a new development being constructed. Other options include:

- The first large-scale developer in a basin would build the entire regional facility. The City would then collect funds from subsequent development projects to reimburse the original developer's over sizing costs.

- Developers would pay their fair share for capacity in a regional facility. Until it is completely financed and constructed, the developers would construct temporary facilities at their individual sites. Upon completion of the regional facility, they would tie in to it and convert the temporary facility to some other beneficial use.

NATURAL GROUNDWATER AQUIFER RECHARGE SUBELEMENT

INTRODUCTION

PURPOSE AND SCOPE

Florida Statutes require local government comprehensive plans in Florida to consider the protection of natural aquifer recharge areas. This is critical because most jurisdictions in Florida rely on aquifers as the sole source of drinking water. This element provides a description of the measures the City of Apopka takes to address this issue.

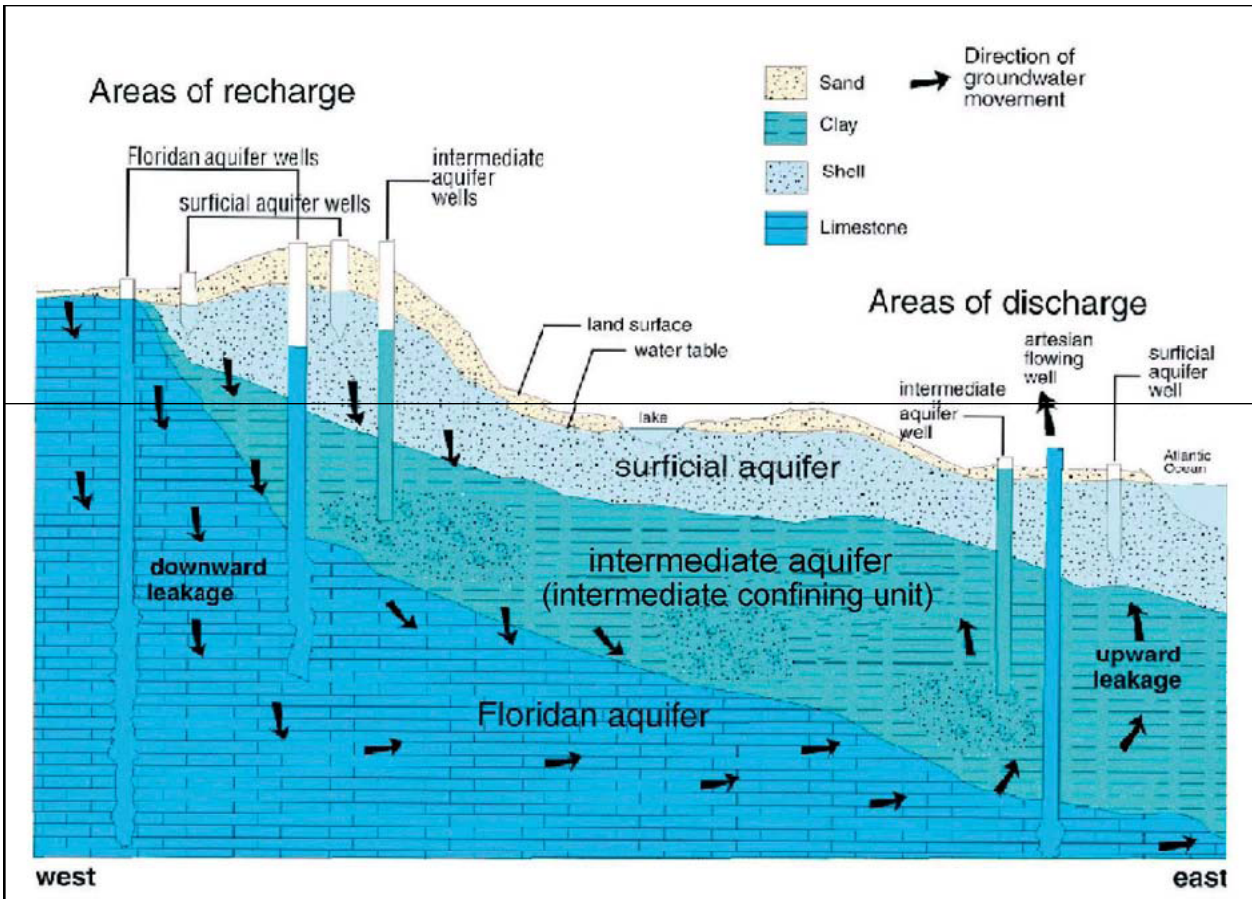
THE FLORIDAN AQUIFER

An aquifer is a subsurface zone that contains and allows fresh water to move from one area to another. These aquifers contain very large quantities of freshwater capable of yielding billions of gallons per day. If this resource is not properly managed, then the supply can be exhausted; or more likely, contaminated. Protection and preservation of these aquifers are important to ensure the supply of potable water is available to future populations.

Recharge is simply the process of replenishing the aquifer. Recharge can occur naturally through percolation. The source of water in aquifers is rainfall. Under the force of gravity, rainfall percolates downward through porous surface soils to enter the aquifer strata. Because of the variable permeability of different soil types, the rate of aquifer recharge from rainfall may vary from one location to another.

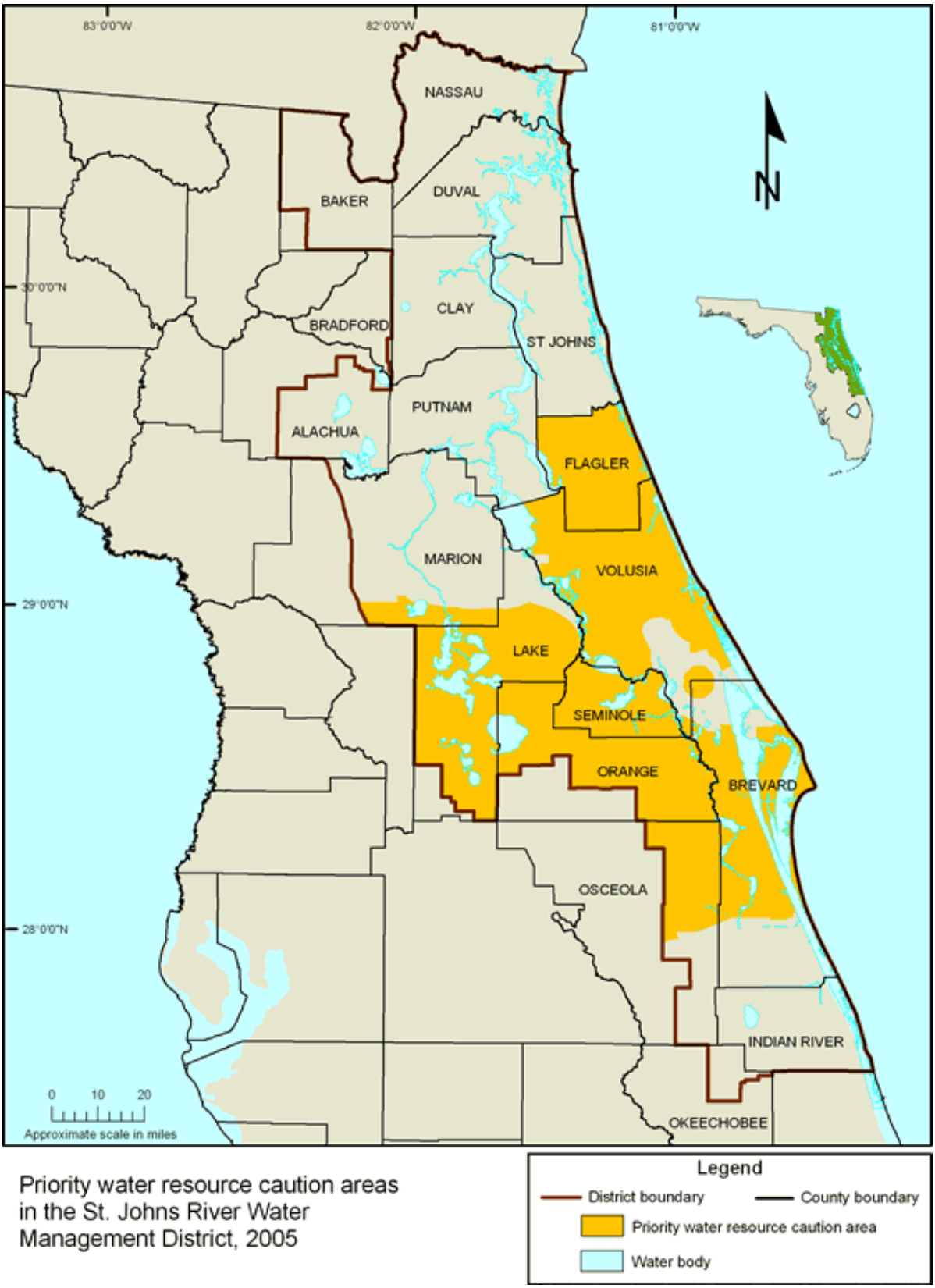
The Floridan aquifer is the primary source of potable water for Apopka. **Figure 4-1** depicts the general structure of the hydrogeological formation of the Floridan aquifer. Principally, the water in the aquifer is derived from rainfall which averages 48.88 inches annually. This aquifer can be up to 2,000 feet thick in some areas and occurs 100 to 200 feet below the land surface. A secondary surficial aquifer is also present and may be found at depths of 60 to 150 feet below the land surface. The primary function of this aquifer is to store water before its infiltration into the Floridan aquifer.

FIGURE 4 - 2: FLORIDAN AQUIFER SYSTEMS



In most of Orange County the Hawthorn Formation restrains the movement of water from the surficial aquifer to the underlying Floridan aquifer. This confining bed is thinnest in the northwest area of the County placing the City of Apopka in an area of high aquifer recharge. **Figure 4-2** shows the St. Johns River Water Management District (SJRWMD) Priority Water Resource Caution Areas and **Figure 4-3** shows the location of high aquifer recharge areas in Apopka.

FIGURE 4- 1: SJRWMD PRIORITY WATER RESOURCE CAUTION AREAS



Priority water resource caution areas in the St. Johns River Water Management District, 2005

AQUIFER RECHARGE ANALYSIS

Aquifer recharge areas are subject to alteration by development. Covering a recharge area with impervious surfaces, such as roads, parking lots and buildings reduces the area available for rainfall percolation, altering the total rate and volume of recharge in that area. Increasing the rate at which stormwater drains from recharge surface area also decreases recharge potential.

A second concern related to development within aquifer recharge areas is the potential for contamination of groundwater within the aquifer. Just as with stormwater run-off to surface waters, pollutants picked up by run-off which enters an aquifer can degrade the quality of the groundwater. Since water flows within an aquifer in a manner similar to surface water flow, downstream portions of the ground water may be polluted over time. This becomes particularly significant when the aquifer is tapped as a potable water supply downstream.

GROUNDWATER SOURCE PROTECTION

Groundwater recharge is vital for providing adequate groundwater supplies for future uses and for preserving the quality of groundwater resources. The City's central water system, which depends on the quality and quantity of available groundwater, is comprised of public production water wells as noted in the Potable Water Element. The City coordinates the production quality of these wells and the consumption of water with the SJRWMD. The SJRWMD performs the required well suitability assessments, permits production wells and requires significant environmental documentation as to the soils, ecology and impacts of the wells, as well as conducting annual inspections.

GROUNDWATER RECHARGE IMPACT

Stormwater is the primary recharge resource for the Floridan Aquifer. Development can increase the amount of impervious surfaces and alter the natural topography, vegetation and runoff patterns, in turn reducing the quantity of natural recharge. Limiting the percentage of impervious surfaces in high recharge areas and encouraging preservation of natural recharge areas in land development regulations aid in maintaining the recharge levels. Currently, land use within the majority of the high recharge areas in Apopka consists of predominantly low density residential.

The SJRWMD completed an aquifer protection plan in 2005 that identified areas in which groundwater supplies were at a risk of depletion and recommended strategies to protect the aquifer. The strategies include artificial recharge projects, technical

assistance and regulatory program enhancements.

AQUIFER CONTAMINATION

High recharge areas may experience groundwater contamination from both point source and non-point source pollutants such as those contained in stormwater runoff. Although the Floridan Aquifer is massive in size, prevention of contamination in high recharge areas is essential due to the regional use of the groundwater supply. The City has adopted stormwater management and wellhead protection regulations that protect the aquifer from contamination

REGULATORY FRAMEWORK

Governing bodies have enacted regulations to prevent negative impacts of excessive water consumption. Extreme lowering of aquifer levels and surface water flows can adversely affect ecosystems by lowering lake levels, degrading wetlands and other natural systems and habitats.

Water Management District Regulations

The state delegates powers to water management districts to regulate well construction and ensure that wells are contaminant free.

State Regulations

The State of Florida adopted wellhead protection rules in Rule 62-521, F.A.C. The rule defines a “Wellhead Protection Area” as an “area designated by the Department consisting of a 500 foot radial setback distance around a potable water well where ground water is provided the most stringent protection measures to protect the ground water source for a potable water well and includes the surface and subsurface area surrounding the well.” Chapter 62-521, F.A.C. additionally defines ground water protection measures in Wellhead Protection Areas. Such measures include rules governing:

- New domestic wastewater treatment facilities
- New domestic wastewater residuals land application sites
- New discharges to ground water
- New solid waste disposal facilities
- New generators of hazardous waste
- New hazardous waste treatment, storage, disposal and transfer facilities
- New above ground and underground tankage of hazardous wastes

Local Regulations

As a means to address these concerns the City has adopted criteria that regulates stormwater run-off rates and volume. In addition the City has adopted an ordinance stipulating that all existing drainwells within the City be plugged. Development regulations related to drainage and stormwater management are further explained in the Conservation Element and the Drainage Sub-element.

The City shall continue to support the SJRWMD in the implementation of Chapters 40C-4, 40C-40, 40C-41 and 40C-42, F.A.C. including the Wekiva River Hydrologic Basin criteria.

SOLID WASTE SUB-ELEMENT

EXISTING CONDITIONS

Orange County is the primary entity responsible for providing solid waste disposal facilities for Apopka and the rest of the county. The City provides solid waste collection services for residential households and commercial users within its entire corporate limits. No services are provided to adjacent jurisdictions or to the unincorporated county area.

COLLECTION SYSTEM

The City's Sanitation Division is responsible for the collection and delivery of both residential and non-residential solid waste to the county transfer stations or landfill and for monitoring solid waste activity. As of September 30, 2008, the City has 507 commercial customers (including multi-family residential) and 8,051 residential customers.

LEVEL OF SERVICE

The City adopted level of service (LOS) standards of four pounds per capita per day for residential waste and 2 pounds per 1,000 square feet of commercial development. Commercial pick-ups are based on the needs of the individual accounts and are available from one to seven days per week. Residential customers receive curbside collection, twice per week.

As of September 2009:	Tons Per Day (365 days)
	Actual
Commercial	24.98
Residential households	39.18
Recycling	5.79
TOTALS	69.95

RECYCLING

The City of Apopka offers curbside collection of mixed-materials (i.e., newspaper, cardboard, glass, cans, and plastics). On January 1, 1992, state law mandated that all yard waste be removed from Class 1 household garbage and the City established new schedules to comply with this law. On January 2, 1996, the City joined Orange County with the mandatory Commercial Recycling Program for all businesses and multi-family developments.

HAZARDOUS WASTES

The City of Apopka does not collect or dispose of any hazardous wastes; however, it is conceivable that some small amounts of household hazardous waste is disposed of in the landfill due to homeowners mixing household hazardous wastes such as pesticide cans, waste oil and paint cans in with their household refuse. The Florida Department of Environmental Protection (FDEP) and Orange County's Environmental Protection Department (OCEPD) are responsible for any hazardous wastes found or collected within the City limits including small quantity generators, households, farms and businesses.

SOLID WASTE FACILITIES

There are no solid waste disposal locations within the City of Apopka. Solid waste material collected by franchised haulers is delivered to Orange County's Transfer Stations or to the landfill. Recycling material is delivered to the Orange County Landfill.

FUTURE CONDITIONS ANALYSIS

LEVEL OF SERVICE AND FINANCIAL FEASIBILITY

The City of Apopka does not anticipate any revision to the current solid waste collection and disposal program. The City's solid waste activities are supported by an enterprise fund. Service charges are evaluated annually or at the time of landfill charges (tipping fees) are increased to ensure sufficient revenue is generated to fund all required operations, maintenance and capital costs.

RECYCLING

The City of Apopka will continue offering residential recycling of newspapers and mixed recyclables. The City will continue to cooperate with Orange County to increase the recycling effort for commercial material. The City of Apopka will coordinate with Orange County and other local municipalities to pursue new technologies for collecting and processing recyclable materials.

HAZARDOUS WASTES

The City of Apopka shall continue to assist the FDEP and OCEPD in eliminating improper household hazardous waste disposal by continuing to assist OCEPD in their Household Hazardous Waste Round-Up programs throughout the county and by distributing FDEP provided educational information. The City shall also publish

information regarding hazardous waste recycling and other disposal programs.

SOLID WASTE FACILITIES

The City of Apopka will continue to rely on Orange County for the disposal of solid waste materials in accordance with Chapter 403.706, Florida Statutes (F.S.). There is currently no formal agreement establishing any specific proportional capacity to the City. **Table 4-13** illustrates the City's projected solid waste disposal needs (Note: The City and county's population projections are very simiilar, so no change in the City's percentage of the county landfill is expected):

TABLE 4-14: PROJECTED SOLID WASTE DISPOSAL NEEDS

Year	Projected Population [1]	Projected City Tonnage [2]	Percent of County Landfill	Projected Recycle Tonnage [3]	Percent of County Landfill
2009*	40,971	23,422	3.2%	2,155	2.4%
2010	41,983	24,001		2,208	
2015	56,953	32,558		2,996	
2020	74,289	42,469		3,907	
2025	98,743	56,448		5,194	
2030	125,538	71,766		6,603	

Note: The service area for solid waste collection is the City's municipal boundaries.

(1) Includes seasonal population

(2) Tonnage deposited in the Orange County Class I Landfill (includes residential and commercial waste from regularly scheduled can and dumpster pickup – no white goods, yard waste or hazardous waste)

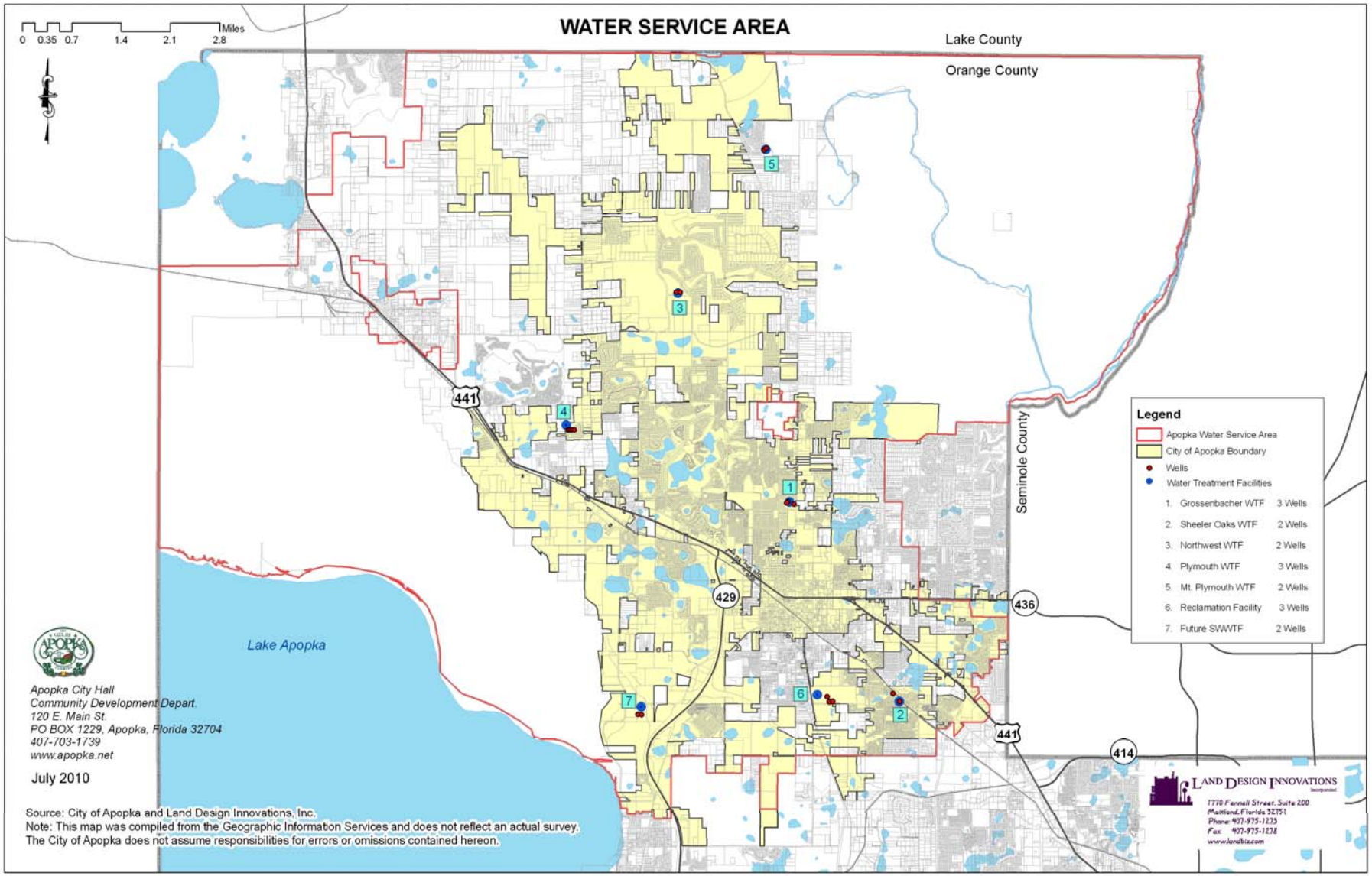
(3) Tonnage deposited at the Orange County Landfill and distributed to either the recycling separation facility, the white goods facility or the landscape waste facility

* Tonnage based on actual figures for October 1, 2008 to September 30, 2009.

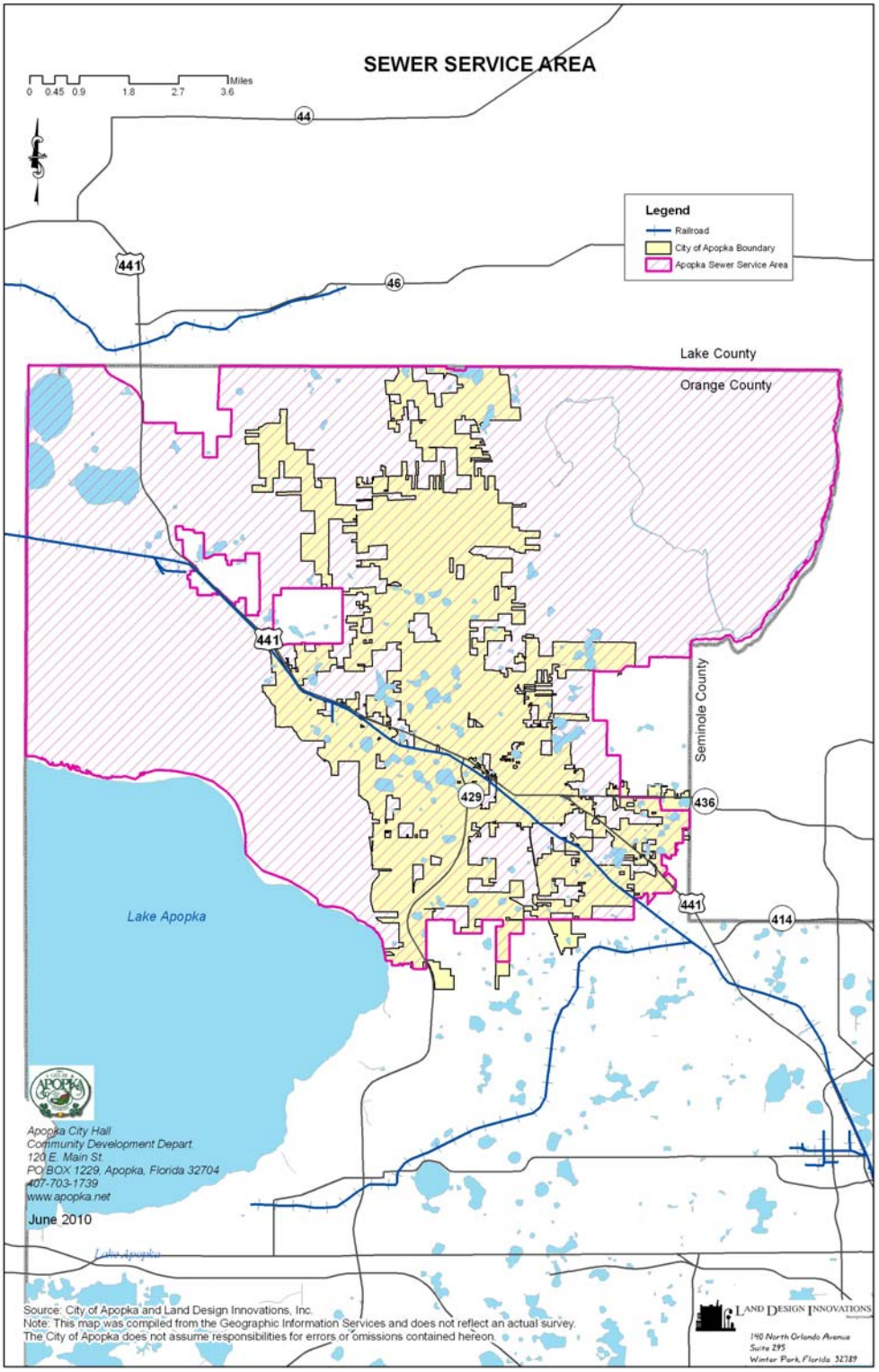
Source: City of Apopka, 2009

According to county projections, the Orange County Landfill is capable of meeting the solid waste disposal demands for Apopka at its adopted LOS standard through the 2030 planning horizon. Timing and location of recycling facilities are determined by Orange County and the City of Apopka.

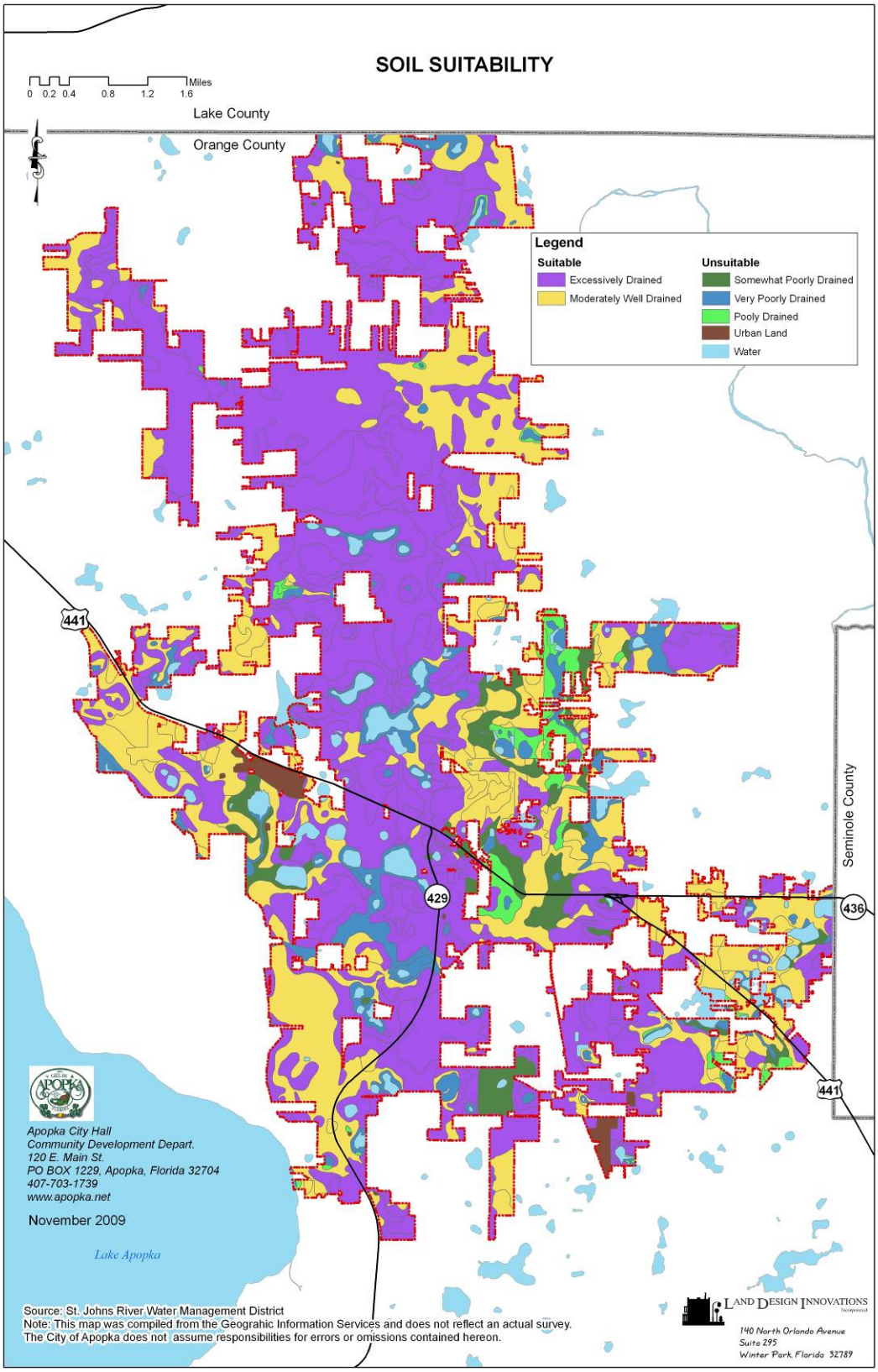
MAP 4-1: APOPKA WATER SERVICE AREA



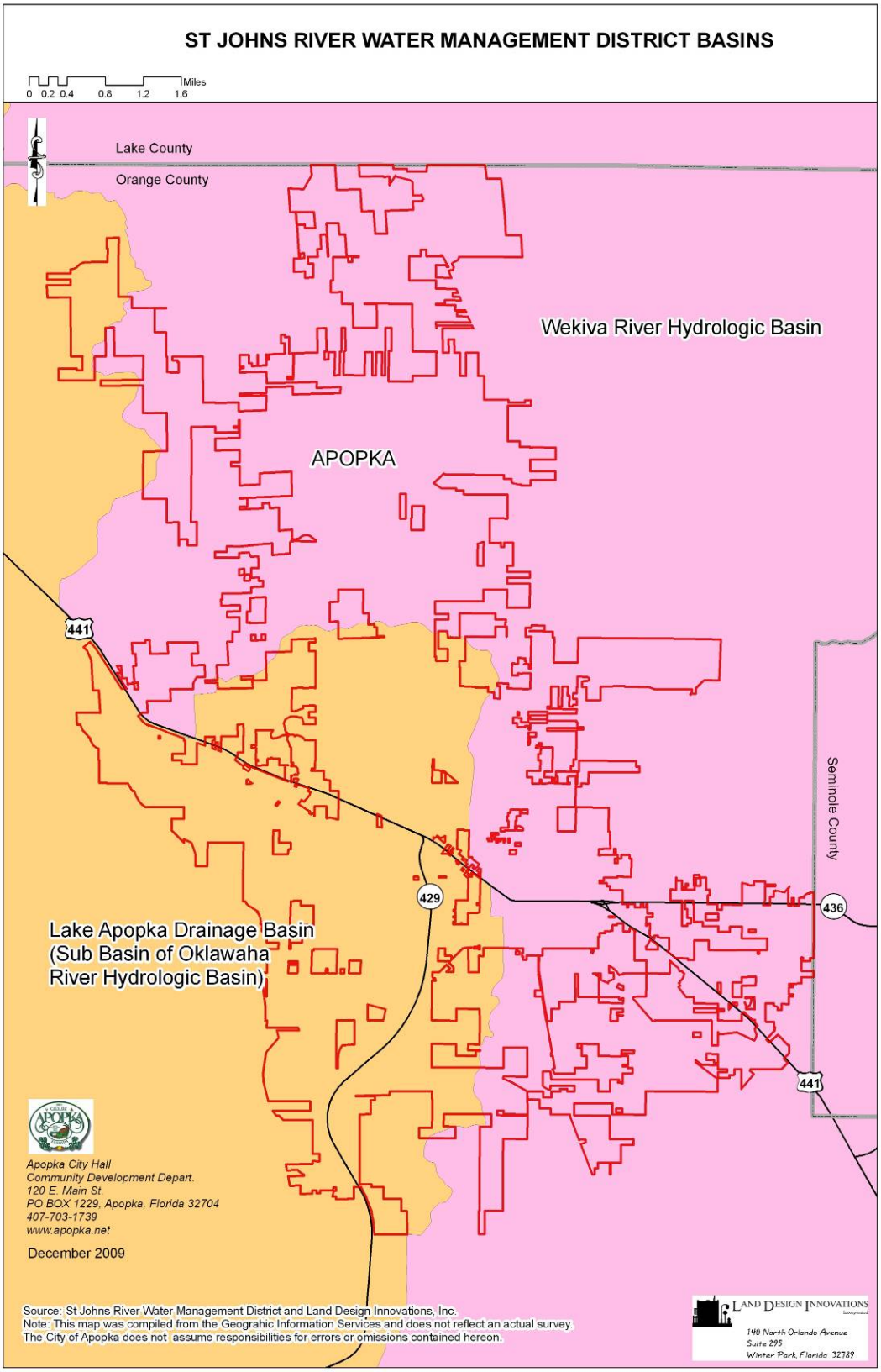
MAP 4-2: APOPKA SEWER SERVICE AREA



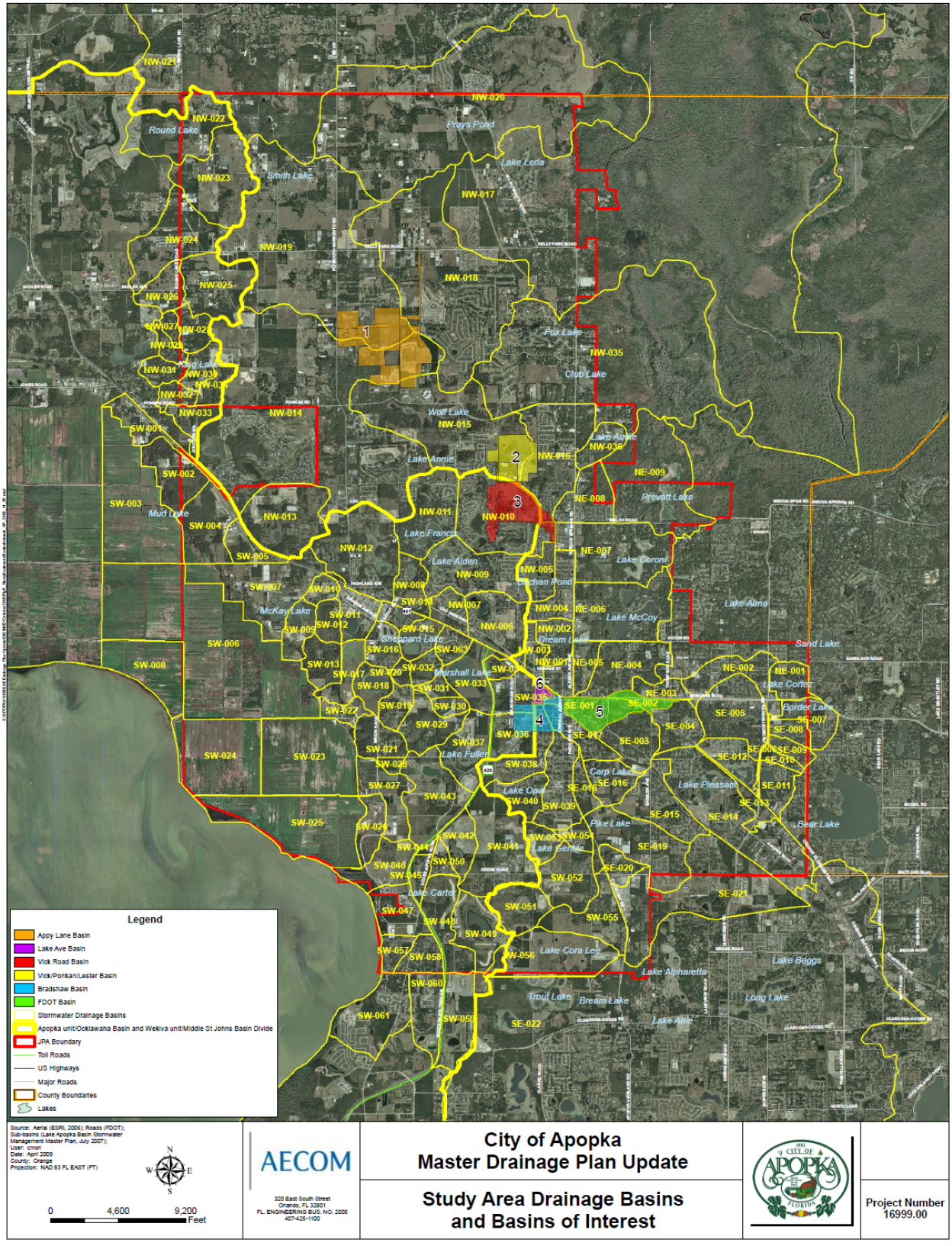
MAP 4-3: SOIL SUITABILITY



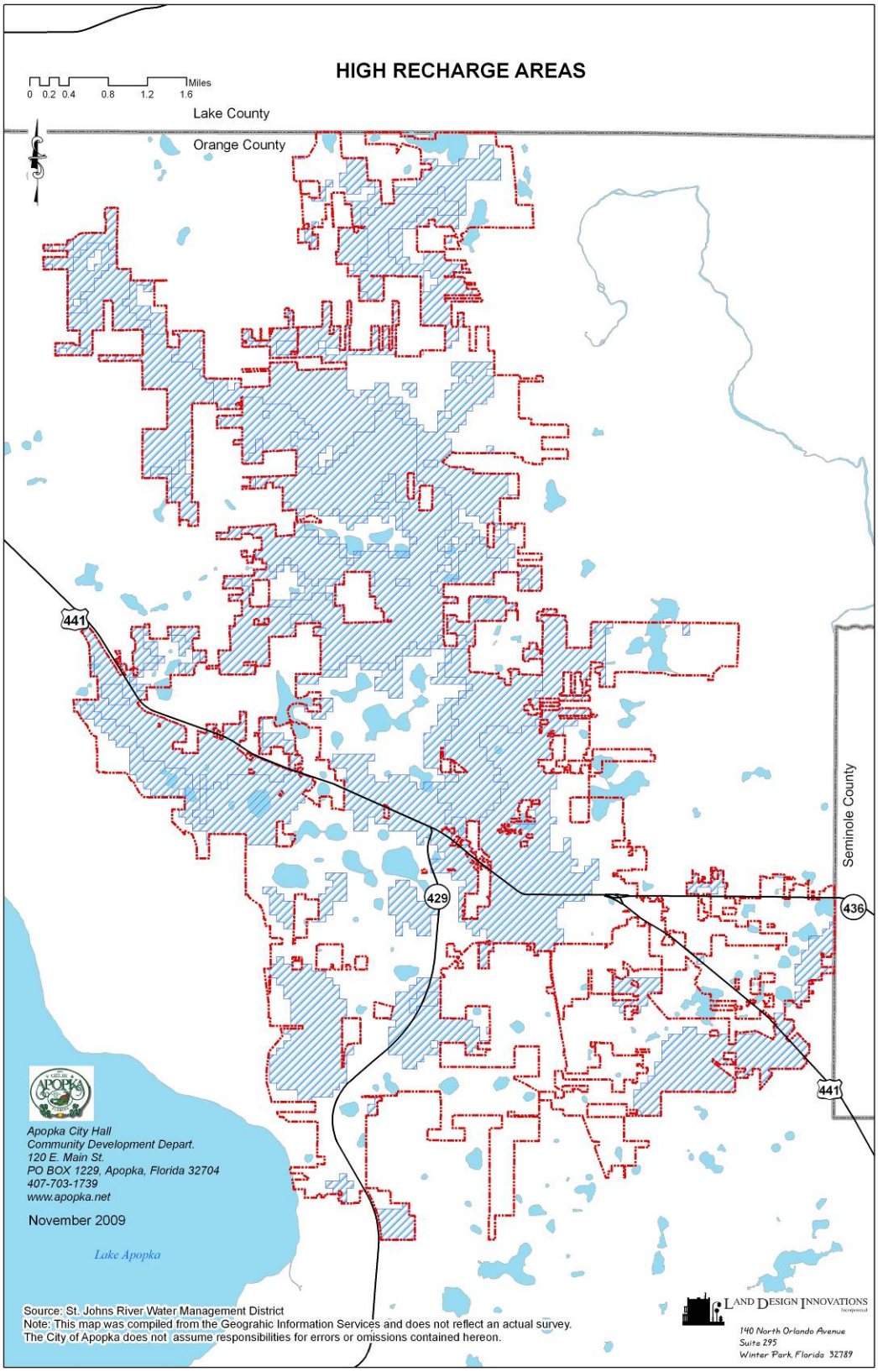
MAP 4-4: ST. JOHNS RIVER WATER MANAGEMENT DISTRICT BASINS



MAP 4-5: DRAINAGE BASIN BOUNDARIES



MAP 4-6: HIGH AQUIFER RECHARGE AREAS IN APOPKA



INFRASTRUCTURE ELEMENT

GOALS, OBJECTIVES AND POLICIES

SANITARY SEWER SUB-ELEMENT

GOAL 1

To provide for the collection, treatment and reclamation of wastewater in an environmentally safe and cost effective manner that will be sufficient to meet the existing and future needs of the citizens residing in the utility service area.

Objective 1.1

The City of Apopka's existing and future wastewater collection and treatment system shall provide the following minimum levels of service, through treatment, conservation and public education strategies.

Policy 1.1.1

The minimum level of service for the City's wastewater system, expressed as a per capita flow to be collected, treated and reclaimed shall be 81 gallons per capita per day. This level of service is an average daily flow based on the population served by the system and the system wide flows generated within the utility service area.

Policy 1.1.2

Peak design flows for the wastewater collection facilities shall range from 2.5 to 4.0 times the average daily flow. These criteria shall be included in the City's Land Development Regulations.

Policy 1.1.3

Peak hydraulic design flows for wastewater treatment facilities shall be no less than 2.0 times the average daily flow as calculated using the minimum level of service stated in Policy 1.1.1.

Objective 1.2

Identify and correct future deficiencies within the wastewater system through regular sewer evaluations and inspections and

include projects to address deficiencies in the City’s Capital Improvements Program.

Policy 1.2.1

The City of Apopka shall continue to annually inspect all lift stations for the integrity of structures and equipment and shall conduct evaluations of lift station operating conditions.

Policy 1.2.2

The City of Apopka shall continue to evaluate and inspect sewer systems which are suspected to be contributing infiltration and inflow.

Policy 1.2.3

The City of Apopka shall continue to use video inspection techniques for regular sewer evaluation and inspection.

Policy 1.2.4

The City of Apopka shall update the wastewater collection system master plan every five years at a minimum.

Objective 1.3

To properly operate and maintain the city's existing and future wastewater collection, treatment, and reclamation facilities in accordance with local, state and federal regulations.

Policy 1.3.1

The City of Apopka shall sufficiently fund the cost of operations and maintenance to carry out Objective 1.3.

Policy 1.3.2

The City's wastewater treatment and reclamation facilities shall be operated and maintained under the supervision of state certified operators and in accordance with all permits issued by local, state and federal regulatory agencies.

Policy 1.3.3

Industrial discharges to the City's collection system shall receive adequate pretreatment in accordance with city code so that such industrial discharges do not adversely affect the operations of the City's wastewater treatment nor cause any

violation of the permits issued by local, state and federal regulatory agencies.

Policy 1.3.4

The City of Apopka shall continue to implement a comprehensive preventative maintenance program for all equipment in the wastewater system.

Objective 1.4

The City of Apopka shall assign the highest priority to cost-effective, beneficial uses of reclaimed water when developing future effluent disposal plans.

Policy 1.4.1

All future wastewater treatment facilities shall incorporate the necessary levels of treatment that will produce a cost effective, reclaimed water that is acceptable to local, state and federal regulatory agencies for irrigation on areas which are accessible to the public.

Policy 1.4.2

The City of Apopka shall update the master plan for the reclaimed water distribution system every five years at a minimum.

Policy 1.4.3

The City of Apopka shall continue to require the construction of dual water systems in future developments located within the reclaimed water service area which have access or are anticipated to have access to reclaimed water.

Policy 1.4.4

Within areas not already served by reclaimed water, the City of Apopka shall identify large potential users (i.e., golf courses, parks, recreational areas) and implement stormwater irrigation practices where practicable and financially feasible. Potential sites shall be evaluated independently on a case-by-case basis based on actual conditions.

Policy 1.4.5

The City of Apopka shall continue to require that new development reuse distribution points be connected to the

reclaim water system.

Policy 1.4.6

The City of Apopka will continue to use the reclaim water conservation rate structure that went into effect in on May 21, 2008 by Ordinance Number 2064.

Policy 1.4.7

The City of Apopka shall perform annual water audits to the reclaimed water treatment facilities using the AWWA water audit spreadsheet.

Objective 1.5

In order to discourage urban sprawl, expansion of the City's wastewater collection, treatment and reclamation facilities will only be allowed within the Utilities Service Area, as defined in the Interlocal Agreement with Orange County, and in accordance with the Capital Improvements Element to serve projected new development or redevelopment with levels of service that meet those adopted by the City.

Policy 1.5.1

The wastewater collection, treatment and reclamation facilities shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with the impacts of development as required in the City's Concurrency Management System.

Policy 1.5.2

The internal wastewater facilities within future developments and/or redevelopments shall continue to be the responsibility of the applicant seeking a development permit and shall be designed and constructed in accordance with the most current edition of the Apopka Land Development Regulations.

Policy 1.5.3

Extensions to the wastewater collection and reclaimed water distribution systems shall be conducted in accordance with the appropriate master plan and the Capital Improvements Element.

Policy 1.5.4

The City of Apopka shall hereby update the 2005 Wastewater Master Plan Update and 2005 Reclaimed Water Master Plan Update, and shall incorporate them into this Comprehensive Plan.

Policy 1.5.5

The permanent use of septic tanks shall only occur for residential developments and neighborhood commercial uses if the following conditions apply:

a) the septic tanks serve a lot of one acre or larger in size;

b) a residential development within the City that is located more than one mile from the City's wastewater collection system. The one-mile distance shall be measured from the nearest lot line where the facilities are located; and

c) it can be demonstrated through soil analysis, subdivision layout, or the use of enhanced technology that comparable groundwater protection can be achieved with small lots.

Exceptions to this policy may be granted by the City for infill projects. For the purposes of this exception provision, infill development shall be considered the development of vacant or underutilized parcels within the City's urbanized areas which are already largely developed. Designation as an infill project shall be done at the sole discretion of the city's Community Development Department (and in compliance with Policy 1.5.9.).

Policy 1.5.6

The City of Apopka shall review the Apopka Land Development Regulations annually for sufficiency of the wastewater guidelines. The Apopka Land Development Regulations shall be updated, at least every three years or more often as deemed necessary by the City, to reflect beneficial advancements in engineering, products and materials, construction and other appropriate areas.

Policy 1.5.7

Until such time the wastewater analysis has been completed, development within the portions of the Small Area Land Use Study Concept Plans (Northwest Area, West Area, Plymouth Area, and Western Expressway Corridor Area) not included in the 2020 Utility Master Plan shall be required to submit a utility analysis, which takes into account the impacts of proposed

utilities in the entire Small Area Land Use Study Concept Plan.

Policy 1.5.8

The City of Apopka has adopted a Wekiva Parkway and Protection Act Master Stormwater Management Plan Support Final Report in cooperation of the St. Johns River Water Management District. The City shall follow the intent of this Report.

Policy 1.5.9

The use of septic tanks for new developments may be undertaken on an interim basis, not to exceed five years, in cases where central sewer improvements necessary to serve the proposed development are scheduled for construction in the adopted Capital Improvements Program within that five year timeframe. The approval for and conditions of the use of septic tanks on an interim basis shall be at the sole discretion of the City.

Policy 1.5.10

Package plants shall not be permitted for any development within the City.

Policy 1.5.11

Where onsite disposal systems (OSDS or septic tanks) are permitted, protection of the environment shall be ensured through OSDS size requirements and the incorporation of a stringent level of wastewater treatment to reduce nitrate levels.

Objective 1.6

To treat and beneficially use the residuals of wastewater treatment in accordance with all applicable local, state and federal regulations.

Policy 1.6.1

The City of Apopka shall continue to use the current residuals management plan approved by the Florida Department of Environmental Protection.

Policy 1.6.2

The City of Apopka shall continue using residuals as a soil conditioner and fertilizer for appropriate agricultural

operations in conformance with local, state and federal regulations.

Policy 1.6.3

The City of Apopka shall consider participation in future regional approaches to residuals management that may involve several local governments.

POTABLE WATER SUB-ELEMENT

GOAL 2

To provide a safe and dependable water supply that is in compliance with local, state and federal regulations and that will be sufficient to meet the existing and future needs of the citizens residing in the utility service area.

Objective 2.1

The City's existing and future potable water system shall provide the following minimum levels of service.

Policy 2.1.1

The minimum level of service for the potable water system expressed as a per capita flow to be supplied, treated and distributed shall be 177 gallons per capita per day. This level of service is an average daily flow based on the population served by the system and the system wide flows generated within the utility service area. The per capita rate of gallons per day includes water demands for commercial, residential and unaccounted-for water.

Policy 2.1.2

The City shall seek to reduce the level of service from 177 gpcd to 166 gpcd in 2015; 154 gpcd in 2020; to 144 gpcd in 2025; and to 137 gpcd in 2030.

Policy 2.1.3

The minimum level of service for system pressure, under normal operating conditions, shall be 30 pounds per square inch (psi), as measured in the water main. During emergency conditions, power failures and/or fire flow conditions, water pressure shall be maintained at a minimum level of 20 psi or greater.

Policy 2.1.4

The City of Apopka shall provide sufficient water storage facilities to store a fire volume equal to four hours of fire flow, plus necessary operational storage. Operational storage shall be equal to the volume of water equivalent to the difference between peak hour and maximum day flow over a period of eight hours. This storage volume shall meet or exceed the storage volume requirements outlined in the

requirements of Florida Department of Environmental Protection (FDEP) Rule 62-555.348 and 62-555.320(19), F.A.C., and shall exceed 25% of the maximum daily demand.

Policy 2.1.5

Expansion of the design capacity of the Water Treatment Plant(s) will be consistent with the goals, objectives, and policies of the Comprehensive Plan and multi-jurisdictional water planning efforts in northwest Orange County.

Objective 2.2

Identify and correct future deficiencies within the potable water system through regular system evaluations and inspections and through the following policies.

Policy 2.2.1

The City of Apopka shall inspect all potable water facilities and conduct an annual evaluation of the performance of each water treatment plant. Deficiencies identified through this inspection shall be evaluated and corrective action shall be prioritized and implemented according to the objectives and policies of the Capital Improvements Element.

Policy 2.2.2

The City of Apopka shall continue its valve exercise and pipe flushing program.

Policy 2.2.3

The City of Apopka shall evaluate pressure complaints at least annually. Improvements needed to correct areas with deficient levels of service shall be identified.

Policy 2.2.4

The City of Apopka shall update the water system master plan every five years at a minimum. The Comprehensive Plan will be amended in accordance with the water system master plan and any revisions thereto.

Policy 2.2.5

All projects identified by the City to correct future deficiencies, that are considered cost effective, shall be

incorporated into the Capital Improvements Element for implementation.

Objective 2.3

To properly operate and maintain the City's existing and future potable water supply, treatment and distribution facilities in accordance with local, state and federal regulations.

Policy 2.3.1

The City of Apopka shall sufficiently fund the cost of operations and maintenance to sustain adopted LOS standards.

Policy 2.3.2

The City's potable water supply, treatment and distribution facilities shall be operated and maintained under the supervision of state certified operators and in accordance with all permits issued by local, state and federal regulatory agencies.

Objective 2.4

To use the lowest quality of water available and acceptable for the intended application according to the Potable Water Master Plan.

Policy 2.4.1

The City of Apopka shall continue to require the use of reclaimed water for irrigation and other beneficial uses where it is available or where it can be furnished in a cost effective manner in accordance with the City's master plan for the reclaimed water system and in accordance with local, state and federal regulations.

Policy 2.4.2

The City of Apopka shall continue to actively promote the use of reclaimed water by educating the public through use of the local media, educational programs at schools and civic organizations, and through other appropriate means.

Objective 2.5

To conserve water resources by using appropriate water conservation techniques and implementing the water conservation plan.

Policy 2.5.1

The City of Apopka shall continue implementation of the Water Conservation Plan established in the City's CUP issued by the SJRWMD.

Policy 2.5.2

The City of Apopka shall continue to enforce state laws requiring the use of low volume plumbing fixtures for construction and/or redevelopment projects.

Policy 2.5.3

The City of Apopka shall continue to participate in water conservation projects or programs that will demonstrate to the public the use of drought tolerant landscape materials to achieve water conservation.

Policy 2.5.4

The City of Apopka shall implement the St. John River Water Management District's landscape irrigation rule through Ordinance Number 2172 entitled "Water Conservation Ordinance for Landscape Irrigation which was adopted on July 7, 2010.

Policy 2.5.5

The City of Apopka shall implement Ordinance Number 2069, adopted on May 21, 2008, which requires waterwise irrigation practices and the application of Florida Friendly landscape practices.

Policy 2.5.6

The City of Apopka shall establish a program to educate customers/groups within the City's Water Service Area on conservation practices, water quality, and the importance of water as a resource. The customer education program will use the following reach out methods:

- Presentations;
- Displays;
- Handouts;
- City's website;
- City's utility billing system; and

- Newspapers.

Policy 2.5.7

The City of Apopka will continue to use the potable water conservation rate structure that was adopted in May 21, 2008 by Ordinance Number 2064.

Policy 2.5.8

The City of Apopka will continue to utilize the City's Automatic Meter Reading (AMR) system to assist customers with indoor and outdoor leak detection. The AMR provides the city staff with the ability of increased usage tracking, real time consumption reading, and leak detection.

Policy 2.5.9

The City of Apopka shall continue to implement the Water Conservation Incentive Program that gives incentives for both commercial and residential water customers that were built prior to the adoption of the Ordinance 2069, May 2008, to retrofit irrigation systems to be more efficient. The incentive program includes; irrigation system evaluations, rain sensors, micro-irrigation retrofits, water conserving irrigation heads, and "smart" irrigation controllers.

Policy 2.5.10

The City of Apopka shall require irrigation systems to be in accordance with the most recent edition of the Florida Irrigation Standards Manual. The City of Apopka shall provide materials to customers on proper irrigation use and maintenance practice in accordance with the Apopka Land Development Code article 5.01.10 Irrigation.

Policy 2.5.11

The City of Apopka shall continue to use the mid-month high consumption notice program that was developed and distributed in October 2008. Notices will be sent to potable water customers half way through their billing cycle that have a usage which at the present trend will put them into the highest conservation rate structure or higher.

Objective 2.6

To provide a safe, dependable and adequate supply of water for potable uses within the utility service area, according to the

Potable Water Master Plan and the Water Supply Facilities Work Plan.

Policy 2.6.1

All future water production wells shall be drilled into the lower Floridan aquifer.

Policy 2.6.2

The City of Apopka shall expand well production capacity as needed to serve projected maximum daily demands for potable water within the utility service area.

Policy 2.6.3

The City of Apopka shall protect its potable water service by enforcing a wellhead protection zone, consisting of a 500' radius from the wellhead, in which potentially high risk land uses such as, but not limited to, industrial and manufacturing which use or store hazardous materials as defined by the U.S. Resource Conservation and Recovery Act and implemented by EPA are prohibited, consistent with FAC 62-521.200(7).

Objective 2.7

To maintain unaccounted for water at 10 percent or less of the total water pumped into the potable water distribution system.

Policy 2.7.1

The City of Apopka shall annually check the calibration of flow meters at the water treatment plants.

Policy 2.7.2

The City of Apopka shall continue the practice of routine meter change outs for large scale water users every five years.

Policy 2.7.3

The City of Apopka shall continue its meter testing and exchange program. Meters shall be replaced on a zero reading report and reading will be taken periodically.

Policy 2.7.4

The City of Apopka shall continue its leakage detection program.

Objective 2.8

To provide cost effective fire protection using the potable water system to protect the lives and property of the citizens living within the utility service area.

Policy 2.8.1

The potable water system shall be an integral part of the City's fire safety program. Fire flow standards shall be identified by the Fire Chief and incorporated into the potable water system master plan.

Policy 2.8.2

The City of Apopka shall continue the practice of testing fire hydrants in accordance with National Fire Protection Association Standards.

Policy 2.8.3

As the reclaimed water system develops, the City shall give consideration to the use of reclaimed water for fire protection in certain future low density residential developments where it is feasible.

Objective 2.9

Expand the potable water facilities and develop water supply sources in accordance with the Capital Improvements Element to serve projected new development and/or redevelopment with levels of service that meet or exceed those adopted by the City.

Policy 2.9.1

The potable water facilities shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with the impacts of development as required by the policies of the comprehensive plan.

Policy 2.9.2

The internal potable water facilities within future developments and/or redevelopments shall be the responsibility of the applicant seeking a development permit and shall be

designed and constructed in accordance with the most current edition of the Apopka Land Development Regulations.

Policy 2.9.3

Extensions to the potable water system shall be conducted in accordance with the master plan and the Capital Improvements Element. The Comprehensive Plan will be amended in accordance with the water system master plan and any revisions thereto.

Policy 2.9.4

The City of Apopka shall review the Apopka Land Development Regulations annually for sufficiency of the potable water guidelines. The Apopka Land Development Regulations shall be updated, at least every three years or more often as deemed necessary by the City, to reflect beneficial advancements in engineering, products and materials, construction and other appropriate areas.

Policy 2.9.5

Until such time the water analysis has been completed, the portion of the Small Area Land Use Study Concept Plans (Northwest Area, West Area, Plymouth Area, and Western Expressway Corridor Area), not included in the 2020 Utility Master Plan, any development shall be required to submit a utility analysis, which take into account the impacts of proposed utilities in the entire Small Area Land Use Study Concept Plan.

Policy 2.9.6

All amendments to the Future Land Use Element map shall demonstrate that adequate potable and nonpotable water supplies and related facilities and sanitary sewer capacity are available to meet projected growth demands associated with the amendment.

Objective 2.10

The City has developed and will maintain a Water Supply Facilities Work Plan (work plan)(see Appendix 1 of the Infrastructure Data and Analysis) for at least a 10-year planning period. The work plan identifies traditional and alternative water supply sources and facilities and conservation and reuse that are necessary to meet the water needs of existing and future development within the jurisdiction of the City and the City’s water service area.

Policy 2.10.1

The City shall update the Water Supply Facilities Work Plan within one year of updates of the SJRWMD district water supply plan that affects the City and will amend the comprehensive plan as necessary to incorporate changes to the background information and the adopted goals, objectives, policies, maps, and capital improvements schedules relative to the work plan update.

Policy 2.10.2

When updating the Water Supply Facilities Work Plan, the City shall seek alternative sources of water in order to meet projected demand increases.

Policy 2.10.3

The Water Supply Facilities Work Plan shall be used to set priorities and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable and nonpotable water to meet future demands.

Policy 2.10.4

The City shall establish and maintain, at a minimum, a current five-year schedule of capital improvements for the improvement, extension and/or increase in capacity of water and reclaimed water facilities.

Objective 2.11

The City shall identify sources of water that can be used to meet existing and future needs identified in the Water Supply Facilities Work Plan.

Policy 2.11.1

In conjunction with the SJRWMD and other local governments, the City shall seek the development of efficient, cost-effective and technically feasible water sources that will supplement future demands without causing adverse impacts to water quality, wetlands and aquatic systems. These sources may include, but are not limited to, surface water, reclaimed water and brackish groundwater.

Policy 2.11.2

The City shall maximize the use of existing potable water facilities through the implementation of management techniques that can enhance a source of supply, sustain water resources and related natural systems and/or optimize water supply yield. These techniques may include, but are not limited to, surface water, reclaimed water, system interconnects and water conservation.

Policy 2.11.3

The City's annual water consumption shall be equal to or less than the amount allocated under the SJRWMD-issued consumptive use permit.

Policy 2.11.4

In order to adequately assess the impact that a proposed development may have upon water supply and related facilities, the City shall, through its concurrency evaluation, assess the availability of adequate water supply and related facilities to serve the proposed development by the issuance date of the certificate of occupancy, development order or other milestone in advance of occupancy as determined by the City. The City will ensure that adequate water supplies and facilities are available and in place prior to issuing a certificate of occupancy or its functional equivalent.

STORMWATER MANAGEMENT SUB-ELEMENT

GOAL 3

To manage stormwater runoff in a manner that will protect the quality of surface and groundwater; preserve natural drainage ways and wetlands; minimize flooding and any other threats to the health safety and welfare of the citizens residing in the City of Apopka.

Objective 3.1

The City's future stormwater management facilities including those facilities serving redevelopments shall provide the following minimum levels of service as stated in the Apopka Land Development Regulations.

Policy 3.1.1

The City of Apopka shall continue to require that the post-development peak rate of discharge must not exceed the pre-development peak rate of discharge for the 25-year, 24-hour storm (8.6 inches of rainfall).

Policy 3.1.2

The City of Apopka shall continue to require that pollution abatement be accomplished by retention of runoff from the developed site with filtration into the soil through the bottom of the retention pond or through an approved filtering media consistent with the St. Johns River Water Management District’s standards, unless more stringent measurements are required in other policies. The city shall require in its Land Development Regulations that stormwater treatment facilities be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use, in accordance with the classifications established in Chapter 62-302.400, F.A.C.

Policy 3.1.3

The City of Apopka shall continue to require, where a positive outfall is not available for stormwater discharge, the 100-year, 24-hour storm (10.6 inches of rainfall) be retained on the site of the development. The retention pond shall be designed to percolate the total runoff volume within 72 hours following the rainfall event.

Policy 3.1.4

The City of Apopka shall continue to require, when runoff from a project is to be discharged to a landlocked lake with no positive outfall, that the on-site stormwater facilities be designed to detain the 25-year, 96-hour storm (12 inches of rainfall).

Policy 3.1.5

The level of service standard for flood protection within the City of Apopka shall be 100 year - 24 hour storm event. The city shall continue to require the finished floor of all inhabitable structures be located no less than 1-foot above the 100 year - 24 hour storm elevation.

Policy 3.1.6

The level of service standard for primary stormwater management facilities within the City of Apopka shall be the 25 year - 24 hour storm event.

Policy 3.1.7

The level of service standard for storm sewer systems within the City of Apopka shall be the 10 year storm event.

Policy 3.1.8

The City’s land development regulations shall provide that no subdivision shall be platted nor shall construction commence for any multifamily, commercial, industrial or institutional project until the drainage design for such project has been approved by the city engineering division. The design shall meet or exceed design standards and the policies and procedures established by the SJRWMD, the Department of Environmental Protection, the Florida Department of Transportation, and the design criteria contained therein, and shall provide for retention and/or detention of stormwater runoff.

Objective 3.2

Restrict development within the 100-year flood plain to those uses that will not adversely affect the capacity of the flood plain to storm water.

Policy 3.2.1

The City of Apopka shall continue to require compensating storage for all flood water displaced by development below the elevation of the base 100-year flood.

Policy 3.2.2

The City of Apopka shall continue to require the finished floor of all inhabitable structures be located 1-foot above the base 100-year flood elevation.

Policy 3.2.3

The City of Apopka shall require where feasible the use of flood plain as conservation, open space and recreation in order to preserve the natural flood plain and vegetation.

Objective 3.3

To properly operate and maintain drainage facilities within the City in accordance with local, state and federal regulations.

Policy 3.3.1

The City of Apopka shall sufficiently fund the cost of operations and maintenance necessary to operate and maintain drainage facilities.

Policy 3.3.2

The City of Apopka shall maintain neglected private stormwater management facilities and the City's cost of maintenance shall be recovered from the private owner and/or operator of the facilities.

Policy 3.3.3

The City of Apopka shall continue to implement pro-active stormwater maintenance and inspection activities, as defined by the National Pollution Discharge Elimination System (NPDES) MS4 permit or by established programs such as, street sweeping; inspections and maintenance of outfalls; maintenance of catch basins and grates; and maintenance of other roadside drainage structures.

Policy 3.3.4

By May 2012, the City of Apopka shall implement identified recommendations in the Regional Master Stormwater Management Plan Support, dated November 2005, for the prioritized deficiencies (South Lake McCoy and Black Forest Court.)

Objective 3.4

The City of Apopka shall require erosion control practices to protect waterbodies and wetlands from siltation resulting from land that has been cleared for construction.

Policy 3.4.1

The City of Apopka shall require developers to disturb as little land as practicable. Those areas that are not to be disturbed shall be protected by an adequate barrier from construction activity. Natural vegetation shall be retained and protected.

Policy 3.4.2

The City of Apopka shall require that erosion and sediment control practices be used to protect water bodies, water courses and wetlands from siltation due to runoff from construction activities and/or from lands that have been cleared for construction. All sediment shall be retained on the site of construction.

Policy 3.4.3

The City of Apopka shall continue its street sweeping program to control the transport of sediments and other materials by stormwater runoff.

Policy 3.4.4

The City of Apopka shall maintain protection guidelines within the Apopka Land Development Regulations.

Policy 3.4.5

The City of Apopka shall by June 2011, amend the Land Development Code to include criteria to minimize erosion, sedimentation, and stormwater runoff within high recharge areas including restrictions on clearing of native vegetation and removal of topsoil.

Policy 3.4.6

The City of Apopka will continue to utilize best management practices, such as silt fences and sediment basins to retain sediment on site.

Policy 3.4.7

The City of Apopka shall by June 2011, amend the Land Development Code to incorporate karst stormwater management system design criteria.

Policy 3.4.8

The City of Apopka shall coordinate with the St. Johns River Water Management District and the Florida Department of Environmental Protection to develop performance standards for new facilities constructed in karst areas or that discharge into sinkholes. Such standards shall be included in the Apopka Land Development Code by June 2011

Objective 3.5

To expand the beneficial uses of areas designated for stormwater management by including in the city's Land Development Regulations provisions for the use of these areas as parks and other recreational uses.

Policy 3.5.1

Encourage creative planning of stormwater retention/detention areas to include facilities for parks and recreation.

Policy 3.5.2

Encourage the use of wetlands and other unique natural areas in stormwater management plans to ensure their viability and preservation.

Policy 3.5.3

The City of Apopka shall require where feasible the planting of littoral zone vegetation in stormwater ponds and/or lakes to provide a natural system for the uptake of nutrients and other constituents transported by stormwater runoff.

Objective 3.6

The City of Apopka shall implement the projects identified in the Capital Improvements Element.

Policy 3.6.1

The City of Apopka shall conduct annual inspections of all drainage facilities. Any deficiencies identified shall be corrected or corrective measures incorporated into the Capital Improvements Element.

Policy 3.6.2

The City of Apopka shall investigate cost effective and practical methods to provide stormwater treatment in accordance with the adopted level of service standards for existing systems that discharge untreated stormwater to surface waters by December 2012. The City will implement those retrofit projects that are considered necessary for the city to comply with future National Pollutant Discharge Elimination System (NPDES) permit requirements.

Policy 3.6.3

The City of Apopka shall eliminate the use of drainage wells that are solely under the City's control and where practical and cost effective alternatives for stormwater management can be developed and incorporated into the Capital Improvements Element.

Objective 3.7

Expand stormwater management facilities to serve projected new developments and/or redevelopments that meet the levels of service adopted by the city.

Policy 3.7.1

Stormwater management facilities shall be provided by the applicant seeking a development permit and/or the City, in a timely manner that is concurrent with the impacts of development as required in the concurrency management system.

Policy 3.7.2

The internal stormwater management facilities within future developments and/or redevelopments shall be the responsibility of the applicant seeking a development permit and shall be

designed and constructed in accordance with the most recent edition of the Apopka Land Development Regulations.

Policy 3.7.3

The City of Apopka shall not permit the construction of drainage wells for future projects.

Policy 3.7.4

The City of Apopka shall review the Apopka Land Development Regulations annually for sufficiency of the stormwater guidelines. The Apopka Land Development Regulations shall be updated, at least every three years or more often as deemed necessary by the City, to reflect any beneficial advancements in engineering, products and materials, construction and other appropriate areas.

Policy 3.7.5

By September 2010, the City of Apopka shall update and maintain its master stormwater management plan to, at a minimum, address the requirements of the Wekiva Parkway and Protection Act and include the following: data collection; identification of problem areas; hydraulic/hydrologic analysis of the primary stormwater management system; water quality; recommendations, estimated costs for capital improvements.

Policy 3.7.6

The City of Apopka shall evaluate and identify Surface Water Conservation, Treatment and Flood Control Management Strategies, Groundwater Protection and Reuse Management Strategies Capital Improvement Programs contained in the Wekiva Parkway and Protection Act Master Stormwater Management Support Document, dated November 2005 for subbasins (receiving a rank of “1" and “2" by 2010, and implement financially feasible projects by 2012; evaluate and identify CIPs for subbasins receiving a rank of “3" and “4" (or higher) by 2012, and implement financially feasible projects by 2017.

Policy 3.7.7

As part of the periodic updates to its master stormwater management plan, the City shall evaluate improvements to its maintenance programs based on the information presented in the Master Stormwater Management Plan and familiarity with its program.

Objective 3.8

Create a source of revenue to fund necessary capital improvements to solve existing drainage problems, operations and maintenance costs attributed to the drainage system and other appropriate costs.

Policy 3.8.1

The City of Apopka shall continue to use the stormwater utility as authorized by the City Council using the non-ad valorem fee collection method as provided in Section 403.0893, F.S., as the source to fund the capital improvement projects.

Policy 3.8.2

The City of Apopka shall require a regionalized approach to stormwater management for all future development and redevelopment projects where the regionalized approach will be more cost effective to design, construct, operate and maintain.

Policy 3.8.3

The City of Apopka shall continue a dedicated funding source, such as the stormwater utility fee, that can be used for planning, implementation and operations and maintenance of regional projects within the Wekiva Study Area.

Objective 3.9

To educate the citizens of Apopka on the environmental effects of stormwater runoff, the stormwater management needs of the community and ways in which the public can help in managing stormwater runoff.

Policy 3.9.1

The City of Apopka shall continue the public education program on stormwater management.

Objective 3.10

To recognize that drainage and stormwater management issues transcend corporate and jurisdictional boundaries and that cooperation with other local government may be necessary for the City to provide the required level of service.

Policy 3.10.1

The City of Apopka shall coordinate with adjoining local governments to address stormwater issues of mutual concern.

NATURAL GROUNDWATER AQUIFER RECHARGE SUB-ELEMENT

GOAL 4

The Floridan and surficial aquifers shall be protected to ensure that City of Apopka residents and businesses have an adequate supply of potable water now and in the future, in accordance with 163.3177(6)(c), Florida Statutes.

Objective 4.1

The City of Apopka shall establish local programs that protect the aquifers, including developing criteria for the Apopka Land Development Regulation.

Policy 4.1.1

The Apopka Land Development Regulations shall contain a definition and a generalized map of aquifer recharge areas in the city. This map shall be based on the SJRWMD maps.

Policy 4.1.2

The City of Apopka shall continue to require all new development to retain minimum of ½ inch of run-off from the entire project site. However, retaining 3 inches of runoff from the directly connected impervious area within the project site shall be required unless it is demonstrated that post-development recharge is equal or greater than pre-development recharge as stipulated in Section 40C-41, FAC.

Policy 4.1.3

Within one year after the St. Johns River Water Management District update guidelines to protect, replenish and maintain critical aquifer recharge areas and the groundwater basin; the City of Apopka shall incorporate pertinent restrictions into the Apopka Land Development Regulations.

Policy 4.1.4

The City of Apopka shall direct incompatible land use away from high recharge areas, including mining as well as industrial and commercial uses with extensive impervious surfaces.

Policy 4.1.5

The City of Apopka shall use best management practices and performance standards to maximize open space, limit impervious surfaces and turf grass areas, promote protection of natural vegetation, promote the use of pervious parking areas, and treat stormwater to protect water quality.

Objective 4.2

The City of Apopka shall coordinate with other governmental entities regarding groundwater pollution through the establishment or continuation of programs and technical assistance.

Policy 4.2.1

The City of Apopka shall cooperate with the St. Johns River Water Management District to prepare a Groundwater Basin Resource Availability Inventory.

Policy 4.2.2

The City of Apopka and the St. Johns River Water Management District shall continue working together to eliminate potential pollution sources that could contaminate water that percolates into the aquifers. These sources may include improperly installed or malfunctioning septic tanks by requiring property owners who fail to correct system deficiencies to connect to the city wastewater system. This shall be an on-going effort.

Policy 4.2.3

The use of septic tanks shall not be permissible within the corporate limits of Apopka for other than residential uses when both of the following conditions apply: the septic tanks serves a lot of one acre or larger in size, and wastewater collection facilities are further than one mile, to be measured from the nearest lot line where the facilities are located.

Policy 4.2.4

The use of septic tanks within environmentally sensitive lands shall be prohibited.

Policy 4.2.5

The use of septic tanks for new developments may be undertaken on an interim base, not to exceed five years, in cases where central sewer improvements necessary to serve the proposed development are scheduled for construction in the adopted Capital Improvements Program within that five year time-frame. The approval for and conditions of the use of septic tanks on an interim basis shall be at the sole discretion of the City.

Policy 4.2.6

The City shall require underground storage tanks be installed pursuant to Chapters 489 and 376, F.S.

Policy 4.2.7

In order to protect groundwater resources, all new development shall be required to demonstrate that pre-and post-development recharge shall be equal.

OBJECTIVE 4.3

The quality of the City of Apopka's groundwater resources shall be maintained at or above state standards through the establishment of the following policies.

Policy 4.3.1

The City of Apopka hereby adopts the Department of Environmental Protection's water quality standards and shall cooperate with the Department of Environmental Protection and St. Johns River Water Management District, to monitor groundwater quality and levels.

Policy 4.3.2

In order to adequately assess the impacts that proposed Comprehensive Plan amendments may have upon groundwater supply, the City of Apopka shall specifically address all issues consistent with the St. Johns River Water Management District Potable Water Availability Worksheet, when analyzing any proposed amendments.

A. Infrastructure Information

Water treatment plant permit number;

Permitting agency;

Permitted capacity of the water treatment plant(s):

_____ million gallons a day (mgd)

Total design capacity of the water treatment plant(s):

_____ mgd

Availability of distribution lines to serve the property

Availability of reuse distribution lines available to serve the property

B. SJRWMD Consumptive Use Permit (CUP) Information

CUP Number:

Expiration date:

Total CUP duration (years):

CUP allocation in last year of permit:

Current status of CUP:

Allocations to other local governments:

Reserved capacity:

C Consumptive Use Analysis

Current year CUP allocation:

Consumption in the previous calendar year:

Amount of capacity to be reserved for the proposed comprehensive plan amendment areas:

The amount of reserved capacity (potable water capacity currently encumbered for developments that are approved but not yet constructed) or a growth projection (current year's projected growth in service area)
Amount available for all other future uses:

Policy 4.3.3

The City of Apopka's update to the Groundwater Recharge Sub-element of its comprehensive plan pursuant to Section 163.3181, Florida Statutes, Evaluation and Appraisal Reports, will be supplemented as appropriate based on the recommendations of the Wekiva River Basin Coordinating Committee as provided by law.

OBJECTIVE 4.4

The City will revise its land development regulations to incorporate regulations protecting the functions of groundwater recharge areas, springs, and springsheds by January 2011.

Policy 4.4.1

New development will be required to maintain surface and groundwater flow rates and volumes at pre-development levels so that the natural function of groundwater recharge areas is maintained.

Policy 4.4.2

Substantial redevelopment projects shall comply with the standards for stormwater runoff that apply to new development. Substantial redevelopment shall be based upon the value and amount of cumulative improvements to the site.

Policy 4.4.3

Best management practices shall be used in combination as part of a BMP treatment train to protect water quality and minimize flooding. BMPs shall be used in the design of stormwater management facilities and systems. The following stormwater BMPs shall be instituted to reduce nitrate loading within:

1. Vegetated infiltration areas shall be encouraged for stormwater treatment and management on all sites except when soil, topography, or seasonal high water conditions are inappropriate for infiltrations as determined by a professional engineer licensed in the State of Florida.

2. Whenever infiltration systems are not feasible, wet detention systems shall be used for stormwater treatment and management.

3. Sensitive karst features, including sinkholes with a direct connection to the aquifer and stream-to-sink features, shall not be utilized as stormwater management facilities. Prior to subdivision approval, all depressions will be investigated by a licensed professional using a professionally acceptable methodology for suitability of water retention using generally accepted geo-technical practices with an emphasis on identification of potential connections to the aquifer. If connections are determined to exist, the depression shall not be used for stormwater retention and the area draining to this feature under pre-development conditions shall be preserved through a conservation easement.

4. All development approval by the City shall require the applicant to submit to the City a copy of the FDEP

stormwater permit and the NPDES notice of intent to be covered by the construction generic permit prior to any land clearing.

5. Sensitive karst features will be identified and placed in a conservation easement so that they will be thereafter used solely for passive recreation are defined as any open sinks, relic sinks with a direct connection to the aquifer and springs to sink systems.

6. All components of the stormwater treatment and management system shall be in common ownership and shall be maintained by the responsible legal entity identified in the DEP stormwater permit, typically a homeowner or property owners association.

Policy 4.4.4

For sub-basins in the Wekiva Study Area identified with predicted percent increases in pollutant loads between existing and future conditions the City of Apopka shall evaluate the use of controls in addition to what is already required for stormwater treatment by City regulations and permitting agencies, where most beneficial and where feasible, by May 2010. The types of controls to be evaluated will utilize the Best Management Practices (BMPs) include the following, at a minimum:

- Stormwater Reuse
- Reservoirs/Ponds
- No Net Floodplain Loss
- Stormwater Infiltration Basins (SIBs)
- Buffers
- Recharge Rule
- Retention
- Detention
- End-of-Pipe Treatments
- Drainage Well / Recharge Well & Treatment System
- Agricultural Nonpoint Source Pollution Management
- Water Wise Landscaping and Reduced Turf Area
- Public Outreach / Education for Proper Management and Use of Fertilizers

SOLID WASTE SUB-ELEMENT

GOAL 5.0

Provide efficient and safe solid waste collection service to accommodate existing and future demands.

Objective 5.1

Provide adequate routes, equipment and manpower to accommodate existing and future demands by implementing the following policies.

Policy 5.1.1

The City of Apopka shall maintain a rate structure that is fair to the consumer and which covers the cost of operating the solid waste collection and disposal system. Funds shall be provided by means of user fees and available county, state, and federal funds.

Policy 5.1.2

The City of Apopka shall use a level of service standard of 4 pounds per capita per day for residential and 2 pounds per capita per day for 1,000 square feet of commercial development to determine the availability of facility capacity for solid waste disposal services (this total includes residential and non-residential generation).

Policy 5.1.3

The City of Apopka shall coordinate with Orange County to provide development information for adequate disposal facility allocation.

Policy 5.1.4

The City of Apopka shall coordinate with Orange County to ensure adequate transfer station facilities are provided to accommodate northwest Orange County needs in an efficient and cost-effective manner.

Policy 5.1.5

The City of Apopka shall provide equipment and manpower necessary to accommodate the collection standard of curbside collection, twice per week, for residential class customers and as needed, available one to seven days per week, to commercial class customers.

Objective 5.2

The City of Apopka will continue its recycling efforts by supporting Orange County's effort to reduce the total waste stream through recycling.

Policy 5.2.1

The City of Apopka will continue to expand the current voluntary residential recycling program.

Policy 5.2.2

The City of Apopka will continue to cooperate with Orange County and other signatories of the Interlocal Solid Waste Management Agreement to develop new recycling programs.

Policy 5.2.3

The City of Apopka will cooperate with Orange County and other local municipalities to pursue new technologies for collecting and processing recyclable material.

Objective 5.3

The City of Apopka shall protect the health, safety, and welfare of the public from the harmful effects of hazardous wastes by cooperating with the Florida Department of Environmental Protection (FDEP) and Orange County Environmental Protection Department (OCEPD) in the regulation and disposal of hazardous wastes.

Policy 5.3.1

The City of Apopka shall continue to coordinate with Orange County in its emergency response plan to handle accidents involving hazardous wastes.

Policy 5.3.2

The City of Apopka shall continue to coordinate with Orange County Environmental Protection Department to hold household hazardous waste round-up programs in the Apopka area.

Policy 5.3.3

The City of Apopka shall distribute educational material regarding household hazardous wastes provided by FDEP to City solid waste customers.

Policy 5.3.4

The City of Apopka shall promote the recycling of hazardous wastes (e.g., waste oil) by publishing a list of approved recyclers.

Policy 5.3.5

The City of Apopka Land Development Regulations shall require evidence of compliance with Orange County Small Quantity Generator Notification Program prior to issuance of an occupational license.

APPENDIX 1

City of Apopka Water Supply Facilities Work Plan

City of Apopka Water Supply Facilities Work Plan

City of Apopka

Mayor	John H. Land
City Commissioners	J. William Arrowsmith Billie L. Dean Marilyn Ustler McQueen Kathy S. Till
Public Services Director	John Jreij, PE
Chief Administrative Officer	Richard Anderson

November 22, 2006
Revised July 5, 2010 / City of Apopka

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INTRODUCTION

Preparation of the City of Apopka Water Supply Facilities Work Plan is in response to a requirement by the 2002 Florida Legislature expanding the local government comprehensive plan requirement to strengthen coordination of water supply planning and local land use planning. The Water Supply Facilities Work Plan should ensure the construction of water supply facilities that are necessary to serve existing and new development for at least a 10-year planning period. Specifically this must include:

1. Project the local government's needs for at least a 10 year period;
2. Identify and set priorities for the water supply facilities;
3. Identify and set priorities for the water supply source(s) to meet the needs;
4. Include those capital improvements identified in the Work plan in the City's Five-Year Schedule of Capital Improvements. Revenue sources must be identified. Further, a current five-year schedule must always be maintained.

This analysis must consider the following three items:

1. City's existing facilities;
2. An analysis of system capacity, surpluses and deficiencies, facility needs, and identify a sufficient supply of water to meet projected needs; and
3. Revisions to the City's Comprehensive Plan elements to integrate the Work Plan into the Comprehensive Plan.

The analysis identifying water supply needs must be coordinated with the St. Johns River Water Management District (District). In 1997, the Florida Legislature amended the Florida Water Resources Act (Chapter 373, F.S.) to require all the districts to initiate regional water supply planning where reasonable anticipated sources of water were deemed inadequate to meet year 2020 projected demands. These water supply plans include a list of water source options that will meet anticipated demands while sustaining water resources and related natural system. The District plan was completed in 2005 and amended most recently on May 12, 2009.

The requirements of this Work Plan have also been impacted by the Wekiva Parkway and Protection Act, which was signed on June 29, 2004.

The requirements of this Work Plan are being impacted by the City's acquisition of Orange County infrastructure in the northwest corner of Orange County in April 2006.

State Law requires this approved Work Plan to be complete, comprehensive plan amendments submitted to DCA and all elements adopted by December 1, 2006 (and implementing land development regulations are due January 1, 2007). These dates are subject to change by the Legislature. The Water Supply Facilities Work Plan is pursuant to the proposed Objective 2.10 of the Infrastructure Element of the City's Comprehensive Plan.

WATER SUPPLY AND FACILITIES INFORMATION

Geographic Area

The City of Apopka water system has historically coincided with the City's current urban service area. The boundary for the service area contains approximately 68 square miles. The City's service area expanded with the acquisition of facilities from Orange County. Refer to Appendix E of this Plan and Map 4-1 of the Infrastructure Element.

Water Sources and Collection Facilities

Apopka's drinking water sources taps the Lower Floridan Aquifer. All of these sources are located in northwest Orange County. Locations of the water treatment plants (WTP) within the City are also listed on Map 4-1 previously referenced from the Infrastructure Element. The City currently owns 5 WTPs including 2 WTPs that were purchased from Orange County. The wells located at these WTPs are listed in Table 1.

Aquifer Recharge And Well Head Protection

The City relies on the Floridan aquifer for water supply, thus, protection of recharge areas and the protection of groundwater quality are prime concerns of the City. The Floridan aquifer is primarily recharged by rainfall. Direct rainfall and stormwater runoff migrates downward through the porous soils to replenish the groundwater. Recharge areas typically are characterized by well drained soils, which also tend to be well suited for development. However, development potentially restricts recharge capacity by covering the land with impervious surfaces such as roads, parking lots and buildings. The City has adopted SJRWMD's regulation for groundwater recharge requirements.

Generally, wellhead protection is concerned with regulating potential sources of groundwater contamination in the vicinity of water supply wells. Some business activities require the use of chemicals and the disposal of wastes. There is a potential for groundwater contamination by the improper use of chemicals and/or the improper disposal of chemicals and wastes. The City has adopted an ordinance to regulate land use and/or business activity in the vicinity of water supply wells to minimize potential threats to the quality of the groundwater. Policies have been added to the Infrastructure Element and the Future Land Use Element to ensure the protection of the City's water sources (see IE 2.6.3, FLUE 4.11, CE 2.1, and ICE 5.2).

Table 1
Summary of Facilities
Existing 2010 Water Treatment Plants
City of Apopka

Plant	Rated Well Pump Capacity (gpm)	Well Casing Size (inches)	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Total High Service "Firm" Pumping Capacity per Plant (gpm)*	Type of Storage	Storage Capacity (million gallons)	Treatment
Myrtle Rogers	3,500	24	2500	5,000	2,500	Ground	1	Aeration and Chlorination
Womble	3,500	24	2500					
Grossenbacher	1,000	12	2400	12,900	9,400	Ground	0.5	Aeration and Chlorination
	3,500	20	3500			Ground	1	Aeration and Chlorination
	3,500	20	3500					
			3500					
Sheeler Oaks	2,500	18	1950	6,650	4,700	Ground	1	Aeration and Chlorination
	2,500	18	1950					
			1500					
			1250					
Plymouth Regional	400	8	1800	4400	2600	Ground	0.75	Chlorination
	500	14	1800					
	500	14	400					
			400					
Mount Plymouth	1000	12	1000	3580	2580	Ground	0.5	Aeration and Chlorination
	1000	10	1000					
			1000					
			580					
Total System	23,400			32,530	21,780		4.75	

Treatment Facilities

Apopka's drinking water treatment facilities include the 5 water plants as shown on Map 4-1 of the Infrastructure Element. A sixth water treatment facility (Southwest) is planned for the future. Water treatment practice in Apopka consists of tray aeration followed by chlorination. Aeration and chlorination work together to remove hydrogen sulfide from the raw water and to disinfect the finished water. The 2005 Potable Water Master Plan Update includes a flow schematic (see Figure 2-2) that is typical of the City's WTPs.

Grossenbacher WTP

The Grossenbacher WTP is the oldest and largest of the treatment plants operated by the City. A summary of its capacities is presented in Table 1. The "firm" capacity of a process, such as high service pumping, is defined as the total capacity of all units of that process less the capacity of the largest unit, which is assumed to be out of service. Assumptions concerning the requirements for backup equipment and firm capacities at the treatment plants are discussed in the Water Supply Master Plan.

Like most wells drilled into the lower Floridan aquifer, H_2S is present in the City's well water. The Grossenbacher WTP uses aeration and detention treatment for H_2S removal as well as chlorination treatment for disinfection.

Sheeler Oaks WTP

The Sheeler Oaks WTP is located in the Southeastern portion of the service area. The treatment process for this plant is similar to that described for the Grossenbacher WTP. A summary of its capacities is given in Table 1**.**

Myrtle Rogers Womble WTP

The Myrtle Rogers Womble WTP (previously known as the Northwest WTP) is the newest of the City's water treatment plants, having been placed in service in 1999. The WTP is located in the northern part of the service area and a description of its capacities is given in Table 1.

Plymouth Regional WTP

The Plymouth Regional WTP is located in the western portion of the service area and currently serves a few small residential communities as well as commercial and industrial users along West Orange Blossom Trail. The treatment process for the WTP does not include aeration, but consists of disinfection and ground storage. A description of its capacities is given in Table 1.

Mount Plymouth Lakes WTP

The Mount Plymouth Lakes WTP is located in the northeastern portion of the service area and currently serves a several small residential communities near the Orange County Kelly Park. The treatment process for the WTP is similar to that described for the Grossenbacher WTP. A description of its capacities is given in Table 1.

Major Distribution and Transmission Facilities

The current water distribution system, not including on-site piping at the treatment plants, consists of pipes ranging in diameter from 3-inch to 36-inches, fire hydrants and isolation valves. There is currently no elevated storage serving the distribution system. Generally, pipes 12-inches in diameter and smaller are of polyvinyl chloride (PVC) construction whereas larger pipes are constructed from ductile iron. Improvements to the distribution/transmission system have generally followed the recommendations outlined in the most recent master plan, with the timing of specific projects dependent on development patterns. The following table lists the various lengths of pipe in the system for 3 inches and larger. That portion of the City's water system which was purchased from the County in 2006 is included in the table below.

Table 2
Potable Water Distribution/Transmission System
City of Apopka

Size (inches)	Total* Length (feet)
3	19,549
4	95,264
6	455,081
8	509,582
10	92,814
12	276,603
14	8,897
16	180,081
18	473
20	3,260
24	9,260
30	5,540
36	58

*Per City GIS June 1, 2010

Storage Facilities

As previously identified in Table 1 there are a total of 6 ground storage tanks (GST) within the City's water distribution system with a total capacity of 4.75 million gallons (mg).

Permit Conditions and Duration

The City has a Consumptive Use Permit (CUP) from the District for its potable water supply system. The CUP has recently been renegotiated to combine #3217, #50172 and #100495 under one CUP, numbered #3217.

CUP #3217

Date: May 10, 2005

Maximum ADF: 10.358 mgd in 2007

Maximum Annual Use: 3780.7 Million Gallons in Year 2007

Expiration Date: May 11, 2007

The City is permitted to augment their reclaimed water supply.

CUP #50172

Date: May 10, 2005

Maximum ADF: 2.5 mgd in Year 2007

Maximum Annual Use: 912.5 Million Gallons in Year 2007

Expiration Date: Expiration Date: May 11, 2007

With the two WTPs, the City has acquired a portion of the Orange County CUP from the District for its potable water supply system (Zellwood augmentation of 0.15 mgd is addressed in the reclaimed water supply augmentation).

CUP #100495

Date Original Permit Issued: October 6, 2005

Date of Transfer: June 21, 2006

Maximum ADF: Estimated to be 2.80 mgd in Year 2010

Maximum Annual Use: 397.80 Million Gallons in Year 2010

Expiration Date: July 12, 2020

Reclaimed Water System(s)

The City of Apopka furnishes reclaimed water to a number of users through its Project ARROW (Apopka Regional Reuse of Water) distribution network. The Apopka Water Reclamation Facility (WRF) is currently the only source of reclaimed water for the City's system. The City has a reclaimed water pump station at the WRF and a re-pump station in the northern part of its service area. The North Pump Station is located adjacent to the Myrtle Rogers Womble WTP.

Apopka WRF

The Apopka WRF provides advance secondary treatment along with high level disinfection to produce reclaimed water that is suitable for use on public access areas like golf courses and home lawns. The Apopka WRF is permitted for a capacity of 4.5 million gallons per day (mgd). The City has received their Florida Department of Environmental Protection (FDEP) permit to expand the WRF to a capacity of 8.0 mgd. The WRF site has three wells that the City uses to supplement the supply of reclaimed water. The WRF has 4 million gallons (mg) of covered storage tank capacity and 25 mg of storage pond capacity. The City will begin the WRF project expansion from 4.5 mgd to 8.0 mgd in 2010 and be completed in 2012. The 8.0 mgd treatment capacity will be sufficient to satisfy the anticipated demand for the year 2030. The construction of an additional 2 mg covered storage tank will be completed in 2015.

North Pump Station

The North Pump Station functions as a re-pump station for reclaimed water. During the day when demands for reclaimed water are low, the storage tank on the pump station site is filled by the reclaimed water transmission system from the WRF. During the early morning hours when irrigation demands increase, the North Pump Station pumps reclaimed water from the storage tank to the transmission system. The North Pump Station currently has two 2 mg ground storage tanks (GST).

The City has other storage facilities within its reclaimed water system. The Rock Springs Ridge Golf Course features three storage ponds with 20 mg of holding capacity. In addition, the City recently completed construction of a storage pond with approximately 120 mg of capacity at its Northwest Recreation Center. This storage pond receives a combination of reclaimed water and stormwater runoff. Table 3 summarizes the City's pumping and storage facilities.

Table 3
Summary of Facilities
Existing 2010 Reclaimed Water Pumping and Storage Facilities
City of Apopka

Facility	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Ground Storage (mg)	Pond Storage (mg)
Apopka WRF	1,400 1,400 1,400 1,400 2,600 2,600	10,800	1 1 2	16 9
North Pump Station	3,750 3,750	7,500	4	
Rock Springs Ridge Golf Course				20
NW Recreation Center				120
Total System		18,300	8	165

Major Reclaimed Water Distribution and Transmission Facilities

The current reclaimed water distribution system, not including on-site piping at the pump stations, consists of pipes ranging in diameter from 4-inch to 36-inches. Generally, pipes 12-inches in diameter and smaller are of polyvinyl chloride (PVC) construction whereas larger pipes are constructed from ductile iron. Improvements to the distribution/transmission system have generally followed the recommendations outlined in the most recent master plan, with the timing of specific projects dependent on development patterns. Table 4 lists the various lengths of pipe in the system.

Table 4
Reclaimed Water Distribution/Transmission System
City of Apopka[(1)]

	Total
Size (inches)	**Length (feet)**
4	61,670
6	179,626
8	96,518
10	29,938
12	94,723
14	4,066
16	5,702
18	3,062
20	39,494
24	4,066
30	18,163
36	475

[(1)]Per City GIS June 11, 2009

North Shore-Reclaimed Water Pump Station

The proposed City of Apopka North Shore Reclaimed Water Pump Station is located in the southwestern section of the City's service area. Originally conceived as just a pump station, the City of Apopka is now engaged in a project to assess the feasibility of using water from the North Shore of Lake Apopka as a supplemental water source for the reclaimed water system (see below). The master planning of this pump station was included in the City of Apopka 2005 Reclaimed Water System Master Plan Update, dated August 2005 and prepared by Boyle Engineering Corporation. The North Shore Reclaimed Water Pump Station is proposed to eventually consist of the following:

- Surface Water Treatment System
- Two 3 million gallon pre-stressed concrete tanks
- One concrete block building to house electrical equipment (with air conditioning), chemical feed storage area and chemical feed pumps
- Five VFD driven pumps each rated at approximately 4,500 gallons per minute (gpm) at full rated speed
- Emergency generator system to power at least two pumps
- Plant site work
- Plant yard piping, electrical and controls systems
- Miscellaneous other improvements

Timing of individual aspects of this project will occur as needed over the next 20 years.

Supplemental Water Supply from the North Shore Restoration Area

The City of Apopka, in conjunction with the SJRWMD, is exploring the possibility of using water from the canal system on the North shore of Lake Apopka as a supplemental source for the City's reclaimed water system. The City is assessing the feasibility of treating the lake water to reclaimed water standards. The City is planning to withdraw up to 5 mgd from the North Shore. The recommended treatment approach is summarized in the report titled Lake Apopka Reclaimed Water Supplement Technical Report, dated May, 2006 and prepared by Boyle Engineering Corporation. The North Shore Reclaimed Water Pump Station will play a significant role in meeting the demands for irrigation water within Apopka's service area. Construction of the North Shore Reclaimed Water Augmentation project is expected to be completed in the year 2014.

The MOA for the NSRA at Lake Apopka was executed by the City of Apopka on January 5, 2009. The MOA allows for the City to lease District lands located on the shores of Lake Apopka, commonly referred to as the North Shore Restoration Area (NSRA). On the leased District property the City will construct a reclaimed water facility which will remove water from the Lust Road Canal and treat it to the reclaimed water standards set forth by the Florida Department of Environmental Protection (FDEP). The District has issued Consumptive Use Permit No. 102497 to allow the withdrawal of 5 MGD, on an annual daily average, of water from the canal. The MOA requires that the withdrawal amounts be regulated by the levels in the Lust Road Canal, the adjacent wetlands and the Lake Apopka level itself. The treated water will then be pumped into the City's reclaimed water distribution system to satisfy the projected irrigation demands.

The North Shore surface water treatment system will include the following:

- Canal water intake and withdrawal pump station

- Pretreatment flow splitter box
- Constructed wetlands system
- Slow sand pond filtration
- Filtered water pump station
- Sodium hypochlorite feed system
- Miscellaneous other improvements

It is envisioned that the surface water treatment plant and the reclaimed water pump station will be constructed on the same site. The proposed location for these facilities is on the north shore of Lake Apopka south of Lust Road. The proposed site is on surplus land that is owned by the St. Johns River Water Management District.

Based on modeling performed for the update of the 2005 Reclaimed Water Master Plan Update, this pump station is projected to handle future peak reclaimed water demands of approximately 21,000 gpm.

This pump station could also be the receiving point for reclaimed water that is made available through Project RENEW (see description below). The City has received a grant through the St. Johns River Water Management District's Cost-Share Agreement Program to assist in the construction of the North Shore Project.

OUC Project RENEW

It is understood that as part of the Orlando Utilities Commission (OUC) SJRWMD CUP, the City of Orlando and OUC are working together to develop and construct a reclaimed system in west Orange County. The City of Apopka and OUC executed an Agreement on March 5, 2009 by which OUC, together with the City of Orlando, will reroute wastewater effluent within the City's wastewater collection and treatment facilities so as to provide the City of Apopka with 3.0 million gallons per day (MGD) of reclaimed water by October 2013 and an additional 5.55 MGD of reclaimed water, for a total of 8.55 MGD, by October 2015. The Agreement provides the supply be provided in two installments. The City plans to accept the first installment of 3.00 mgd by the year 2014 with the remaining 5.55 mgd to be included by 2016.

City Stormwater Supplement

The City Drainage Master Plan Update, prepared in April 2009, identifies stormwater collection projects which are expected to yield an annual daily average collection capacity of 0.497 mgd. The collected stormwater will be used to supplement the City's reclaimed water supplies.

Supply and Demand Analysis and Projections

Demand Analysis and Projections

The City of Apopka's system has experienced steady growth. Flow projections were developed as part of the City's consumptive use permitting process with the SJRWMD. System flow projections are based on a review of historical records and estimates of future needs. A brief description of each major factor is discussed below.

Land Use

For the purposes of a build-out scenario, the future land use maps were considered in developing the total demand that the system will need to provide.

Population Growth and Demand Projections

Population and water demand projections for the potable water system were developed by the City. They appear in Table 5A below in summary form and by year in Table 5B. The City is not planning to extend the potable water and/or wastewater systems into areas that are predominately served by private wells and/or septic tanks. If environmental concerns arise that could be alleviated by a central water and sewer system, then the City would be willing to consider participation in projects that would provide relief to such areas. Appendix B is a map that shows areas served by septic tanks within the City's water service area. The City currently provides water service to 2,932 customers who do not receive wastewater services from the City. These customers represent the number of estimated septic tanks contained within the septic tank areas shown in Appendix B. The City estimates that approximately 134 of their utility accounts are served potable water by a private well. The actual accounting for these private wells and septic tanks is performed by the Orange County Health Department who regulates their use. Table 5C shows the water demand projections for the reclaimed water system. Table 5D combines the two demands to show total projected demand for water resources.

Future Potable Water Demand Growth Expectations

The City recognizes that they will experience an estimated 0.159 MGD deficit of potable water supply in 2029 and an estimated 0.508 MGD deficit of potable water supply in 2030. As was discussed in the City's current Consumptive Use Permitting (CUP) process the City has been actively involved in the Seminole County Yankee Lake Project. The Yankee Lake Project is a cooperative effort on the part of Seminole County and several local utilities to withdraw water from the St. Johns River and deliver the water to the participating utilities. The utilities will then treat the water to meet their individual needs, that is, either as a potable water alternative water source or a reclaimed water alternative water source. The City is willing to participate in the Yankee Lake Project or other future alternative water supply projects identified by the District to satisfy the city's expected 2029 and 2030 potable water deficits.

Table 5A
Population served by the Potable Water System and Potable Water Demands[(1)]
City of Apopka

Year	Projected Service Population	Projected Average Potable Water Demand (MGD)
2010	59,196	10.925
2013	68,615	12.114
2015	74,894	12.912
2020	90,633	14.542
2025	111,086	16.607
2030	129,304	18.279

(1) Source: Apopka CUP #3217 response to RAI # 6

Table 5B
Projected Potable Water Use
City of Apopka
(Revised June 8, 2010)

Year	Cumulative Population (Potable)	Projected Annual Population (Potable)	Percent of Projected Annual Population w/Reclaim	Projected Annual Population on Reclaim	Cumulative Population Reclaim	House-hold size, persons	Number of Units with Reclaim	Per Capita Usage Potable w/o Reclaim (gpcd)	Percentage Potable Usage w/o Reclaim	Potable Per Capita Usage with Reclaim (gpcd)	Percentage Potable Usage with Reclaim	Per Capita Usage Combined (gpcd)	House-hold Avg. Day (mgd)	House-hold Max Day (mgd)	Commercial Industrial Avg.. Day (mgd)	Commercial Industrial Max. Day (mgd)	Irrigation Urban Landscape or Common Areas Avg. Day (mgd)	Irrigation Urban Landscape or Common Areas Max. Day (mgd)	Water Utility (mgd)	Unaccounted for Water (mgd)	Zellwood Station	Total Annual Avg. Day (mgd)	Total Annual Max. Day (mgd)
2010	59,196	3,140	75%	2,355	15,532	2.80	5,547	162	74%	75	26%	139	8.23	20.575	1.312	3.280	0.082	0.205	0.160	0.721	0.420	10.925	27.313
2011	62,335	3,139	75%	2,354	17,886	2.80	6,388	162	71%	75	29%	137	8.54	21.350	1.361	3.403	0.085	0.213	0.166	0.748	0.433	11.333	28.333
2012	65,475	3,140	75%	2,355	20,241	2.80	7,229	162	69%	75	31%	135	8.84	22.100	1.409	3.523	0.088	0.220	0.171	0.775	0.447	11.730	29.325
2013	68,615	3,140	75%	2,355	22,596	2.80	8,070	162	67%	75	33%	133	9.13	22.825	1.455	3.638	0.091	0.228	0.177	0.800	0.461	12.114	30.285
2014	71,755	3,140	75%	2,355	24,951	2.80	8,911	162	65%	75	35%	132	9.47	23.675	1.510	3.775	0.095	0.238	0.184	0.830	0.475	12.564	31.410
2015	74,894	3,139	75%	2,354	27,305	2.80	9,752	162	64%	74	36%	130	9.74	24.350	1.553	3.883	0.097	0.243	0.189	0.853	0.480	12.912	32.280
2016	78,042	3,148	76%	2,392	29,697	2.80	10,606	162	62%	73	38%	128	9.99	24.975	1.592	3.980	0.100	0.250	0.194	0.875	0.500	13.251	33.128
2017	81,190	3,148	77%	2,424	32,121	2.80	11,472	162	61%	72	39%	127	10.31	25.775	1.643	4.108	0.103	0.258	0.200	0.902	0.509	13.667	34.168
2018	84,336	3,148	78%	2,455	34,576	2.80	12,349	162	59%	71	41%	125	10.54	26.350	1.680	4.200	0.105	0.263	0.204	0.922	0.519	13.970	34.925
2019	87,485	3,147	79%	2,486	37,062	2.80	13,236	162	58%	70	42%	123	10.76	26.900	1.715	4.288	0.108	0.270	0.209	0.942	0.529	14.263	35.658
2020	90,633	3,148	80%	2,518	39,580	2.80	14,136	162	56%	69	44%	121	10.97	27.425	1.749	4.373	0.110	0.275	0.213	0.960	0.540	14.542	36.355
2021	94,724	4,090	82%	3,354	42,934	2.80	15,334	162	55%	68	45%	120	11.37	28.425	1.812	4.530	0.114	0.285	0.221	0.994	0.549	15.060	37.650
2022	98,814	4,091	84%	3,436	46,370	2.80	16,561	162	53%	67	47%	117	11.56	28.900	1.843	4.608	0.116	0.290	0.224	1.011	0.560	15.314	38.285
2023	102,905	4,091	86%	3,518	49,888	2.80	17,817	162	51%	66	49%	115	11.83	29.575	1.886	4.715	0.118	0.295	0.230	1.035	0.570	15.669	39.173
2024	106,995	4,091	88%	3,600	53,488	2.80	19,103	162	50%	66	50%	114	12.2	30.500	1.945	4.863	0.122	0.305	0.237	1.066	0.580	16.150	40.375
2025	111,086	4,091	90%	3,682	57,170	2.80	20,418	162	49%	65	51%	113	12.55	31.375	2.001	5.003	0.126	0.315	0.243	1.097	0.590	16.607	41.518
2026	114,730	3,644	90%	3,280	60,450	2.80	21,589	162	48%	65	52%	112	12.85	32.125	2.048	5.120	0.129	0.323	0.249	1.122	0.596	16.994	42.485
2027	118,373	3,644	90%	3,280	63,730	2.80	22,761	162	47%	65	53%	111	13.14	32.850	2.095	5.238	0.131	0.328	0.255	1.147	0.602	17.370	43.425
2028	122,017	3,644	90%	3,280	67,010	2.80	23,932	162	45%	65	55%	109	13.3	33.250	2.120	5.300	0.133	0.333	0.258	1.161	0.608	17.580	43.950
2029	125,660	3,643	90%	3,279	70,289	2.80	25,103	162	44%	65	56%	108	13.57	33.925	2.163	5.408	0.136	0.340	0.263	1.184	0.614	17.930	44.825
2030	129,304	3,643	90%	3,279	73,568	2.80	26,274	162	43%	65	57%	107	13.84	34.600	2.206	5.515	0.138	0.345	0.268	1.207	0.620	18.279	45.698

Table 5C
Reclaimed Water System Demands[(1)]
City of Apopka

Year	Projected Service Population	Projected Average Daily Residential Demand (MGD)	Projected Average Daily Commercial & Other Demands (MGD)	Projected Total Average Daily Reclaimed Water Demand (MGD)
2010	15,532	3.899	4.112	8.011
2013	22,596	4.949	4.479	9.428
2015	27,308	5.406	4.664	10.070
2020	39,580	7.006	5.575	12.581
2025	57,170	10.119	6.920	17.039
2030	73,568	13.022	8.226	21.248

[(1)] Source: City of Apopka CUP #3217 response to RAI # 6

Table 5D
Total Projected Average Daily Demand for Water Resources
City of Apopka

Year	Projected Potable Water Demand (MGD)	Projected Reclaimed Water Demand (MGD)	Total Water Resources Demand (MGD)
2010	10.925	8.011	18.936
2013	12.114	9.428	21.542
2015	12.912	10.070	22.982
2020	14.542	12.581	27.123
2025	16.607	17.039	33.646
2030	18.279	21.248	39.527

Supply Analysis

It is projected that the Floridan Aquifer will supply about 15.788 mgd in 2010, 17.771 mgd in 2013, and 18.279 mgd in 2030. The projected potable water use for the City is shown in Table 5B. As shown in Table 5B, the City plans to meet its potable water demand in part by aggressively lowering the per capita use in the future. This will be accomplished by a steady increase in the reclaimed water use within new developments in the City. The reclaimed water system will be augmented by projects previously listed above.

As shown in Table 5C, the reclaimed water demand for the City is expected to increase over the next 10 years.

The projected total water demand for the City is shown above in Table 5D on the previous page.

District Water Supply Plans

The St Johns River Water Management District has been actively researching water supply options within district borders. Initially the District Water Supply Plan (DWSP) was developed as of May 2000, but an updated draft was issued in August 2005. Following a series of public hearing, the Plan was adopted in 2006. A fourth addendum to the plan was dated May 12, 2009. It serves as a roadmap for the District and sets the direction for the district's strategic plans, fiscal plans, and other planning efforts. It also serves as a source of information for local governments and others seeking technical information regarding water resource issues.

In previous version of the DWSP, for the East-Central Florida Area the District has been focusing on a Planning Initiative (Initiative). In November 2002 the East-Central Florida Water Agenda Issue Areas, Recommendations and Strategies was published (Phase I). Issue areas addressed were to develop new water supply, optimize the use of reclaimed water, enhance aquifer recharge using reclaimed water, increase water conservation, link land use and water supply planning, and enhance intergovernmental coordination. For 2003, the District developed the East-Central Florida Water Supply Planning Initiative Phase II Annual Report of Activities and Accomplishments. Phase II Initiative activities during 2003 included efforts in each of the six issue areas identified in Phase I.

However, in the fourth addendum version of the DWSP, the following potential alternative water supply projects were identified for the City of Apopka .

- St Johns River (Yankee Lake)
- Lake Apopka Reuse Augmentation
- Orlando Utilities Commission (OUC) – Project RENEW

The City advised the District on November 13, 2009 that the City's revised list of alternative water supply projects would consist of the OUC Project RENEW, North Shore Restoration Area (fka: Lake Apopka Reuse Augmentation) and the City Stormwater Supplement.

With partial funding from the SJRWMD, the City of Apopka studied the feasibility of using Lake Apopka as a source of supplemental water for the City's reclaimed water system. The report titled "Lake Apopka Reclaimed Water Supplement Final Technical Report" was published in May 2006. On December 9, 2008 the SJRWMD issued CUP No. 102497 to the City of Apopka authorizing the withdrawal of 5.0 mgd average annual daily of surface water withdrawal from the Lake Apopka North Shore Restoration Area for reclaimed water augmentation through the year 2028. The estimated capital costs for the project are reported at $8.79 million with an estimated unit cost of $1.99/1000 gal.

Lake Apopka water does not meet unrestricted access reclaimed water standards for total suspended solids, pH, and turbidity. Also, disinfection is necessary before using the water for unrestricted access irrigation with a minimum chlorine residual of 1.0 mg/L. Therefore, treatment is necessary before using the water as a supplemental reclaimed water supply source. It was envisioned that surface water from the Lake Apopka system would be developed in up to three phases. The Phase 1 average daily flow capacity will be 5.0 mgd. Phases 2 and 3 were envisioned to include an average daily withdrawal of 5.0 mgd and 4.0 mgd, respectively. Phases 2 and 3 will likely rely on the development of reservoirs along the lake shore where excess water may be diverted and stored.

The May 2006 Report includes the following components:

- Establishing existing and future reclaimed water demands
- Establishing need for supplemental reclaimed water supply
- Brief review of alternative sources of supplemental reclaimed water
- Review of existing and future regulatory requirements/constraints and other pertinent information
- Lake Apopka source water characterization
- Establishing size of the project, setting treatment goals, and recognizing treatment issues
- Conceptual designs of common treatment unit processes in three (3) alternatives
- Conceptual designs of three (3) alternative systems
- Developing capital and O&M costs of alternatives
- Present Worth Analysis and alternatives comparison

Three (3) alternative treatment systems were evaluated in the May 2006 Report:

1. Natural Treatment System (NTS) - Constructed wetlands treatment system followed by slow sand pond filter using naturally available soils. The NTS will be similar to that currently employed by SJRWMD on the northwest shore of Lake Apopka called the "Marsh Flow-Way".

2. Algae Harvesting System (AHS) – This is a proprietary system from Aqua Fiber Technologies, Winter Park, Florida using Periphyton (algae) Flow-Ways followed by a Diatomaceous Earth (DE) filter.

3. Chemical Treatment System (CTS) - Actiflo® physical-chemical treatment system using alum or ferric sulfate coagulation/flocculation/sedimentation followed by slow sand pond filtration using naturally available soil.

The present worth values for Phase I (5.0 mgd) were calculated using a 7.0 percent interest rate and a 30-year project life. Alternative 1 (Natural Treatment System) had a present worth cost $1.22 per 1,000 gallons. It was the least expensive treatment option and will potentially produce water that has a color similar to the City's WRF effluent (reclaimed water). Alternative 3 (Chemical Treatment System) had a present worth cost of $1.75 per 1,000 gallons. The water produced from Alternative 3 would be high quality with color meeting secondary drinking water standards. The present worth cost for Alternative 2 (Algae Harvesting System) was $1.79 per 1,000 gallons, which was the highest among the evaluated alternatives. The water quality produced by Alternative 2 would be comparable with Alternative 3's water quality.

Based on Present Worth Analysis, Alternative 1 – Natural Treatment System is the least expensive alternative. A pilot study of the selected alternative is recommended before commencing the final design to validate system performance.

Conservation

The City of Apopka employs a number of water conservations measures. Through the City's water conservation ordinance (No. 2107) for landscape irrigation, water conservation restrictions have been established for both potable and reclaimed water users. The ordinance includes the following provisions:

- Landscape irrigation is restricted to a maximum of two days per week. No irrigation is allowed between the hours of 10 a.m. and 4 p.m. during daylight savings time.

- During Eastern Standard Time customers not using reclaimed water for irrigation may irrigate their landscape only one day per week. Reclaimed water customers may irrigate two days per week in accordance with District rules.

- Addresses ending with an odd number must only irrigate on Wednesday and Saturday.

- Addresses ending with an even number must only irrigate on Thursday and Sunday.

A violation of the irrigation restrictions results in a $50 dollar fine after the first offense. Subsequent violations result in even higher fines. After 4 offenses, the fine is $500 for each subsequent violation.

In May 2008, the City amended its Landscape Ordinance (2069) to include water-wise irrigation practices and the application of Florida friendly landscape practices. Among the features of this ordinance are the following:

- Restricts high volume irrigation (>5 gpm/spray head) to 50% of the landscaped area or one-half acre whichever is smaller for residential properties.
- Restricts medium volume irrigation (0.5 to 5 gpm/spray head) to 25 percent of the landscaped area. The irrigation area can be increased to 75 percent if no high volume irrigation is present.
- Allows 100 percent coverage for low volume (< 0.33 gpm/emitter) systems. The minimum coverage is 25 percent of the landscaped area.
- Restricts use of low drought tolerance turf grass to 50 percent of the green space area or one-half acre, whichever is smaller.
- Does not limit the use of drought tolerant turf like bahia grass.
- Provides for financial incentives to encourage home owners to upgrade their irrigation systems to conserve water.

The City's rate structures for both potable water and reclaimed water are increasing block rates. The rate structures are designed to encourage wise use of water.

The City provides water conservation education to the public through the city website, utility billing mailings, newspaper articles, brochures, flyers, door hangers, and high user letters with tips on conserving water and proper irrigation maintenance. The city also provides speakers, displays, handouts, and activities for school events, City events, Home Owner Associations, builders, and to any group or individual that requests the information. The City is planning to purchase water conservation kits to use as an education tool at schools and other city events.

The City provides financial incentives through the Water Conservation Incentive Program to encourage homeowners and businesses to upgrade and retrofit their irrigation systems to become more efficient and water conserving. The program provides credits for installing water-conserving devices such as low-volume irrigation and "smart" controllers. The City also offers customers with a free irrigation evaluation, as well as provides rain sensors to those without a functioning sensor.

All new development projects within the City of Apopka are required to have a dual water system. Water for indoor uses and fire protection is provided by the potable water system. Water for outdoor uses is provided by the reclaimed water system.

The City of Apopka is planning on the positive benefits of water conservation. The Comprehensive Plan's Infrastructure Element Policy 2.1.2 calls for the City to lower its level of service from 177 gpcd in 2020 to 166 gpcd by January 1, 2015 and to further reduce it to 154 gpcd by 2020, 144 gpcd in 2025 and 137 gpcd in 2030. The City will commit to meeting the revised per unit demand for potable water as shown in Table 5B. The City estimates a water use rate of 159 gpcd for the year 2018, which incorporates commercial flows and unaccounted for water based on the flow projections and the projected number of residential units (City of Apopka CUP #3217 RAI #6 response).

Particular information concerning conservation, such as implementing District water restrictions and enforcement of same, public education, special rates, residential meter change out, address unaccounted for water, and reuse are discussed in the SJRWMD CUP permit renewal and not repeated here.

Water Supply Strategy

The City will adopt a policy in the Infrastructure Element of the Comprehensive Plan to ensure that the impacts of comprehensive plan amendments upon groundwater supply are assessed. . The issues to be addressed in the analysis include: Infrastructure Information, SJRWMD CUP Information, reserved capacity for the proposed amendment, and a Consumptive Use Analysis. Projected sources and flows for the potable water and reclaimed water systems are shown in Tables 6 and 7, respectively.

The City recognizes the shortfall of groundwater to supply future water demand and has been participating in the implementation phase of the District's East-Central Water Supply Planning Initiative in order to find regional solutions for potential water supply problems. This will include the development of alternative water sources to supplement the groundwater supply. Total well capacity after the purchase of the Orange County facilities was 33.7 mgd.

The City's existing SJRWMD CUP permits the use of groundwater to augment the City's reclaimed water distribution system. The City is currently planning on three projects to augment the City's reclaimed water supply, including OUC's Project Renew; North Shore surface water and the collection of stormwater into lined ponds. As these projects' resources become available, the City plans to divert the groundwater previously used for reclaimed water augmentation to satisfy the City's potable groundwater needs.

The City is working with the SJRWMD on a conjunctive water use approach involving groundwater and other sources of augmentation water such as the North Shore. In the event the augmentation sources are limited in supply, the City would use groundwater to make up the difference.

Table 6
Projected Potable Water Supply Sources and Flows
City of Apopka

Year	Average Daily Flows			Maximum Daily Flows		
	Projected Flow ADF (MGD)	Existing Floridan Aquifer Supply (MGD)	Other Supplies Needed (MGD)	Projected Flow MDF (MGD)	Existing Floridan Aquifer Supply (MGD)	Other Supplies Needed (MGD)
2010	10.925	33.7	0	27.313	33.7	0
2013	12.114	33.7	0	30.285	33.7	0
2015	12.912	38.74	0	32.280	38.74	0
2020	14.542	38.74	0	36.355	38.74	0
2025	16.607	48.82	0	41.518	48.82	0
2030	18.279	48.82	0	45.698	48.82	0

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Table 7
Projected Reclaimed Water Supply Sources and Flows
City of Apopka

Year	Average Daily Flows				
	Projected Reclaimed Water Use (MGD)	Projected WRF Flow ADF (MGD)	Projected Average Daily Flow from Neighboring Utilities (MGD)	North Shore Supplies (MGD)	Projected Average Daily Flow from Groundwater Augmentation (MGD)
2010	8.011	3.148	0	0	4.863
2013	9.428	3.771	0	0	5.657
2015	10.070	4.184	3.00	5.00	0.00
2020	12.581	4.903	8.55	5.00	0.00
2025	17.039	6.227	8.55	5.00	0.00
2030	21.248	7.405	8.55	5.00	0.00

FACILITY ANALYSIS

Ten-Year Work Plan 2020

The City of Apopka WTPs have maximum treatment capacity (well capacity) of 33.7 mgd, which will potentially serve AADF demands beyond 2016. Additional capacity upgrades to transmission distribution, and storage facilities will be occurring during the next 10 years. Refer to Appendix C for a listing of the various proposed projects.

Presently the City plans to construct the Southwest WTP in the year 2016 consisting of 1 well rated at 3,500 gpm, 2 high service pumps each rated at 3,500 gpm, one ground storage tank sized at 1.5 million gallons. As required by the City's Comprehensive Plan, these wells will be drilled into the Lower Floridan Aquifer. However in the latest 2005 Potable Water Master Plan Update that will eventually be incorporated into the Comprehensive plan, this proposed WTP would have the following elements by 2030:

	2016	2021	2030
HSPs, rated at 3,500 gpm each	2	3	3
Wells, rated at 3,500 gpm each	1	2	2
GSTs, rated at 1.5 mgd each	1	1	2

Every five (5) years, the City plans to update its Work Plan in conjunction with the preparation of CUP Compliance Reports in order to verify that the water sources and facilities are capable of supplying the needs of Apopka.

In order to provide capacity, the City has established a **Ten-Year Schedule of Capital Improvement**, which is included in Appendix C and Appendix D. A more detailed description of these projects can be found in the City's Capital Improvement Element. The schedule of improvements will enable the City to address projected flows from existing and proposed sources. The City has secured funding for these projects through the use of impact fees, renewal and replacement funds, and other revenue sources. The City has used other funding means in the past such as municipal loans and bonds to finance projects. Developers are required by City policy to extend their utility mains up to one mile to connect to the City's utility services. Due to the recent downturn in economic development the planned utility improvements identified in the City's 2005 Water Master Plan, 2005 Wastewater Master Plan and 2005 Reclaimed Water Master Plan scheduled to take place by 2015 have been moved to 2020 in this Work Plan. The Utility Master Plan updates scheduled for 2012 will further describe the City's needed future utility improvements.

REVISED COMPREHENSIVE PLAN ELEMENTS

After assessing the current Comprehensive Plan, the City feels that only these elements need to be amended to implement the Water Supply Facilities Work Plan. Below is an analysis of the pertinent elements to the Comprehensive Plan.

Capital Improvements:

The background document will be updated to reflect at least a five-year schedule of capital improvements.

Intergovernmental Coordination:

Policies in the Intergovernmental Coordination Element will be revised to establish a relationship between the Water Supply Facilities Work Plan, District Water Supply Plan (SJRWMD 2000), the District's water supply assessments, Consumptive Use Permit process, East Central Florida Water Supply Planning Initiative, East Central Florida Regional Planning Council, District Staff, and Orange County.

Policies will be added to the Intergovernmental Coordination Element to address the following:

- Supply and demand projections will be consistent with the plans noted above.
- The City will actively participate in water supply planning work groups and meetings on an as-needed basis.

Infrastructure Element

The most recent minimum level of service (LOS) standards for water were effective on November 4, 2004 and need to be brought up-to-date to reflect the commitment to a reduction in the demand in terms of gallons per capita per day (gpcd).

Potable Water Sub-Element

Two modified and two additional objectives and associated policies were added to the Potable Water Sub-Element to address the Water Supply Facilities Work Plan.

- Maintain a Water Supply Facilities Work Plan that covers a minimum ten-year planning period. The associated policies require continuous updates to the Water Supply Facilities Work Plan including consistency with LOS standards State and Regional plans, a plan to seek alternative sources of water, demand projections, capital improvement schedule and the provision of facilities to withdraw, transmit treat, store and distribute potable water.

- Identify and use water supply sources that are consistent with the Water Supply Facilities Work Plan. The associated policies will direct the City to develop feasible water sources and avoid adverse impacts to the environment. The policies will also require the City to maximize the use of alternative water supplies and implement management techniques in order to sustain water resources and enhance existing supplies.

Conservation

As necessary, the background documents of the conservation element will be revised to update the projected water demands and sources identified in the Water Supply Facilities Work Plan.

CHAPTER EXHIBITS AND MAPS

For the following exhibits and maps related to this Work Plan, refer to the 2005 Potable Water Master Plan Update and Reclaimed Water Master Plan.

- Water Collection and Treatment Facilities
- Major Water Distribution Mains and Storage Facilities
- Reclaimed Water Distribution System
- Water Service Area Existing and 20 year Projection
- Water Distribution System Inventory

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APPENDIX A

SJRWMD CONFIRMATION LETTER

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APPENDIX A: SJRWMD Confirmation Letter (The SJRWMD approval letter is then inserted into this Appendix)

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APPENDIX B

SEPTIC TANK AREA MAP

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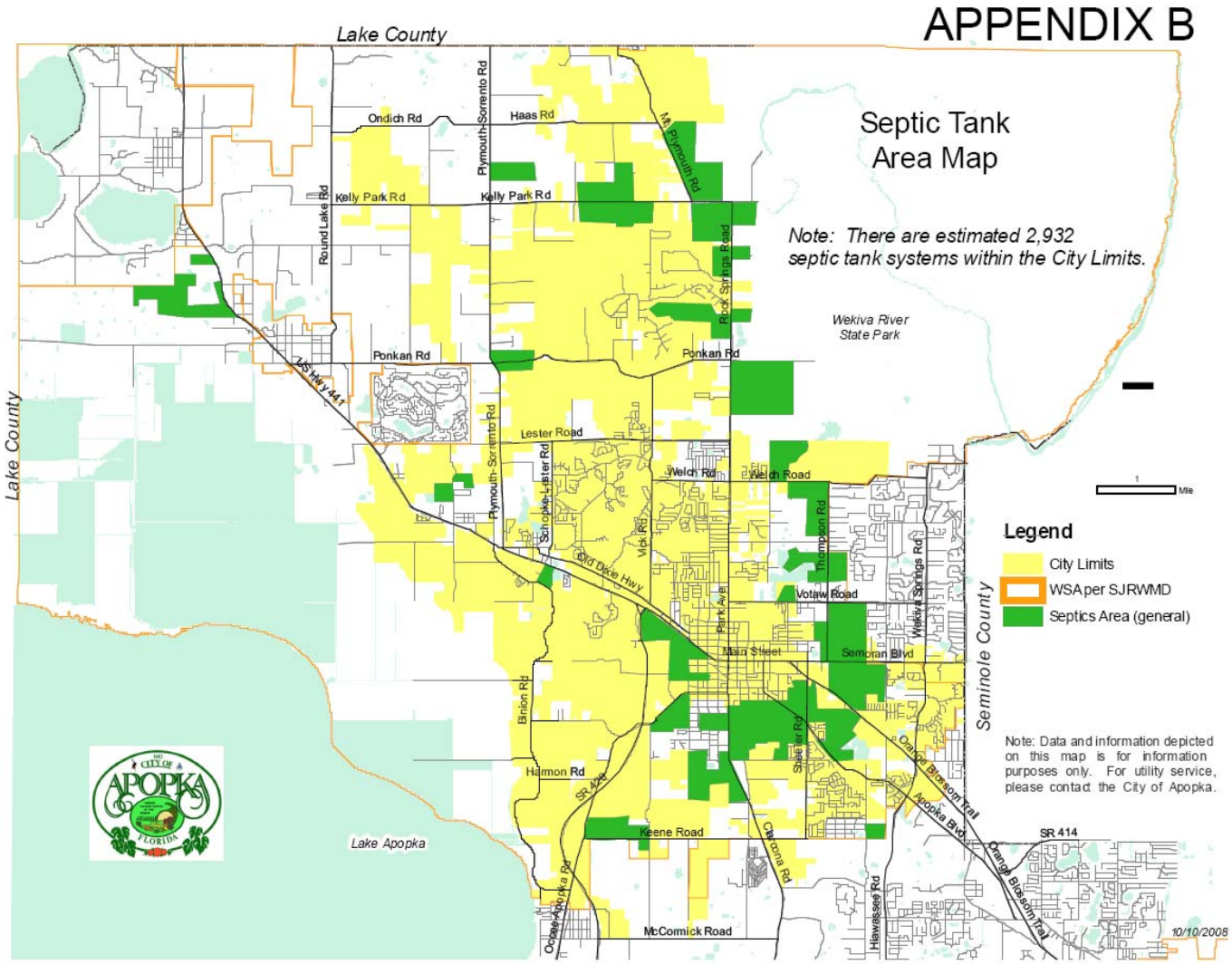
APPENDIX B


Lake County
Septic Tank
Area Map
Note: There are estimated 2,932
septic tank systems within the City Limits.
Wekiva River
State Park
Lake County
Seminole County
Lake Apopka
Ondich Rd
Haas Rd
Kelly Park Rd
Ponkan Rd
Lester Road
Welch Road
Votaw Road
Main Street
Semoran Blvd
Harmon Rd
Keene Road
McCormick Road
SR 414
Apopka Blvd
Orange Blossom Trail
Plymouth-Sorrento Rd
Round Lake Rd
Rock Springs Road
Thompson Rd
Park Ave
Binion Rd
Hawkesset Rd
Clarcona Rd
Ocoee-Apopka Rd
Old Dixie Hwy
Vick Rd
Schopke-Lester Rd
US Hwy 441
SR 414
Legend
City Limits
WSA per SJRWMD
Septics Area (general)
1 Mile
Note: Data and information depicted on this map is for information purposes only. For utility service, please contact the City of Apopka.
10/10/2008

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APPENDIX C

TEN YEAR WORK PLAN

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APPENDIX C: Ten-Year Work Plan

Table C-1
2020 Summary of Facilities – Water Treatment Plants
(Source: Table 6-1 of 2005 Potable Water Master Plan Update)**

Plant	Rated Well Pump Capacity (gpm)	Well Casing Size (inches)	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Type of Storage	Storage Capacity (MG)	Treatment
Myrtle Rogers	3,500	24	2,500	8,000	Ground	1.0	Aeration & Chlorination
Womble	3,500	24	2,500		Ground	1.0	
			3,000				
Grossenbacher	1,000	12	2,400	12,900	Ground	0.5	Aeration & Chlorination
	3,500	20	3,500		Ground	1.0	Aeration & Chlorination
	3,500	20	3,500				
			3,500				
Sheeler Oaks	2,500	18	1,950	6,650	Ground	1.0	Aeration & Chlorination
	2,500	18	1,950		Ground	0.5	Aeration & Chlorination
			1,500				
			1,250				
Plymouth	400	8	2,200	6,200	Ground	0.75	Chlorination
Regional	500	14	1,800		Ground	1.0	Aeration & Chlorination
	500	14	1,800				
	3,500	18	400				
Mount	1,000	12	1,000	3,580	Ground	0.5	Aeration & Chlorination
Plymouth	1,000	10	1,000				
			1,000				
			580				
Southwest	3,500	20	3,500	7,000	Ground	1.5	Aeration & Chlorination
		20	3,500				
Total	30,400			44,330*		8.75	

*Since all of the plants are interconnected, the system firm capacity is the total capacity less the capacity of the largest high service pump or 40,830 gpm.

** Potable Water Master Plan to be updated in 2012.

Table C-2
2030 Summary of Facilities – Water Treatment Plants
(Source: Table 6-2 of 2005 Potable Water Master Plan Update)**

Plant	Rated Well Pump Capacity (gpm)	Well Casing Size (inches)	High Service Pumps (gpm)	Total High Service Pumping Capacity (gpm)	Type of Storage	Storage Capacity (MG)	Treatment
Myrtle Rogers	3,500	24	2,500	11,000	Ground	1.0	Aeration & Chlorination
Womble	3,500	24	2,500		Ground	1.0	
			3,000				
			3,000				
Grossenbacher	1,000	12	2,400	16,400	Ground	0.5	Aeration & Chlorination
	3,500	20	3,500		Ground	1.0	Aeration & Chlorination
	3,500	20	3,500		Ground	1.0	
			3,500				
			3,500				
Sheeler Oaks	2,500	18	1,950	6,650	Ground	1.0	Aeration & Chlorination
	2,500	18	1,950		Ground	0.5	Aeration & Chlorination
			1,500				
			1,250				
Plymouth	400	8	2,200	6,200	Ground	0.75	Chlorination
Regional	500	14	1,800		Ground	1.0	Aeration & Chlorination
	500	14	1,800				
	3,500	18	400				
Mount	1,000	12	1,000	3,580	Ground	0.5	Aeration & Chlorination
Plymouth	1,000	10	1,000				
			1,000				
			580				
Southwest	3,500	20	3,500	10,500	Ground	1.5	Aeration & Chlorination
	3,500	20	3,500		Ground	1.5	
			3,500				
Total	33,900			54,330		11.25	

*Since all of the plants are interconnected, the system firm capacity is the total capacity less the capacity of the largest high service pump or 50,830 gpm

** Potable Water Master Plan to be updated in 2012.

Table C-3
~~2010~~ 2020 Summary of Facilities – Reclaimed Water Pump Stations
(Source: Table 7-1 of 2005 Reclaimed Water Master Plan Update)*

Pump Station	Reclaimed Water Pumps (gpm)	Total Reclaimed Water Pumping Capacity (gpm)	Type of Storage	Storage Capacity (MG)
Wastewater Treatment Plant	1,400	18,000	Ground	1.0
	1,400		Ground	1.0
	1,400		Ground	2.0
	1,400		Ground	2.0
	2,600			
	2,600			
	3,600			
	3,600			
North Pump Station	3,750	7,500	Ground	2.0
	3,750		Ground	2.0
North Shore Pump Station	4,500	13,500	Ground	3.0
	4,500			
	4,500			
Total System		39,000		13.0

* Reclaimed Water Master Plan to be updated in 2012.

Table C-4
2030 Summary of Facilities – Reclaimed Water Pump Stations
(Source: Table 7-2 of 2005 Reclaimed Water Master Plan Update)*

Pump Station	Reclaimed Water Pumps (gpm)	Total Reclaimed Water Pumping Capacity (gpm)	Type of Storage	Storage Capacity (MG)
Water Reclamation Facility	1,400	18,000	Ground	1.0
	1,400		Ground	1.0
	1,400		Ground	2.0
	1,400		Ground	2.0
	2,600			
	2,600			
	3,600			
	3,600			
North Pump Station	3,750	11,250	Ground	2.0
	3,750		Ground	2.0
	3,750			
North Shore Pump Station	4,500	18,000	Ground	3.0
	4,500		Ground	3.0
	4,500			
	4,500			
Total System		**47,250**		**16.0**

* Reclaimed Water Master Plan to be updated in 2012.

Table C-5
Summary of Proposed Potable Water Pipelines – Year 2005-2010
(Source: Table 6-14 of 2005 Potable Water Master Plan Update)*

Pipe Diameter (in)	Length (ft)	Cost ($/ft)	Total Cost ($1,000)
6	3,218	30	$97
8	21,935	40	$877
10	2,655	50	$133
12	32,264	60	$1,936
16	9,568	80	$765
Total	**69,640**		**$3,808**

Table C-6
Summary of Proposed Potable Water Pipelines – Year 2011- 2020
(Source: Table 6-15 of 2005 Potable Water Master Plan Update)*

Pipe Diameter (in)	Length (ft)	Cost ($/ft)	Total Cost ($1,000)
6	9,352	30	$281
8	18,634	40	$745
12	41,455	60	$2,487
16	20,072	80	$1,606
Total	**89,513**		**$5,119**

* Potable Water Master Plan to be updated in 2012.

Table C-7
Summary of Proposed Reclaimed Water Pipelines – Year 2005-2010
(Source: Table 7-7 of 2005 Reclaimed Water Master Plan Update)*

Pipe Diameter (in)	Length (ft)	Cost ($/ft)	Opinion of Probable Construction Cost ($1,000)
6	3,599	30	$108
12	28,405	60	$1,704
16	5,367	80	$429
24	13,378	120	$1,605
30	9,917	150	$1,488
36	4,615	180	$831
48	9,934	240	$2,384
Total	**75,215**		**$8,549**

Table C-8
Summary of Proposed Reclaimed Water Pipelines – Year 2011- 2020
(Source: Table 7-8 of 2005 Reclaimed Water Master Plan Update)*

Pipe Diameter (in)	Length (ft)	Cost ($/ft)	Opinion of Probable Construction Cost ($1,000)
8	7,969	40	$319
12	66,348	60	$3,981
16	32,874	80	$2,630
20	30,948	100	$3,095
24	5,648	120	$678
30	21,743	150	$3,261
36	4,173	180	$751
42	4,413	210	$926
48	12,831	240	$3,096 $3,079
Total	**186,947**		**$18,720**

* Reclaimed Water Master Plan to be updated in 2012.

APPENDIX D

10 YEAR CAPITAL IMPROVEMENT PLAN

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Table D-1
Potable Water

403/WATER IMPACT FUND	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 19/20	FY 20/21	TOTAL
Haas Rd WM, Mt. Plymouth Rd to Round Lake Rd., 22,708 LF 12" (1)											$1,362,480	**$1,362,480**
Kelly Park Rd WM, Golden Gem Rd to Round Lake Rd, 4,035 LF 16" (1)								$400,320				**$400,320**
Kelly Park WM, Plymouth Sorrento Rd. to Golden Gem Rd, 6,672 LF 12" (1)							$322,800					**$322,800**
Lester Rd WM, Vick Rd. to Rock Springs Ridge (1)					$350,000							**$350,000**
Miscellaneous Water Mains (2)	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$1,100,000**
NW WTP (1 High Speed Pump) (2)	$170,000											**$170,000**
NW WTP (1 MG Storage Tank) (1)				$750,000								**$750,000**
Plymouth Sorrento Rd WM, Ponkan Rd. to Kelly Park Rd. (1)						$1,027,488						**$1,027,488**
Plymouth Sorrento Rd WM, Yothers Rd to Ponkan Rd. (1)					$390,744							**$390,744**
Plymouth Water Plant HSP upgrade (2)		$125,000										**$125,000**
Plymouth Water Plant (Well, 1MG Storage Tank) (1)			$1,900,000									**$1,900,000**
Sheeler Oaks WTP GST .5MG (1)											$600,000	**$600,000**
Southwest Water Plant (1)							$3,234,000					**$3,234,000**
US441 WM, Roger Williams Rd to Sheeler Rd. (1)										$240,000		**$240,000**
Water Master Plan Update (2)			$50,000									**$50,000**
TOTAL WATER IMPACT FUND	**$270,000**	**$225,000**	**$2,050,000**	**$850,000**	**$840,744**	**$1,127,488**	**$3,656,800**	**$500,320**	**$100,000**	**$340,000**	**$2,062,480**	**$12,022,832**

(1) Water Impact Fees
(2) Utility Operation Fund

Table D-2
Sanitary Sewer

403/SEWER IMPACT FUND	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 19/20	FY 20/21	TOTAL
Miscellaneous Sewer Mains (2)	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$1,100,000**
Plymouth Sorrento Rd. FM,Ponkan Rd. to Yothers Rd., 5,840 LF 12" (1)		$350,400										**$350,400**
WWTP Expansion to 8 MGD (3)		$13,000,000	$18,500,000									**$31,500,000**
Sewer Master Plan Update (2)			$50,000									**$50,000**
Plymouth Rd. FM, Ponkan Rd to Kelly Park, 1,095 LF 12" (1)				$657,060								**$657,060**
Clarcona Rd FM, WWTP to Keene Rd, 4,456 LF 30" (1)							$668,400					**$668,400**
Keene Rd FM, Clarcona Rd to Marden Rd, 7,562 LF 30" (1)								$1,134,300				**$1,134,300**
Marden Rd FM, Keene Rd to 437 A, 10,262 LF 30" (1)									$1,539,300			**$1,539,300**
437 A FM, Marden Rd to Boy Scout Rd, 1,345 LF 24" (1)										$161,400		**$161,400**
Boy Scout Rd FM, 437 A to Binion Rd, 5,128 LF 24" (1)										$615,000		**$615,000**
Binion Rd FM, Boy Scout Rd to US 441, 10,234 LF 24" (1)											$1,228,080	**$1,228,080**
US 441 FM, Boy Scout Blvd to Plymouth 6,654 LF 16" (1)								$532,320				**$532,320**
Plymouth Rd. FM, US 441 to Yothers Rd, 5,323 LF 16" (1)							$425,840					**$425,840**
Junction Rd. FM, US 441 to Sadler Rd, 13,025 LF 16" (1)					$651,250							**$651,250**
Junction Rd FM, Sadler Rd to Kelly Park Rd, 2,627 LF 10" (1)						$131,350						**$131,350**
TOTAL SEWER IMPACT FUND	**$100,000**	**$13,450,400**	**$18,650,000**	**$757,060**	**$751,250**	**$231,350**	**$1,194,240**	**$1,766,620**	**$1,639,300**	**$876,400**	**$1,328,080**	**$40,744,700**

(1) Sewer Impact Fees
(2) Utility Operation Fund
(3) Bond Issue

Table D-3
Reclaimed Water

403/RECLAIM IMPACT FUND	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 19/20	FY 20/21	TOTAL
2MG Storage Tank @ WWTP (2)						$1,100,000						**$1,100,000**
Binion Rd RWM , Lust Rd. to Harmon Rd., 6,774 LF 36"/30" *(1)	$1,097,550											**$1,097,550**
Binion Rd RWM, Lust Rd. to Old Dixie Hwy, 9,602 LF 48" *(1)	$2,600,000											**$2,600,000**
Boy Scout Road RWM , Binion Rd. to Bronson property, 2,200 LF 16" (2)		$176,000										**$176,000**
Clarcona Rd RWM, Keene Rd to WWTP, 5,259 LF 48" (1)		$1,514,596										**$1,514,596**
Keene Rd RWM, Marden Rd to Clarcona Rd., 7,562 LF 48" (1)		$2,177,856										**$2,177,856**
Kelly Park Rd RWM, Golden Gem Rd to Round Lake Rd (2)											$964,080	**$964,080**
Kelly Park RWM, Jason Dwelley Parkway to Plymouth Sorrento Rd. (2)					$677,760							**$677,760**
Kelly Park RWM II, Jason Dwelley to Mt Plymouth Rd (2)							$954,960					**$954,960**
Kelly Park RWM , Mt Plymouth Rd. to Rock Springs Rd (2)								$216,000				**$216,000**
Kelly Park RWM , Plymouth Sorrento Rd. to Golden Gem Rd (2)											$963,720	**$963,720**
Lake Apopka Plant, NSRA *(1) & *(3)		$1,000,000	$4,900,000	$5,900,000								**$11,800,000**
Lester Rd RWM, Vick Rd. to Rock Springs Ridge (2)					$317,000							**$317,000**
Lust Road RWM , Binion to Lake Apopka plant, 2,628 LF 36" *(1)			$473,040									**$473,040**
Marden Rd RWM, Keene to Emerson Park, 5,422 LF 20" (2)				$542,200								**$542,200**
Miscellaneous RWM (5)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$550,000**
Plymouth Sorrento Rd RWM, Ponkan Rd. to Kelly Park Rd. (2)										$1,121,760		**$1,121,760**
Plymouth Sorrento RWM, Yothers Rd. to Ponkan Rd. (2)									$650,400			**$650,400**
Project Renew (OUC) (4)						$9,203,500		$18,177,400				**$27,380,900**

403/RECLAIM IMPACT FUND	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 19/20	FY 20/21	TOTAL
Reclaim Master Plant Update (5)			$50,000									**$50,000**
Rogers Rd. RWM, Lester Rd. to Ponkan Rd., 5,814 LF 30" *(1)		$872,100										**$872,100**
Schopke Rd. RWM, Schopke-Lester Rd. to Plymouth Rd. (2)					$288,000							**$288,000**
TOTAL RECLAIM IMPACT FUND	**$3,747,550**	**$5,790,552**	**$5,473,040**	**$6,492,200**	**$1,332,760**	**$10,353,500**	**$1,004,960**	**$18,443,400**	**$700,400**	**$1,171,760**	**$1,977,800**	**$56,487,922**

*(1) Sewer Impact Fees with a 30% grant from St. Johns River Water Management District

(1) Sewer Impact Fees

(2) Reclaimed Water Impact Fees

*(3) Bond Issue with a 30% grant from St. Johns River Water Management District; Lake Apopka Plant NSRA $5,900,000 FY 12/13

(4) Bond Issue

(5) Utility Operation Fund

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APPENDIX E

Apopka Water Service Area Map

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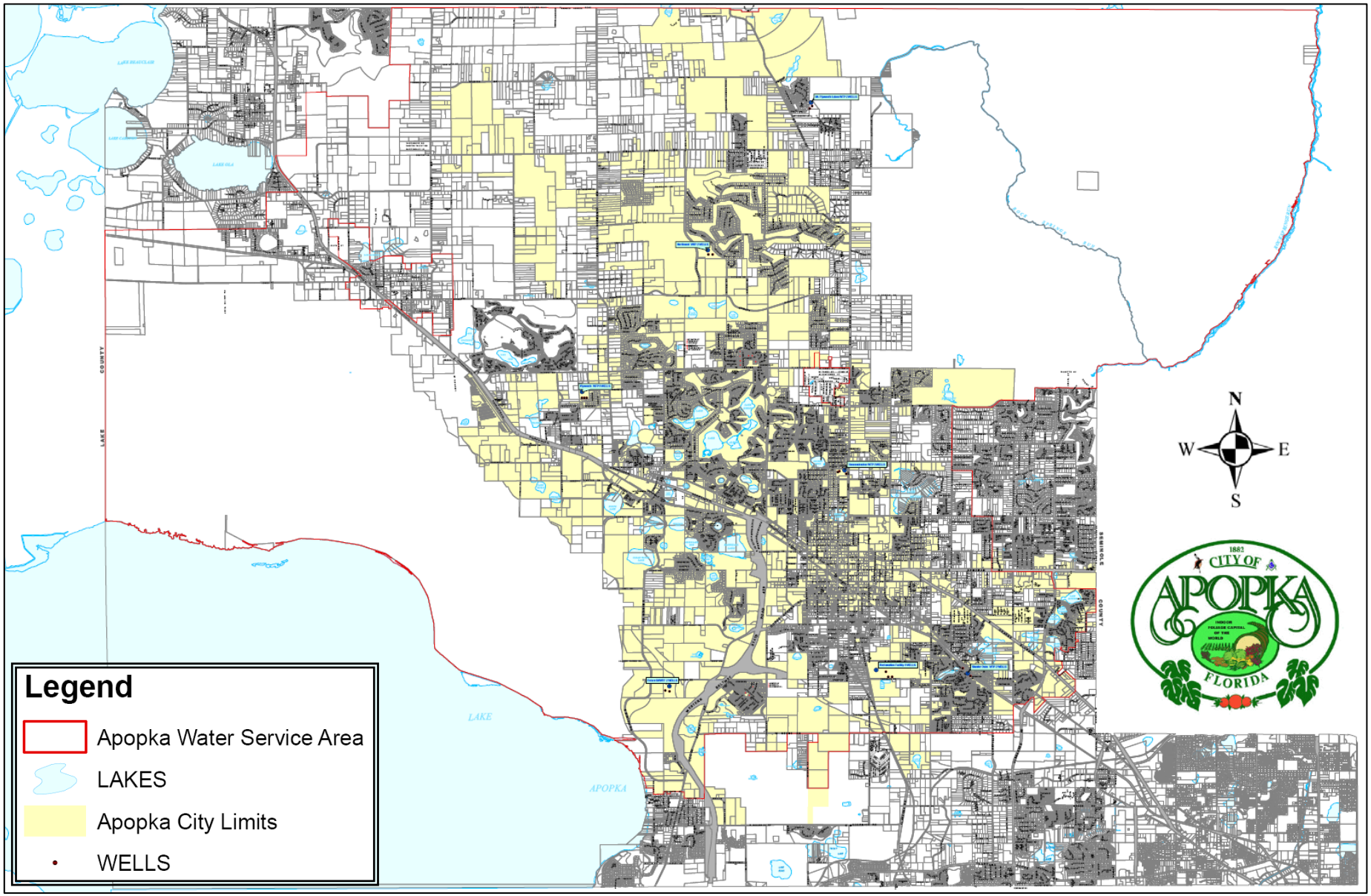
City of Apopka Water Utility Service Area



F-1

City of Apopka
Comprehensive Plan 2030

Conservation Element

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CONSERVATION ELEMENT

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CONSERVATION ELEMENT

INTRODUCTION

The Conservation Element is designed to identify environmentally sensitive areas, areas which can support little or no urban development, and to provide development guidelines to protect these areas.

This element was prepared in accordance with the Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Florida Statutes, and Rule 9J-5, F.A.C. The natural resources which are described and analyzed include air, groundwater, surface water, wetland communities, flood plains and endangered wildlife and plants. There are no known fisheries in the City and Apopka is an inland City; therefore, fisheries and marine habitats are not discussed in this element. The data collection for this element was based on the review of existing documentation.

INVENTORY OF NATURAL RESOURCES

SURFACE WATER

There are two major drainage basins in Apopka. These basins are generally on either side of US 441, which runs along a high sandy ridge between the Oklawaha Drainage Basin and the Wekiva River Drainage Basin. Each contains several sub-basins which are connected during floods. In addition, numerous local, landlocked drainage basins exist that are not connected by surface flow with any of the major basins. Each local basin contains its own small lake, depression or sink-hole. Many boundaries between local basins have been altered by development; however, most basins have retained their identity. The location of the drainage basins may be seen in the Stormwater Management Sub-Element of the Infrastructure Element.

There are approximately 72 small lakes located completely or partially within the City limits of Apopka. These lakes cover a surface area of approximately 700 acres and are depressional and primarily fed by surface water runoff. The lakes within the City are relatively small and shallow. Surface water quality is regulated by FDEP, Rule 17-3 FAC. If the Florida Department of Environmental Protection (FDEP), St. Johns River Water Management District (SJRWMD) or the Orange County Environmental Protection Department should determine surface water quality within Apopka to be below applicable standards, the City cooperates with these agencies to develop management and restoration plans.

GROUNDWATER

The Floridan aquifer is the primary source of potable water for

Apopka. Principally, the water in the aquifer is derived from rainfall, which averages 48.88 inches annually. This aquifer has a thickness of up to 2,000 feet in some areas and occurs 100 to 200 feet below the land surface. A secondary surficial aquifer is also present at depths of 60 to 150 feet below the land surface with the primary function of storing water before its infiltration into the Floridan aquifer.

Groundwater recharge occurs as rain percolates into the ground and through the semi-permeable limestone confining beds. Soils, slope, and land use all affect the degree of aquifer recharge. Course, sandy soils promote percolation of water to the aquifer, while clay-like soils inhibit percolation. The soils in the Apopka area are primarily sandy and well drained. Land uses that allow for large amounts of impervious surfaces impede the percolation of water to the aquifer. The Aquifer Recharge Sub-Element further discusses recharge conditions within the City.

WETLANDS

There are approximately 500 acres of wetlands within the City of Apopka (see **Map 5-1)**. These wetlands are isolated and are scattered throughout the City. The SJRWMD has regulatory authority over isolated wetlands. SJRWMD designates wetlands through the use of three criteria: Hydrologic conditions, a vegetative index and a soil index. Hydrological conditions are the most accurate indicators of wetland areas; however, this information is usually not readily available. The Soil Conservation Service has designated certain soils to be hydric. Hydric soils support wetland vegetation. The SJRWMD has compiled a vegetative index that includes plant species indicative of wetland habitats.

The wetland system in the northwest area of the City includes Lake Merril, Lake Wolf and Lake Cora. The remaining wetlands and the surrounding uplands have remained in their natural state. In this northwest area the wetland has been identified as a freshwater marsh and is adjacent to a variety of upland communities including grasslands, scrub and hardwood forests.

The wetlands in the southwest portion of the City are associated with Marshall Lake, Upper and Lower Lake Doe and Lake Witherington. There is very little development located in the area of these wetlands; however, with the completion of the SR 429 Western Expressway development pressures in this area are increasing. The larger southern portion of this wetland has undisturbed uplands to both the east and west. This wetland system would make an excellent managed conservation area, as it offers both marsh and forested wetland varieties and is adjoined by grass and scrubland type uplands as well as a hardwood forest.

COMMERCIALLY VALUABLE MINERALS

Mining for peat and sand are the only two commercially valuable minerals found within the City of Apopka. There is one active peat mine operating within the City at the present time.

FLOODPLAINS

Flood plains may be divided into floodways and special flood hazard areas. The floodway portion of the floodplain is the most critical area, as this cross-sectional area carries the flood flows. Undisturbed floodplains are a valuable ecological resource and can provide a rich diversity of vegetation and wildlife. They also serve an important function in filtering stormwater runoff and aid in aquifer recharge. When natural flood plains are maintained and managed as parks or open space, they provide recreational and wildlife habitat preservation opportunities. Apopka includes measures within its Land Development Code delineating criteria for the preservation of the natural floodplain.

Flood-prone areas are shown on **Map 5-2**. The City instituted a floodplain management program and became eligible to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) in 1987. Under this program, residents in the City purchase flood insurance through the federal government and the City is eligible for federal disaster assistance. As participants in the NFIP CRS, the City is required to enforce 100-year floodplain elevations for new developments in identified special flood hazard areas. Should development be permitted in special flood hazard areas, regulations require compensating stormwater storage and finished floor elevations at least one foot above flood elevation.

SOILS

Soils provide several resource functions including drainage, stormwater filtration, water storage, aquifer recharge, and ground stabilization. For planning purposes, soil conditions refer to those characteristics of the land having special relevance and importance to urban development. The predominant soils in Apopka and its surrounding planning area are predominantly of the Lakeland-Blanton association, characterized by nearly level to strongly sloped, well drained to somewhat excessively drained sandy soils interspersed with many lakes and ponds. Small areas of more poorly drained or hydric soils are found in the flat areas scattered throughout Apopka, usually bordering lakes and ponds. There is little surface drainage pattern in the Lakeland-Blanton association since most drainage is through the porous soil.

Although Lakeland-Blanton soils association is predominant, there are four additional categories of soils within the area that impact future land use potential. These categories include soils suitable for urban development, soils with slope of eight percent or

greater, soils with high water table and soils limitations due to flood hazard and muck deposits. Soils with high water table and muck deposits often are associated with wetland vegetation and animal species, which are protected through various regulatory measures. Soils with steep slopes seldom prevent development as engineering practices can alleviate this problem. **Map 5-3** depicts the soil types in the City.

VEGETATIVE AND WILDLIFE COMMUNITIES

Native vegetation that exists on less urban or undeveloped lands within Apopka can be classified into two broad categories - uplands and wetlands. The two categories are further classified into several sub-categories. The uplands can be classified into forested uplands and non-forested uplands, wetlands can be classified into mixed wetland hardwoods, cypress, wetland forested mixed, freshwater marshes, wet prairies and emergent aquatic vegetation.

There is no data currently available on the location of specific plant and animal species within the City of Apopka. The City has not conducted a study to determine whether species that are endangered, threatened, rare or species of special concern are located within its limits. Coordination with the Florida Fish and Wildlife Conservation Commission (FFWCC), SJRWMD and the Florida Department of Forestry are required to determine precise data.

The SJRWMD 2004 Land Cover/Land Use classification identifies generalized locations of the vegetative communities mentioned above, some of which are located within the City of Apopka. The SJRWMD derived this classification system from the Florida Land Use and Cover Classification System (FLUCCS). **Map 5-4** shows the general ranges of these communities. The vegetative communities existing in the City of Apopka and are described below.

UPLANDS COMMUNITIES

Apopka has a wide variety of undisturbed uplands. These uplands serve as wildlife habitats and may act as buffers surrounding wetlands. They may also provide habitats for endangered or threatened species of animals and plants. Upland communities that provide these wetland buffers and habitats for dwindling species are more susceptible to development pressures than wetlands, as they are not given the special protection given to wetlands by state and federal agencies.

Following is an inventory of the upland communities found in Apopka as identified in the Florida Natural Areas Inventory.

Pine Flatwood - These forested uplands are dominated by Longleaf or Slash Pine and generally occurs on nearly level land. During the rainy season (June - September) water may be found on the surface.

The soils tend to be fairly dry at other times. This community is recognized by the scattering of pines with an understory of grasses and saw palmetto, often surrounding small isolated wetlands. Fire acts as a controlling mechanism in these areas and, without it, these flatwoods would progress to hardwood communities. Tree species found in this area include longleaf pine and slash pines. Other vegetation includes saw palmetto, wax myrtle, ground blueberry, gallberry, shining sumac, deer tongue, creeping beggarweed, gay feather, low particular topsided indiangrass, chakly bluestem and creeping bluestem. Wildlife species found in this community include gray squirrel, cotton rat, cottontail rabbit, raccoon, Sherman's fox squirrel, brown headed nuthatch, yellow rat snake, pygmy rattle snake, eastern diamondback rattlesnake, black racer and red bellied woodpecker.

Sand Pine Scrub - This community occurs in excessively well-drained sands with a land contour that is level to strongly sloping. This is a fire-based community and tends to burn every 20 to 40 years. Many endangered species live in this warm, dry community including the Florida scrub jay, sand skink and Florida mouse. Trees found in this area include sand pines with an understory of myrtle oak, chapman oak and sand live oak. Other vegetation includes dwarf huckleberry, gopher apple, prickly pear, grassleaf goldmaster, deermoss, yellow indiangrass and low panicum. Wildlife species found in this community include Florida scrub jay, Florida mouse, gopher tortoise, fox squirrels, pocket gopher, black racer, deer, sand skink and Bachman's sparrow.

Mesic Hardwood - This habitat supports a variety of vegetation and animal species and is dominated by a crown closure of upland hardwood species. The habitat occurs in a variety of conditions from strongly sloping to completely level. Trees found in this community include laurel oak, live oak, red maple, red bay, flowering dogwood, water oak, magnolia, sweetbay and sweetgum. Other vegetation includes American beautyberry, wax myrtle, saw palmetto, low panicum, common greenbriar, blackberry and maidencane. Wildlife species typically found in this community include southern flying squirrel, spadefoot toad, raccoons, opossums, great crested fly catcher, skunks, hognose snake, eastern diamondback rattlesnake, bobcats, deer and foxes.

Grassland/Shrubland - These communities consist of prairie grasses, which occur along the margins of wetland zones and often act as transitional zones between wetlands and uplands. Typical vegetation found in these uplands includes sedges, wax myrtle and gallberry. Wildlife found in this community includes cotton rat, cottontail rabbit, redtailed hawk, yellow rat snake, Bachman's sparrow and the Florida mouse.

WETLANDS COMMUNITIES

Wetlands provide a habitat for many varieties of plants and animals

including several threatened and endangered species. Wetlands also aid in the protection of water quality. Pollutants in stormwater are often washed into wetlands, which can trap nutrients before the water is discharged into lakes and streams. Wetlands store water during floods and then slowly release it during dry periods. The vegetation in wetlands can also help prevent erosion along surface water shorelines. Wetlands and the wildlife habitats they provide are also of aesthetic value to the City and add to its quality of life. . The description of each, including dominant species is included in **Table 5-1**.

TABLE 5-1: WETLAND COMMUNITIES

COMMUNITY	CHARACTER	VEGETATION	WILDLIFE
Pond Pine	Crown closure of Pine trees	Pond Pine Slash Pine Palmetto	Pinewood Tree Frog, Red Shouldered Hawk, raccoon, opossum, deer
Freshwater Hardwood Swamp	Forested Wetland	Red Maple, Water Hickory Tupelo, Sweet Gums and Bays, Wax Myrtle, Sawgrass	American Alligator, Striped Mud Turtle, Florida Black Bear, Great Egret, Red Tailed hawk
Bayheads	Forested Wetland	Sweethead Loblolly Bays, Pond Cypress, Pines, Wax Myrtle, Dahoon	American Alligator, Florida Brown Snake, King Snake, armadillo, raccoon, Florida Black Bear, Red Shouldered Hawk
Freshwater	Marshes with sedges and rushes	Sawgrass, Cattail Waterlillies Flat Sedge, Wood Duck, Marsh Hawk Water Hyacinth	Frogs, alligator, turtles, Florida Black Bear, bobcat,
Mixed Wetland	Conifer/ Hardwood Freshwater Hardwood Forest	Pond Pine,	See Pond Pine, Maple, Bays,
Wetlands and Bayheads		Myrtle	
*Cabbage Palm	Smaller wetlands near lakes	Scattered Pines Cabbage Palms, Palmetto and Grasses (herbaceous plants)	
*Cypress	Inundated wetlands or a forested Border along creeks and lakes or occur in depressions as circular domes or linear srands	Dominated by either bald cypress or pond cypress	
*Wet Prairie	Soil saturated during rainy season	Open grasses, sedges Flatwoods or Hammocks	Many wildlife species
*Freshwater Marsh	Lake Apopka Area	Grasses, sedges and rushes (herbaceous plants)	

SOURCE: Seminole County, Florida, Wetland Field Guide, June 17, 1986
Florida Division of State Planning, The Florida Land Use and Cover Classification System: A Technical Report, April 1976
*SJRWMD – GIS Data Download Table, Land Use/Land Cover, 2004

ENDANGERED AND THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN

The City has a number of undisturbed uplands and wetlands which are suitable for listed species of flora and fauna; however, the City has not conducted a study to determine whether listed species are located within its limits. Coordination with the Florida Fish and Wildlife Conservation Commission (FFWCC), SJRWMD and the Florida Department of Forestry are required to determine precise data. A listing of endangered or threatened species and species of special concern having potential habitats in Apopka is provided in **Table 5-2**.

TABLE 5-2: LISTED SPECIES

Common Name	Species	Habitat	USFWS	FGFWFC
INVERTEBRATES				
Jumping Spider	Phidippus xerus	Sand Pine Scrub		
McCrone's burrowing wolf spider	Geolycosa xera	Sand Pine Scrub		
Red Widow Spider	Latrodechus bishopi	Sand Pine Scrub		
Scarab beetle (Horn)	Aphodius aegrotus	Sand Pine		
Scarab beetle (Haldeman)	Aphodius laevigatus	Sand Pine		
Scarab beetle (Linell)	Diplotaxis rufa	Unknown		
Scarab beetle (LeConte)	Hypotrichia spissipes	Deep Sand		
Scarab beetle (Howden)	Peltotrupes profundus	Deep Sand		
AMPHIBIANS				
Florida Gopher Frog	Rana areolia aesopus	Sand Pine Scrub	4R2	SSC
Striped Newt	Notophthalmus perstriatus	Pine Flatwoods		
BIRDS				
Audubon's Crested Caracara	Polyborus plancus audubonii	Prairie	T	T
Bachman's Sparrow	Aimophila aestivalis	Open Pinelands	UR2	
Cooper's Hawk	Accipiter cooperii	Mesic Hardwood Hammock		
Florida Scrubjay	Aphelocoma coeurlescens	Sand Pine Scrub	T	T
Glossy Ibis	Plegadis falcinellus	Freshwater Marsh		
Great Egret	Casmerodius	Various Wetlands		

Common Name	Species	Habitat	USFWS	FGFWFC
	albus			
Least Bittern	Ixobrychus exilis	Freshwater Marsh		
Limpkin	Aramus guarauha	Various Wetlands		SSC
Little Blue Heron	Egretta caerufea	Various Wetlands		SSC
Louisiana Heron	Egretta tricolor	Estuarion		SSC
Merlin	Falco columbarius	Various Wetlands		
Night Heron, Black-crowned	Nycticorax nycticorax	Shallow Water		
Night Heron, Yellow-crowned	Nycticorax violaceus	Live Oak, Pine Groves		
Ospray	Pandion haliaetus	Hardwood Swamp		
Sandhill Crane	Grus canadensis	Prairie		T
Short Tail Hawk	Buteo brachyious	Ripanian Hardwood/ Prairie		
Snail Kite	Rostrhamus sociabilis	Freshwater March	E	E
Snowy Egret	Egretta thula	Various Wetlands		SSC
Southeastern American Kestrel	Falco sparverius paulus	Pine Flatwoods	UR2	T
Swallow-tailed Kite	Elanoides forficatus	Hardwood Swamp	UR5	
White Ibis	Exdocimus albus	Freshwater Marsh		
Wood Stork	Mycteria americana	Freshwater Marsh	E	E
Woodpecker, Hairy	Picoides villosus	Various		
Woodpecker, Ivory Billed	Campephilus principalis	Hardwood Forest	E	E
Woodpecker, Red Cockaded	Picoides borealis	Pinelands, Mature	E	T
MAMMALS				
Big Brown Bat	Eptesicus fuscus	Various		
Florida Black Bear	Ursus americanus Ursus floridanus	Swampland	UR2	T
Florida Weasel	Mustela frenate peninsulae	Various	UR2	
Florida Mouse	Peromyscus floridanus	Sand Pine Scrub, Flatwoods	UR2	SSC

Common Name	Species	Habitat	USFWS	FGFWFC
Hoary Bat	Lasiurus cinereus	Forest		
Roundtailed Muskrat	Neofiber alleni	Marshland	UR2	
Sherman's Fox Squirrel	Sciurus niger shermani	Sandhill Pines	UR2	SSC
Southeastern Big-eared Bat	Plecotus rafinesquii	Forest	UR2	
Southeastern Shrew	Sorex longirostris long.	Swamp Forest		
REPTILES				
American Alligator	Alligator mississippiensis	Various Wetlands	T	SSC
Eastern Indigo Snake	Pryhrarchon corais coupen	Pine Flatwoods/Mesic Hammocks	T	T
Florida Pine Snake	Pituophis melanoleucus mugitis	Scrub, Sand Pine	UR2	SSC
Gopher Tortoise	Gopherus polyphemus	Sand Pine Scrub	UR2	SSC
Mole Snake	Lampropeltis calligaster	Pine Flatwoods		
Short-tailed Snake	Stilosoma extenuatum	Scrub, Sand Pine	UR2	T
PLANTS				
Butterfly Pea	Clitoria fragrans	Sandy Scrub	UR2	
Curtis Milkweed	Asclepias curtissii	Sandy Scrub		T
Double Spleenwort	Asplenium plenum	Wet Pinelands	UR2	T
Dwarf Redbay, Redbay Persea	Persea borbonia var. humilis	Sand Pine Scrub	UR5	
Florida Bonamia	Bonamia grandiflora	Sandy Scrub	T	E
Florida Jointtail	Coelorachis tubersubsia	Marshes	UR2	E
Florida Bonamia	Bonamia grandflora	Sandy Scrub	T	E
Florida Willow	Salix floridana	Hardwood Swamp	UR2	T
Foxglove, Carter's Large Purple	Agalinis pupurea var. cart.	Moist Pineland	UR2	
Foxglove, Narrow-leaved	Agalinis stenophylla	Pinelands	UR2	

False				
Spoon-flower	Peltandra sagittifolia	Wetlands		
Water Sundew	Drosera intermedia	Bog/Stream		T

SOURCE: Guide to Listed Species in the East Central Florida Region - East Central Florida Regional Planning Council Special Projects Section, by Michael J. Gillbrook and Elizabeth Gisondi, November 1989.

HAZARDOUS WASTE

Hazardous wastes are corrosive, toxic, flammable, or reactive substances that may harm public health and the environment. There are no known commercial hazardous waste generators within the City of Apopka. For industrial operations located in Orange County, the FDEP keeps a listing of all hazardous materials, amounts, storage methods and disposal methods for small industrial operations within the county.

There are no hazardous waste disposal facilities in the City or in Orange County. Household hazardous waste may be dropped off by county residents at the Orange County landfill. The county also provides collection of household hazardous wastes at community pick-up stations four times a year. After the waste is dropped off at the landfill, a private contractor separates out recyclables. The remaining hazardous waste is then transported to an out-of-state waste disposal facility.

AIR QUALITY

While there is no specific data available relating to air quality in the City of Apopka, the air quality in the Orlando area is considered good. A description of the Air Quality Index is shown in **Figure 5-1**. The Air Quality Index monitoring report for Orlando from 2000-2006 is listed in **Table 5-3**.

TABLE 5-3: AIR QUALITY INDEX, ORLANDO 2000-2006

AQI Level	Year and Number of Days						
	2000	2001	2002	2003	2004	2005	2006
Good (0-50)	252	283	300	309	308	289	293
Moderate (51-100)	111	79	64	56	58	70	71
Unhealthy for Sensitive Groups (101-150)	3	3	1	0	0	6	1

Source: Air Monitoring Report 2006, Department of Environmental Protection, Division of Air Resource Management, Apopka Community Development Department, 2009

FIGURE 5-1: AIR QUALITY INDEX

Air Quality	Air Quality Index (AQI) AQI=100 corresponds to EPA's air quality standard	What does it mean?
Good	0 to 50	No health impacts are expected when air quality is in this range.
Moderate	51 to 100	Unusually sensitive people should consider limiting prolonged outdoor exertion.
Unhealthy for Sensitive Groups	101 to 150	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
Unhealthy	151 to 200	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion; everyone else, especially children should limit prolonged outdoor exertion.
Very Unhealthy	201 to 300	Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children should limit prolonged outdoor exertion.

Source: Florida Department of Environmental Protection, Air Quality Index, "A Guide to Air Quality and Your Health," August 1993

ANALYSIS OF NATURAL RESOURCES

This section will analyze the condition of natural resources in the City and how the management of these resources relates to the sustainability or growth of the community.

SURFACE WATER

Specific data on surface water quality is not available for lakes within Apopka. However, it is known that pesticide use, stormwater runoff and siltation due to soil erosion contribute to the degradation of the City's surface waters. Sources of surface water pollution are divided into two categories and are described as follows:

Point Source Discharges

Point sources generally have a human-made discharge point such as a pipe or channel and are discharged into water bodies at discrete points. A point source permitting program has been implemented for domestic and industrial wastewater facilities that discharge either to surface or ground water. The FDEP maintains a listing of these permitted point source pollution discharges to surface waters. This list allows maintenance of a fairly complete inventory of all surface water pollution sources in and around the City of Apopka.

Non-point Source Discharges

Non-point pollution is generally associated with run-off water from the surface, which carries with it sediment, organic material, nutrients and toxins into receiving waters. Non-point source pollution is difficult to monitor because of the diffuse and intermittent nature of discharges. The fact that most non-point pollution occurs during the first flush of rainfall following a storm event adds to the difficulty of non-point source monitoring. The non-point source discharges in the City of Apopka are from both urban and rural/agricultural land uses.

Apopka is known as the "Indoor Foliage Capital of the World". There are hundreds of nurseries in the Apopka area. It is a vital part of the Orange County economy and of the City of Apopka as well, with 15 nurseries operating within its municipal boundaries. A decrease in the number of foliage operations has occurred due to development; however, the remaining businesses may pose a problem if runoff from their use of chemical fertilizers, fungicides and pesticides enters the areas surface waters. To date, there has been no indication that the permitted application rates have caused any surface water pollution problems. Nonetheless, because the potential is present, the City will continue to cooperate with the Florida Department of Agriculture and Consumer Services, the FDEP,

the SJRWMD, and other pertinent agencies to monitor surface and groundwater conditions near these foliage operations.

Soil erosion in the City is not considered a problem although forms of wind and water erosion do occur throughout the area under severe storm occurrences. Erosion is evident in the agricultural land near the southwest corner of the City; however, the St. John's River Water Management District (SJRWMD) has formed agreements with local farmers for stormwater management and soil erosion control. Citrus growers in the area have begun to plant grass between rows of trees, which has decreased the incidence of both wind and water erosion.

The most serious erosion problem occurs with unprotected soils on construction sites. Because land about to be developed is usually stripped of all vegetation, the property becomes a target for the forces of wind and water. This can be alleviated through more sensitive land development measures including the required retention of natural vegetation.

Surface Water Management Programs

Lake Apopka SWIM Plan. The Lake Apopka Surface Water Improvement and Management (SWIM) Plan, as coordinated by the SJRWMD, has completed construction of the first phase of a marsh flow-way project that will filter suspended solids and phosphorus from Lake Apopka. This project will be expanded to 3,400 acres and will filter the total volume of Lake Apopka twice annually. The 1996 Lake Apopka Restoration Act included authorization for SJRWMD to set a criterion to be used in limiting phosphorous discharges to the lake and provided funding to initiate a mandated buyout on the North shore of Lake Apopka. The district adopted a phosphorus criterion by rule in 1996 and completed it's buyout of the muck farms in 1999. Mass harvesting of rough fish is being used as a supplementary restoration technique for phosphorus removal and bio-manipulation.

Florida's Non-Point Source Management Program. The FDEP, the SJRWMD, Department of Agriculture and Consumer Services, Department of Health and local governments implement Florida's Non-point Source Management Program. The goal of the program is to mitigate non-point source pollution from new land use activities and to reduce pollution from existing activities. The Non-point Source Management Section administers the following programs:

- State Stormwater Management Program Coordination
- State Nonpoint Source Management Program
- Clean Lakes Program

WETLAND AND UPLAND HABITATS

One of the most important aspects of both wetland and upland communities is the wildlife they support. Of special concern are wildlife species designated as endangered or threatened by the FFWCC. When portions of ecological communities are altered, vegetative links between wildlife areas are often destroyed. The destruction of these links, or wildlife corridors, is detrimental to wildlife as movement is often needed for feeding and breeding purposes, as well as a means for evacuation from danger. Because these vegetative communities often cross jurisdictional lines, development approvals in environmentally sensitive areas should be coordinated with all permitting agencies and surrounding jurisdictions.

Orange County has identified lands in the northwest section of the Apopka planning area that it feels could be significant conservation lands and which merit protection (Orange County CARL Committee Study, July 1991). An evaluation matrix was used to prioritize land suitable for acquisition by Orange County. Each site was scored based on the ranking criteria for several parameters. In addition, each parameter was assigned a weighting factor indicating the relative importance of each parameter in the overall ranking system.

The City has identified upland and wetland vegetative communities within its municipal boundaries and has a general idea of what species may be present in these communities; however, this information is somewhat generalized and is not site-specific to Apopka. Recognizing that all wetlands are environmentally sensitive areas the City and has assigned a conservation land use designation to all existing wetlands within the City limits.

The City maintains the quality and quantity of wetlands in its jurisdiction through the encouragement of techniques such as conservation easements and transfer of development rights. In addition, the City has included in its Land Development Code provisions for upland buffer zones for habitat protection and to provide foraging areas for wetland species. In order to protect endangered or threatened species and species of special concern, development proposals of 10 acres or more are required to submit a survey that identifies areas exhibiting the attributes which are indicative of sites that should be able to sustain identified species.

The criteria for ranking the habitats is based on the Orange County Endangered, Threatened and Species of Special Concern Habitat Evaluation Criteria, which applies a numerical system assigned to identify the degree of each characteristic present at a site (see **Table 5-4**).

TABLE 5-4: ENDANGERED THREATENED AND SPECIES OF SPECIAL CONCERN HABITAT EVALUATION CRITERIA

Unit Values	Rank	VEGETATIVE COMMUNITIES
15	1	Community not rare, sensitive, threatened, or endangered and not containing or likely to contain threatened or endangered species
30	2	Community not rare, sensitive, threatened, or endangered but containing or likely to contain listed plant species
45	3	Community rare, sensitive, threatened, or endangered and not containing or likely to contain listed plant species
60	4	Community rare, sensitive, threatened, or endangered and containing or likely to contain listed plant species
		ANIMAL SPECIES
20	1	Habitat contains or is likely to contain no listed species
40	2	Habitat contains or is likely to contain species of special concern
60	3	Habitat contains or is likely to contain threatened and/or endangered species
		VULNERABILITY (DEVELOPMENT PRESSURE)
9	1	Site currently protected from development
18	2	Site not protected but unlikely to be developed
27	3	Site not protected and development imminent.
36	4	Site not protected but there are no known applications for development
		MANAGEABILITY FEASIBILITY/POTENTIAL
6	1	Site could be managed properly but moderate management problems would exist
12	2	Site would have minimal management constraints
		ECOLOGICAL VIABILITY
16	1	Low potential for viability of featured attribute(s
32	2	Moderate potential for viability of featured attribute(s)
48	3	High potential for viability of featured attribute(s)
		ADJACENCY TO EXISTING PUBLICLY OWNED CONSERVATION LANDS
0	0	Site non-adjacent
36	1	Site adjacent
		HISTORICAL/ARCHAEOLOGICAL VALUE
0	0	Site contains no historic, archaeological sites
30	1	Site contains historic, archaeological sites; moderate to low significance
60	2	Site contains historic, archaeological sites; moderate to high significance
		AQUIFER RECHARGE POTENTIAL
0	0	Aquifer recharge potential; low to none (soils poorly/very poorly)
30	1	Aquifer recharge potential; moderate (soils moderately well drained)
60	2	Aquifer recharge potential; high (soils excessively well drained)
		SCENIC VALUE
0	0	Scenic values not significantly unique
36	1	Scenic values; significantly unique, endangered.
		DEGREE OF DISTURBANCE
8	1	Site highly disturbed
16	2	Site moderately disturbed
24	3	Site relatively undisturbed
		WILDLIFE CORRIDOR POTENTIAL
0	0	Site not within or adjacent to a wildlife corridor
30	1	Site within or adjacent to a wildlife corridor but not a vital component of corridor
60	2	Site a vital component of an identified wildlife corridor

Where an endangered or threatened species or species of special

concern is present and the site achieves a high enough rating of 169 or higher, the City requires preservation of the specific areas that are large enough to sustain a viable population of the identified species. If the site rates less than 169; and endangered, threatened or species of special concern are present, mitigation measures or relocation of the identified species is permitted. The City will work with the FFWCC to develop regulations that will identify all measures necessary to ensure the habitat will sustain a viable population for any listed species which may be found in the Apopka ecosystem.

USE OF NATURAL RESOURCES

Commercial Use

Mining for peat and sand are the only two commercial uses of natural resources within the City of Apopka. There are no other known commercial uses of surface water or vegetative communities within the City. The only peat mine in the City was permitted under the Orange County Conservation Ordinance after it was determined that the wetland was degenerating. The mining company has agreed to restore the wetland. The Florida Department of Environmental Protection (FDEP) regulates the reclamation requirements for mining through Chapter 16C-39, FAC, and the City requires that these standards be met.

Recreational Use

Currently, there are no managed recreational uses of lakes, vegetative communities, wildlife or freshwater fisheries within the City of Apopka. Some of the lakes in the City are used for boating and fishing; however, there is no public boat ramp access to any of the lakes, which are all quite shallow. The City provides two waterfront parks -one along the shore of Dream Lake and the other at Buchan Pond (Wells Street). Both parks are used for passive recreation and shoreline fishing. According to the Florida Fish and Wildlife Conservation Commission (FWCC), recreational fishing pressure within Apopka is minimal, with the greatest recreational effort occurring between January and March.

Conservation Use

Conservation uses are defined by the Florida Department of Community Affairs as being “activities or conditions within land areas designated for the purpose of conserving or protecting natural resources or environmental quality, including areas designated for such purposes as flood control, protection of quality or quantity of groundwater or surface water, floodplain management, commercially or recreationally valuable fish and shellfish, or protection of vegetative communities or wildlife habitats.” The Future Land Use Map shows that over 280 acres of publicly owned conservation areas are located in Apopka.

HAZARDOUS WASTE

The FDEP Hazardous Waste Section and the Orange County Environmental Protection Division are responsible for hazardous waste regulation and compliance in Apopka. The county's primary responsibility is to monitor businesses and industries classified as small quantity generators or as conditionally exempt generators, while FDEP concentrates its efforts on large quantity generators. There are no known commercial producers of hazardous waste within the City of Apopka.

AIR QUALITY

Orange County regulates air quality pursuant to the "Orange County Air Quality Rules" (Article III, Air Quality Control, Orange County Code). The article lists which emissions are prohibited and which uses require permits, which the County's Environmental Protection Officer is authorized to issue

POTABLE WATER SOURCES AND DEMAND

The evaluation of necessary systems to meet domestic and commercial consumptive demand is based upon the entire system's ability to meet peak hour flow. Presently, the ability of the City's system to meet the consumptive demand is controlled by the maximum permitted pumping capacity as limited by the City's Consumptive Use Permit (CUP) from the SJRWMD. The following is summary of the existing and future potable water demands. For further details refer to the Potable Water Element.

Existing Demand Surpluses and Deficiencies

In 2008, the City's central water system withdrew 7.18 million gallons per day (mgd) on an average annual daily withdrawal basis. The system has a permitted allocation of 7.307 mgd average annual daily withdrawals. Therefore, there was surplus capacity available for additional connections in 2008. The City's central potable water system has adequate capacity to serve all of the existing residential and non-residential units that are currently connected and serve some additional new development.

Future Demand Capacity

Future water demand was forecast based on City population projections. In 2009, the central water system treated an average of 7.565 mgd of potable water. Based on 2009 water usage and the estimated central service area population of 52,567, potable water usage was 144 gallons (gpcd) for residential and non-residential uses. The maximum daily potable water demand for 2030 is projected to be 18.279 mgd. The maximum allocated withdrawal for the system

is 13.158 mgd. The City is currently applying for a modification to the CUP in order to meet the projected demands.
The City will continue to coordinate updates of its Water Supply Facilities Work Plan with the SJRWMD to ensure that it is consistent with the most recently adopted SJRWMD district water supply plan. The updates to the Work Plan will address water supply sources and related facilities necessary to meet the existing and projected demand within the City's utility service area.

Water Conservation

The City of Apopka employs a number of water conservation measures. Through the City's landscape ordinance, water conservation restrictions have been established for both potable and reclaimed water users. The ordinance includes the following provisions:

- Landscape irrigation is restricted to a maximum of two days per week. No irrigation is allowed between the hours of 10 a.m. and 4 p.m.

- Addresses ending with an odd number must only irrigate on Wednesday and Saturday.

- Addresses ending with an even number must only irrigate on Thursday and Sunday.

A violation of the irrigation restrictions results in a $50 dollar fine after the first offense. Subsequent violations result in even higher fines. After 4 offenses, the fine is $500 for each subsequent violation.

In May 2008, the City amended its Landscape Ordinance (2069) to include water-wise irrigation practices and the application of Florida friendly landscape practices. Among the features of this ordinance are the following:

- Restricts high volume irrigation (>5 gpm/spray head) to 50% of the landscaped area or one-half acre whichever is smaller for residential properties.

- Restricts medium volume irrigation (0.5 to 5 gpm/spray head) to 25 percent of the landscaped area. The irrigation area can be increased to 75 percent if no high volume irrigation is present.

- Allows 100 percent coverage for low volume (< 0.33 gpm/emitter) systems. The minimum coverage is 25 percent of the landscaped area.

- Restricts use of low drought tolerance turf grass to 50 percent of the green space area or one-half acre, whichever is smaller.

- Does not limit the use of drought tolerant turf like bahia grass.

- Provides for financial incentives to encourage home owners to upgrade their irrigation systems to conserve water.

The City's rate structures for both potable water and reclaimed water are increasing block rates. The rate structures are designed to encourage wise use of water.

The City provides water conservation education to the public through the city website, utility billing mailings, newspaper articles, brochures, flyers, door hangers, and high user letters with tips on conserving water and proper irrigation maintenance. The city also provides speakers, displays, handouts, and activities for school events, City events, Home Owner Associations, builders, and to any group or individual that requests the information. The City is planning to purchase water conservation kits to use as an education tool at schools and other city events.

All new development projects within the City of Apopka are required to have a dual water system. Water for indoor uses and fire protection is provided by the potable water system. Water for outdoor uses is provided by the reclaimed water system.

WEKIVA RIVER PROTECTION AREA ACT

The state has designated the Wekiva River as a Wild and Scenic River and enacted the Wekiva River Protection Act in 2004 to protect the river and its surrounding habitats. A small area of the northeastern portion of Apopka, east of County Road 435, lies within the Wekiva River Protection Area as designated by the Act. None of the waterways within the Wekiva River system lie within the City limits, as the Wekiva Springs State Park surrounds the river system in the Apopka area.

Development in the protection area is limited to a low density residential subdivision, Wekiva Glen, Wekiva Park, Parkview at Wekiva Park, Wekiva Preserve (a portion), and the Orange County Administration Building. Wekiva Park/Parkview was approved as a Planned Unit Development (PUD) and includes an existing retail neighborhood commercial center at the Northeast corner of Rock Springs Road and Welch Road. The remaining PUD property is vacant.

Section 369.305(1)(a) of the Wekiva River Protection Act mandates that the local comprehensive plans of counties in the protection area shall be reviewed to ensure they contain goals, objectives and policies that address the protection of the following:

1. Water quality and quantity and the hydrology of the Wekiva River System;

2. Wetlands associated within the Wekiva River Protection Area;

3. Aquatic and wetland dependent wildlife species associated with the Wekiva River System;

4. Habitat within the Wekiva River Protection Area of species designated pursuant to rules 39-27.003, 39-27.004, and 39-27.005, Florida Administrative Code; and

5. Native vegetation within the Wekiva River Protection Area.

Section 369.305(1)(b) requires the local plans to also include:

1. Provisions to ensure the preservation of sufficient habitat for feeding, nesting, roosting, and resting so as to maintain viable populations of species designated pursuant to Rules 39-27.003, 39-27.004, and 39-27.005, F.A.C., within the Wekiva River Protection Area.

2. Restrictions on the clearing of native vegetation within the 100-year floodplain.

3. Prohibition of development that is not low density residential in nature unless that development has less impact on the natural system than low density residential.

4. Provisions for setback along the Wekiva River for areas that do not fall within the protection zones established pursuant to s. 373.415, F.S.

5. Restrictions on intensity of development adjacent to publicly owned lands to prevent adverse impacts to such lands.

6. Restrictions on filling and alteration of wetlands in the Wekiva River Protection Area.

7. Provisions encouraging clustering of residential development when it promotes the protection of environmentally sensitive areas, and ensuring that residential development in the aggregate shall be of rural density and character.

The Act also states that local land development codes “...shall also include restrictions on the location of septic tanks and drainfields in the 100-year floodplain and discharges of stormwater to the Wekiva River System.”

In order to meet these requirements within the Wekiva River Protection Area the City of Apopka shall:

1. Restrict development to residential land uses of two dwelling units per acre or less.

2. Prohibit the use of septic tanks.

3. Not permit clearing and alteration of the 100-year flood plain or wetland areas.

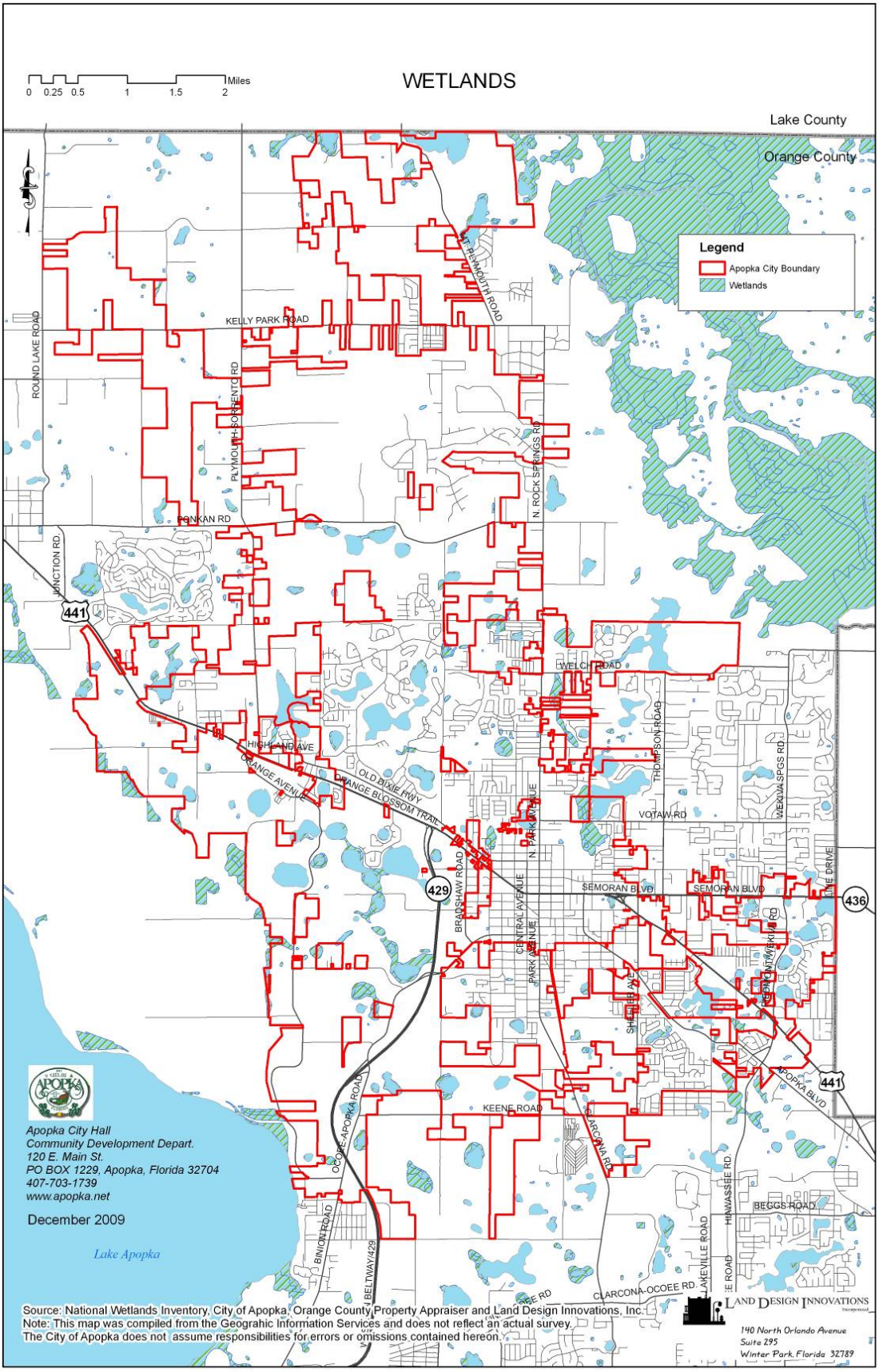
4. Provide for transfer of one quarter of the development rights for wetland properties and properties within the 100 year floodplain. For properties which are entirely wetland or 100 year flood plain, the City shall allow the transfer of one quarter of the development rights to designated receiving zones.

5. Include in its Land Development Code that at least two development alternatives be submitted for review in the Wekiva River Protection Area. One shall utilize cluster development concepts.

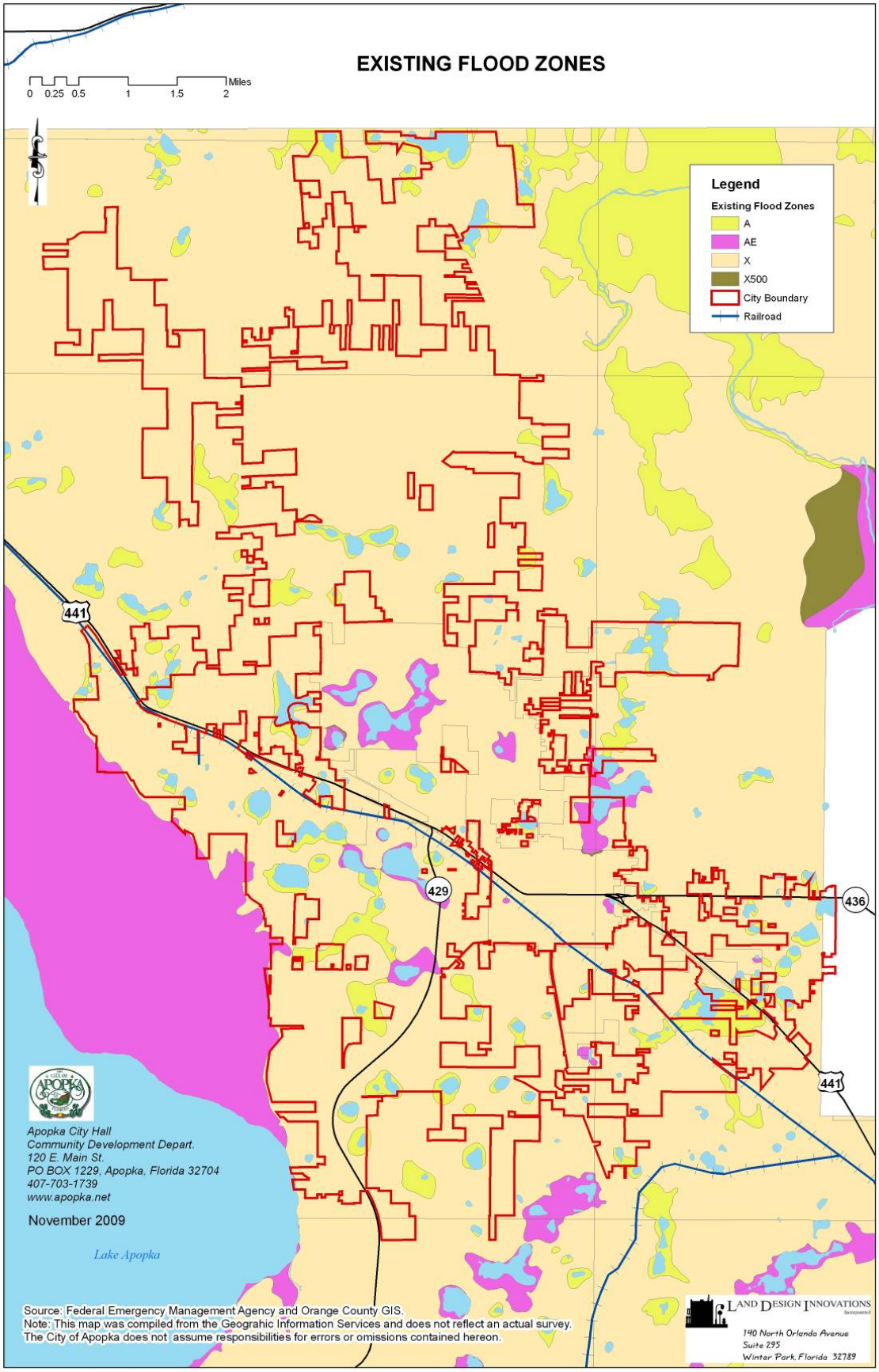
6. Require habitat surveys and protection methods for any habitat of species pursuant to Rules 39-27.003, 39-27.004 and 39-27.005, Florida Administrative Code.

The requirements of the Wekiva River Protection Act which relate to setbacks from the river’s edge and protection zones do not apply to development in Apopka.

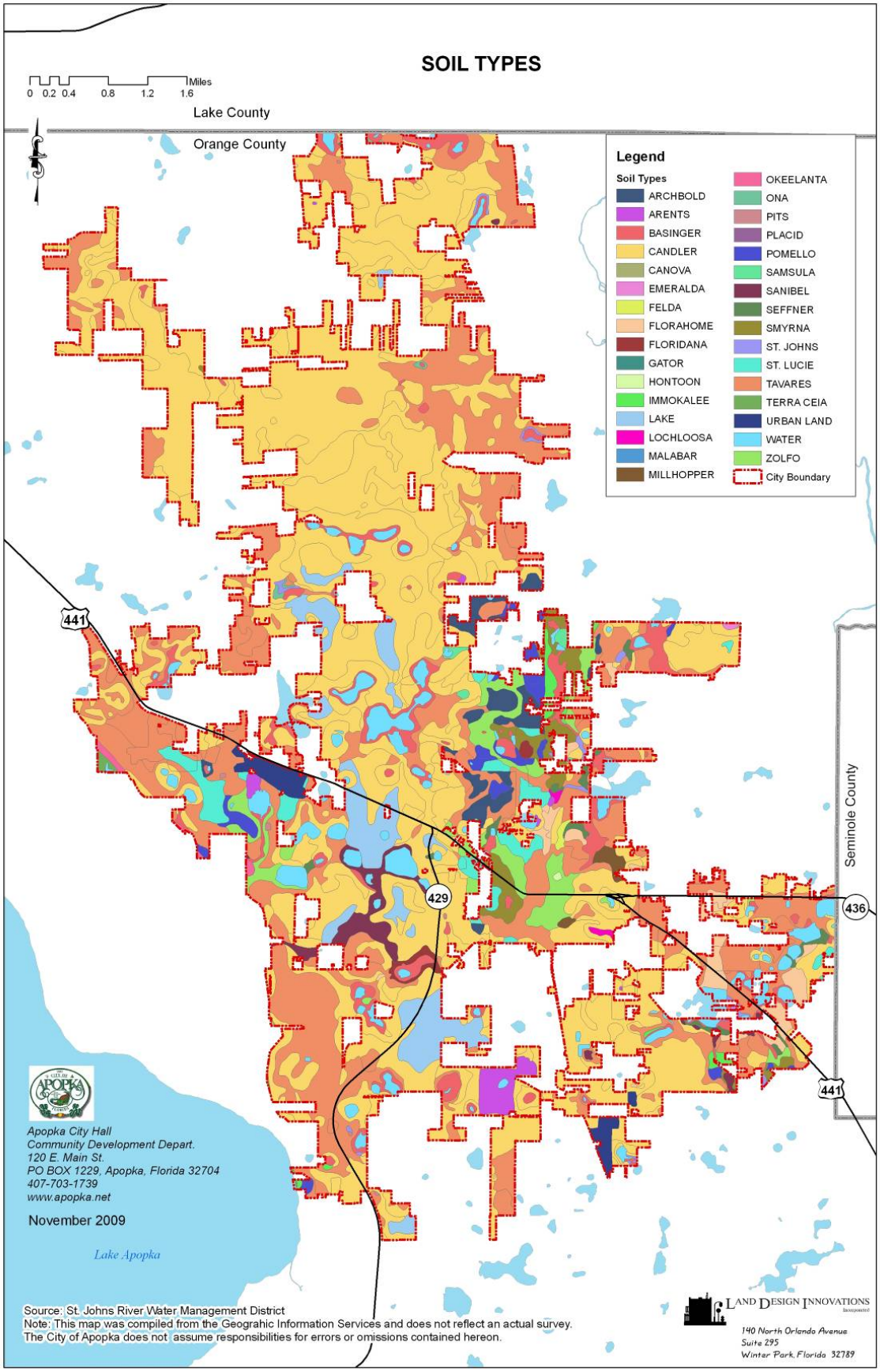
MAP 5-1: WETLANDS



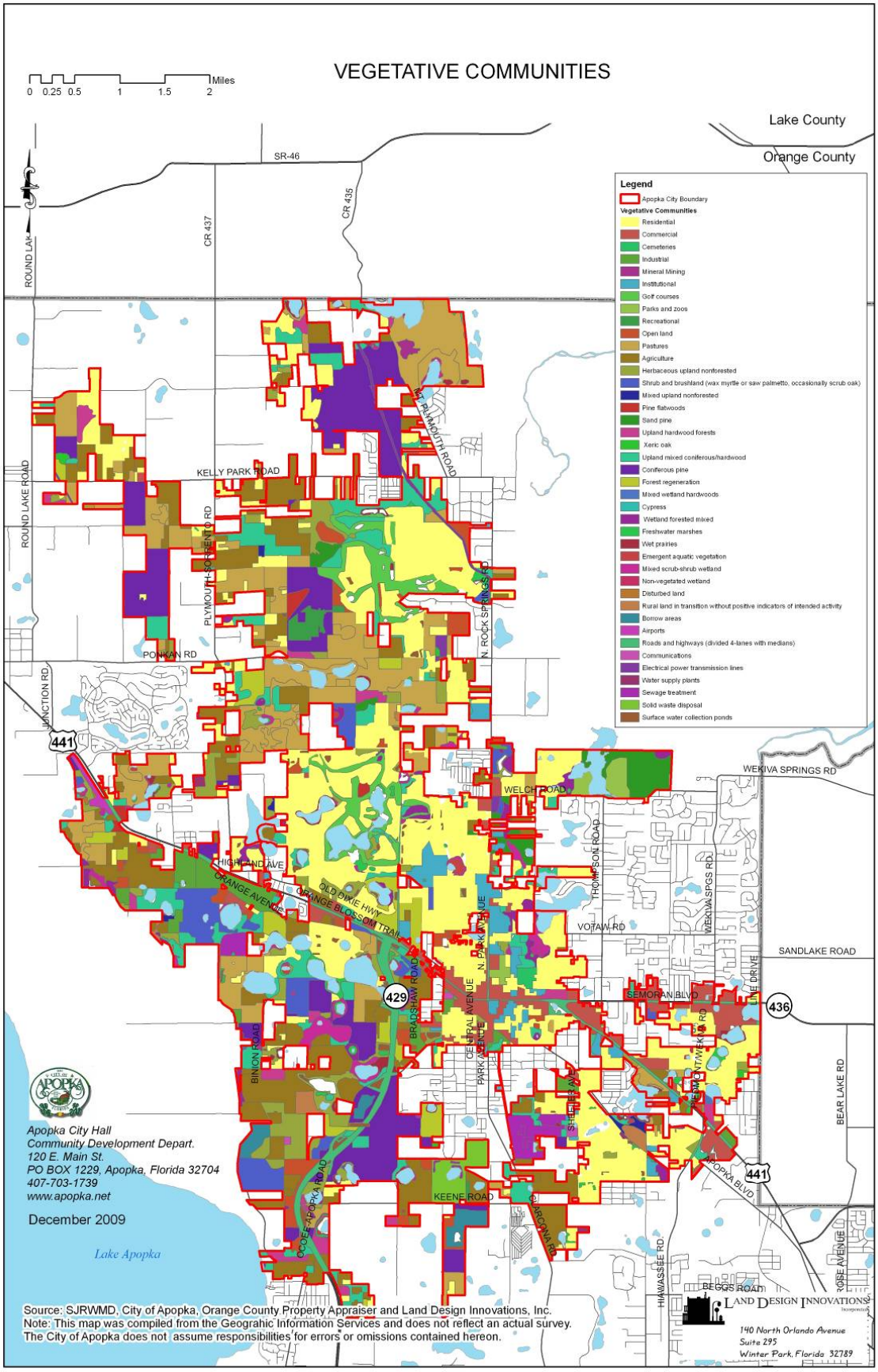
MAP 5-2: FLOOD ZONES



MAP 5-3: SOIL TYPES



MAP 5-4: VEGETATIVE COMMUNITIES



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CONSERVATION ELEMENT

GOALS, OBJECTIVES, AND POLICIES

GOAL

Protect the natural resources of the City of Apopka and guide development to areas that can sustain urban development.

Objective 1

The City of Apopka, in cooperation with Orange County and the St. Johns River Water Management District (SJRWMD), shall ensure that the quality of surface water will meet state standards as detailed in rules 62-302.300 - 62-302.530 and 62-520.420, Florida Administrative Code (F.A.C.).

Policy 1.1

The City of Apopka shall continue to require that stormwater treatment facilities be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use in accordance with the classifications established in Section 62-302.400 F.A.C.

Policy 1.2

Any person wishing to perform any clearing operation shall be required to obtain a permit from the City. A permit will be granted only if the applicant presents a soil erosion plan indicating surface water quality will not be degraded by such actions. Each applicant adjacent to water bodies must address and submit a plan pursuant to requirements established in the City’s Land Development Code.

Policy 1.3

The City of Apopka shall continue its street sweeping program to control the transport of sediments and other materials by stormwater runoff.

Objective 2

The City of Apopka, in cooperation with Orange County and SJRWMD shall ensure that the quality of ground water will meet standards as detailed in Rule 62-550.330, F.A.C., as amended.

Policy 2.1

The City of Apopka shall continue to protect its potable water wellfields by enforcing a wellhead protection zone within a 500' radius of a wellhead, in which potentially high risk land uses such as, but not limited to, industrial and manufacturing which use or store hazardous materials as defined by the U.S. Resource Conservation and Recovery Act and implemented by EPA are prohibited, consistent with Rule 62-521, F.A.C., as amended.

Objective 3

The City of Apopka shall protect its natural resources including wetlands as defined by rules 40C-4 and 62-302, F.A.C., floodplain storage, and identified threatened and endangered species and species of special concern as defined in the Future Land Use Element.

Policy 3.1

The City of Apopka shall protect habitat for semi-aquatic or water-dependent terrestrial species of wildlife through the maintenance of native upland vegetation consistent with SJRWMD policy.

Policy 3.2

Activities which destroy or degrade the functions of a wetland shall be required to mitigate the adverse effects within the same watershed, through demonstrably successful creation or preservation of wetland whose functional values are equal or greater to those lost, pursuant to SJRWMD and FDEP regulations.

Policy 3.3

New developments shall identify jurisdictional wetland boundary areas and such areas shall be so designated and assigned a Conservation Land Use. Those areas designated in the development plan as wetland areas shall be updated in the Future Land Use Map upon each large scale Comprehensive Plan Amendment.

Policy 3.4

The City of Apopka shall continue to review land uses within environmentally sensitive areas and areas adjacent to wetlands in order to determine incompatibility.

Policy 3.5

Except as expressly provided by this plan, no development activity shall be undertaken in or directly adjacent to any environmentally sensitive areas. Wetland and shoreline setbacks shall continue to be regulated in the Apopka Land Development Code.

Policy 3.6

The City shall continue to require confirmation from the SJRWMD of stated wetland boundaries, as well as any authorization of any proposed encroachment prior to authorization of construction for any approved development plan.

Policy 3.7

Environmentally sensitive lands, per 9J-5, Florida Administrative Code and Chapter 163, Florida Statutes, for the purposes of this comprehensive plan shall mean Class I Conservation Areas as defined in Conservation Policy 3.9.

Policy 3.8

The City of Apopka shall continue to adopt regulations which protect and conserve wetlands. Such regulations shall include criteria for identifying the significance of wetlands.

1. Class I Conservation Areas shall mean those wetland areas which meet at least one of the following criteria:

    a. Any wetland of any size that has a hydrological connection to natural surface water bodies or the Floridan aquifer; or

    b. Any wetland of any size that is within a lake littoral zone; or

    c. Any large isolated uninterrupted wetlands forty (40) acres or larger; or

    d. Any wetland of any size that provides critical habitat for federal and/or state listed threatened or endangered species.

2. Class II Conservation Areas shall mean those wetland areas which meet any of the following criteria:

    a. Consist of isolated wetlands or formerly isolated wetlands which by way of man’s activities have been

directly connected to other surface water drainage; and are greater than or equal to five (5) acres; or

b. Are less than 40 acres and do not otherwise qualify as a Class I conservation area.

3. Class III Conservation Areas shall mean those wetland areas which meet all of the following criteria:

a. Isolated wetlands less than five (5) acres; and

b. Do not otherwise qualify as a Class I or Class II conservation area.

The regulations shall also identify is and to what extent the conservation area is allowed to be altered and the mitigation requirements for unavoidable loss.

Policy 3.9

Conservation areas as defined by Policy 3.8 and their functions shall be protected and conserved by restricting direct and indirect development impacts according to Policies 3.9 and 3.10, designation as conservation land use, open space requirements and the following:

A. General

1. It is the policy of the City of Apopka to avoid or minimize development impacts on wetlands; to direct incompatible land uses away from wetlands; to require wetland buffers; to allow wetland losses only where all practical engineering measures have been applied to avoid such losses; and to allow for effective mitigation.

2. All development shall comply with wetland protection requirements of the federal, state and regional agencies having regulatory authority. This Plan provides supplemental conservation and protection measures for wetlands pursuant to the direction of Chapter 163, Pt. II, F.S. and Rule 9J-5, F.A.C. Provisions in this Plan shall not conflict with other agency regulations.

3. Land use planning and site design shall support development patterns that avoid or minimize the impact of development on wetlands.

4. In order to properly identify and delineate wetlands prior to development, the City of Apopka shall rely on the delineation of wetlands and

surface waters by the SJRWMD. This delineation shall be reproduced on construction plans which are submitted for review by the City. For other review purposes which do not specifically permit development (e.g. rezonings, etc.) the extent of onsite wetlands shall be estimated and no delineation is required unless specifically required by the City.

5. In no instance shall these wetland policies be construed to allow development that is otherwise prohibited by the Comprehensive Plan.

6. The removal, alteration or encroachment within a Class I conservation area shall only be allowed in cases where no other feasible or practical alternatives exist that will permit a reasonable use of the land or where there is an overriding public benefit. The protection, preservation and continuing viability of Class I conservation areas shall be the prime objective and the basis for review of all proposed alterations, modifications, or removal of these areas.

7. Removal, encroachment or alteration for Class II conservation area should be presumed to be allowed unless removal, encroachment or alteration is contrary to the public interest. Removal, encroachment or lateration may be allowed in Class III conservation areas.

8. The Conservation designation on the Future Land Use Map shall serve as a conceptual indicator of conservation and wetland areas. The precise delineation of these areas shall be determined through site specific studies and field determinations which assess the extent of wetland vegetation. If an area designated as Conservation on the Future Land Use Map is determined to be a developable area, the Future Land Use Map designation shall be as shown.

B. Land Use

1. Existing uses in wetlands may continue, but shall not be expanded unless they are explicitly allowed, permitted or exempted by the SJRWMD regulations and Conservation Policies 3.9 and 3.10. Existing silviculture in wetlands shall be consistent with “Silviculture Best Management Practices” published by the Florida Department of Agriculture, 1998.

2. New development allowed under Comprehensive Plan Future Land Use Map designations and which will have no significant impact on the net wetland functions will be allowed, including:

   - Water dependent uses as defined by 9J-5.003(137) F.A.C. Walking trails or elevated wooden boardwalks designed to minimize disturbance to the wetland system shall be allowed to provide limited access for purposes of passive recreation or access to other portions of the site or adjacent waters which are otherwise inaccessible.

   - Insect control structures.

   - Temporary impacts associated with the installation of cables, conduits and pipelines that transmit electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas or natural gas.

   - Minor activities by FDOT, the City of Apopka, and Orange County within existing ROW or easements, subject to permitting by the City. Exemptions listed in 40D-4.051, together with projects described in SJRWMD 40D-4.054, 40D-40.040, and 40D-400.

   - Environmental restoration, enhancement, and research uses.

   - Uses allowed under the future land use designation that require the dredging and filling of less than 100 square feet of wetlands.

3. Other new development shall not be allowed in wetlands, i.e., development shall occur outside of the wetland (including its upland buffer as specified below) unless explicitly permitted by the SJRWMD standards and Conservation Policies 3.9 and 3.10. When one or more contiguous lots or parcels of record under common ownership or control as of the date of adoption of this Comprehensive Plan policy are evaluated under these allowances or exemptions, the lots or parcels shall be aggregated and evaluated as a single lot or parcel.

4. When wetlands are identified on a site and mitigation is not approved, new development (other than listed in 2. above) shall be clustered away from the wetlands on upland portions of a

development site. Development densities and/or intensities may not be transferred out of the undeveloped wetland areas.

5. If the extent of wetlands on an individual development parcel would prevent the use of the parcel as allowed by the Future Land Use Map designation then the following densities and intensities shall be allowed:

   - For wetland areas less than 20 acres, a single family residence that is not part of a larger plan of common development proposed by the applicant, including associated residential improvement such as a driveway, garage and an on-site sewage disposal system, not to exceed 6,000 square feet. Structures must be elevated when possible to minimize wetland impacts.

   - For wetland areas exceeding 20 acres, residential uses at a density of one dwelling unit per twenty acres.

   - Non-residential uses allowed by the future land use category when elevated above the wetland on pilings and having less than 1,000 square feet of floor space per acre.

C. Buffers

1. Upland buffers are considered an integral component of a functioning wetland and shall be afforded the same types and levels of protection as the wetland itself. Buffers shall be an average minimum width of 25 feet beyond the perimeter of the wetland with a minimum width of 15 feet, excepting the point where permitted water conveyance facilities connect to the wetland. Buffers shall not be developed, cleared, or landscaped in any fashion that would decrease their effectiveness in supporting wetland functions. Encroachment into the wetland buffers for the purpose of hydrologic connection of drainage systems and creation of mitigation areas shall require no further buffering compensation. Additionally, all structures shall be setback 50 feet from the wetland’s edge.

2. The City of Apopka may require that upland buffers be extended beyond 25 feet if necessary to connect isolated wetlands with other protected wetlands existing within 100 feet, depending on the

existence of listed species and habitat valuation. Greenways will be created when possible.

D. Mitigation:

The purpose of mitigation is to offset environmental impacts. Mitigation activities approved by a federal, state or regional agency are supported by the City of Apopka. However, the issuance of a permit by any other agency, with or without mitigation, does not exempt the development from the requirements and restrictions of Conservation Policies 3.9 and 3.10 and other requirements of the Comprehensive Plan. Development in wetlands must be consistent with this plan to proceed.

E. Implementation:

1. The City of Apopka shall maintain a generalized wetlands map as part of this Plan. This map shall be based on the Florida Land Use Cover and Forms Classification System (FLUCFCS) Geographic Information System mapping by SJRWMD.

2. Wetlands that exist on a proposed development parcel shall be shown by the landowner/developer as a part of the construction plans submitted to the City for review of the proposed project. Additionally, this map must show the delineation of the upland buffer for projects which do not require a SJRWMD permit. For projects requiring a SJRWMD permit, the City shall require as a condition of development approval that wetland buffers shall be protected.

3. New lots shall not be created and/or platted that do not contain sufficient buildable upland areas in order to provide a reasonable use for the lot under the requirements of the Comprehensive Plan.

Policy 3.10

Exceptions to Policy 3.9 above:

A. Isolated wetlands

1. Development may incorporate isolated wetlands into stormwater management systems, provided that the stormwater runoff is pre-treated prior to entering any of the wetland, so that the wetland is used for nutrient and volume attenuation. The City of Apopka shall encourage designs which maintain the existing natural wetlands community, except where

permitting agencies agree that the imposition of conditions which favor a different plant community are more desirable for the purpose of providing habitat, improving water quality or enhancing other wetland values.

2. Any proposed encroachment shall require an environmental assessment by a professional biologist rendering an opinion as to whether the wetland has significant wildlife values based on the following factors:

   a) The extent to which the isolated wetland acts in concert with the broader regional landscape to provide both food web support and habitat for wildlife;

   b) The potential cumulative impacts to isolated wetland wildlife functions are a regional level;

   c) Individual wetland features that are important to wildlife;

   d) Whether the isolated wetland is used by endangered or threatened species or species of special concern; and

   e) The degree to which adjacent existing or planning development will affect the use of the wetland by wildlife.

   If the biological evaluation indicates that the isolated wetland has significant and sustainable wildlife values, the wetland shall be afforded the same level of protection as all other wetlands. However, if the report indicated no significant and sustainable values, then the underlying land use category may be applied. This does not preclude the application of any regulatory requirements of other federal, state or regional agencies.

B. Buffers

Buffer widths shall be a minimum of 15 feet excepting permitted water conveyance facilities, and may only be adjusted downward to below a minimum average of 25 feet on a case-by-case basis if the following conditions are present:

1. The developable portion of existing lots of record as of the date of adoption of this plan does not

have sufficient size or dimensions to allow for a reasonable use of the property based on the designated land use category. In this instance, the remaining buffer shall be enhanced with native species to minimize development impacts.

2. The proposed development shall provide mitigation for reduction in standard by enhancing the functioning value of the wetland buffer area.

C. Degraded Wetlands

If the SJRWMD indicated that a wetland (or a portion thereof) is severely degraded and has minimal restoration potential and that beneficial restoration or enhancement mitigation of another wetland would be achieved as a result of mitigation that allows some development in this degraded wetland (or portion thereof) then the underlying land use category shall apply. Mitigation shall be permitted with the first priority being mitigation on-site, the second priority being mitigation within the City limits, and the third priority being mitigation within Orange County under a City/County interlocal agreement.

D. Road Crossings

Road crossings shall be allowed to access developable portions of the development parcel or if shown to be in the overriding public interest (e.g., as necessary local, collector or arterial road linkage.) When allowed, road crossings shall occur at the narrowest practical point given the constraints of safe roadway design and shall provide for hydrologic connectivity and aquatic species movement.

Policy 3.11

The City of Apopka shall coordinate with the Army Corps of Engineers, the Florida Department of Environmental Protection, and the St. Johns River Water Management District to identify and regulate wetland areas under their jurisdiction.

Policy 3.12

The City of Apopka shall protect identified wetland areas and existing wildlife habitat through the control and maintenance of invasive non-native (exotic) plants on City-owned environmentally sensitive lands.

Policy 3.13

The City of Apopka shall continue to seek out innovative partnerships and opportunities to preserve and conserve its natural resources in a balanced approach that ensures multiple and compatible uses of those lands while providing just compensation to the landowner.

Policy 3.14

The City of Apopka shall revise, adopt, and implement land development codes to require site plan review where a development project is directly contiguous to wetlands or involves disturbances of wetlands so as to ensure that no wetland is disturbed except in accordance with the following standards:

a. No wetland may be disturbed unless the City Council makes a finding (supported by the site plan application and documentation) that no reasonable alternative (such as clustering development on upland portions of the site) is available to avoid a taking, a that the nature and degree of disturbance is the minimum possible to achieve development that is otherwise compliant with the goals, objectives, and policies of the Plan.

b. All rules of the FDEP and SJRWMD for jurisdictional wetlands shall be met.

c. Pre-development/pre-disturbance water flow and quality shall be maintained.

Policy 3.15

The City of Apopka shall cooperate with the Florida Department of Environmental Protection, St. Johns River Water Management District, East Central Florida Regional Planning Council, and Army Corps of Engineers to improve compliance with federal and state dredge and fill permitting process.

Policy 3.16

The City of Apopka will prohibit stormwater discharge from development from discharging into wetlands, sinkholes, bays or rivers without sufficient prior treatment that will protect existing water quality.

Policy 3.17

The City of Apopka shall utilize the best available data to identify and protect recharge areas and sensitive upland habitats, including wetlands, Longleaf Pine, Sand Hill, Sand

Pine, and Xeric Oak Scrub. These provisions shall apply to all land use amendments.

Objective 4

Where listed species are found, the City of Apopka shall maintain necessary habitat for the protection of such species, either through preservation, mitigation or relocation.

Policy 4.1

Development habitat studies, based on the evaluation criteria found in **Table 5-1** in the Conservation Element support documentation shall be required for all developments of more than 10 acres. Where listed species are found:

a. and the site achieves a rating of 169 or higher, an area which will sustain a viable population of the species shall be preserved;

b. And the site achieves a rating of less than 169, mitigation measures which ensure an area which will sustain a viable population of the species present shall be preserved, or the species may be relocated to an area which will sustain a viable population of the species inhabiting the site.

Policy 4.2

If the habitat survey indicates the presence of listed species, the Florida Fish & Wildlife Conservation Commission (FFWCC) will be notified and allowed 15 days to submit comments or recommendations.

Policy 4.3

The city shall verify and update accordingly on an annual basis the specific listing of potential listed species and habitat as changes occur.

Policy 4.4

The City of Apopka shall coordinate with the Florida Fish & Wildlife Conservation Commission (FFWCC) on an as needed basis for technical assistance to ensure protection regulations for listed species are concurrent with updated laws.

Policy 4.5
The City of Apopka will use the best available data from the Florida Fish & Wildlife Conservation Commission (FFWCC) to protect and identify sensitive upland habitats.

Objective 5

The natural functions of the 100-year floodplain will be protected in order to ensure the natural flood storage and carrying capacity.

Policy 5.1

Floodplains, as designated on the Future Land Use Map, shall be protected as conservation land uses, or as:

a. Recreation land uses, provided the use does not interfere with the aquifer recharge or flood storage capacity;

b. Residential very low suburban, residential low suburban, residential low and residential low-medium land use classifications provided the use does not interfere with the aquifer recharge capacity or flood storage capacity.

Policy 5.2

The City of Apopka shall continue to require compensating storage for all flood water displaced by development below the elevation of the base 100-year flood.

Policy 5.3

The City of Apopka shall continue to require the finished floor of all inhabitable structures be located 1-foot above the base 100-year flood elevation.

Policy 5.4

The City of Apopka shall require where feasible the use of floodplains as conservation, open space and recreation in order to preserve the natural flood plain and vegetation.

Objective 6

The City of Apopka shall promote air quality which meets or exceeds minimum air quality standards as set forth in the Clean Air Act and Title 40 of the Code of Federal Regulations.

Policy 6.1

The City of Apopka shall require the planting of native species of trees and vegetation to reduce the amount of CO_2 in the air.

Policy 6.2

The City of Apopka shall continue to include within the Apopka Land Development Regulations requirements which reduce the

potential for automobile emissions, such as requirements for bike and pedestrian facilities that offer alternatives to the use of vehicles.

Policy 6.3

The City shall participate in public information programs that educate citizens and business owners about ways to reduce air pollution.

Objective 7

The City of Apopka shall conserve potable water resources to ensure adequate supplies for future through the following policies:

Policy 7.1

The City of Apopka shall cooperate with SJRWMD to educate and notify City water customers of water restrictions imposed during SJRWMD declared water shortages. The city shall notify SJRWMD of any known violations of water restrictions.

Policy 7.2

The City of Apopka shall continue to enforce state laws requiring low volume plumbing fixtures for new construction through building permits.

Policy 7.3

The City of Apopka shall require the use of native drought resistant plants to meet 75% of City landscaping projects.

Policy 7.4

The City shall encourage the use of native, water-conserving plant materials and a low-impact irrigation system to meet 50% of proposed landscaping requirements. Selection of plant species shall be made based upon Florida Friendly landscape concepts outlined in the UF/IFAS Florida Yards and Neighborhoods Handbook and as identified in its Florida Friendly Plant List.

Policy 7.5

The City of Apopka shall continue implementation of the Water Conservation Plan.

Policy 7.6

The City of Apopka shall update the master plan for the reclaimed water distribution system every five years.

Policy 7.7

The City of Apopka shall continue to require the construction of dual water systems in future developments which lie within the City's reclaimed water service area.

Policy 7.8

The City shall maintain a Water Supply Facilities Work Plan that is consistent with the most recently adopted SJRWMD district water supply plan to address water supply sources and related facilities necessary to meet the existing and projected demand within the City's utility service area.

Objective 8

The City of Apopka shall require development which destroys native trees to replace cleared trees with similar species and maturity levels on a one to one ratio within practical limitations, for all areas of the City.

Policy 8.1

The City of Apopka shall adopt regulations which set minimum standards for preservation of native vegetation.

Policy 8.2

The City of Apopka shall prohibit the clearing of native vegetation within the 100 year floodplain unless replanting shall be at a one to one ratio and clearing is necessary to provide compensating storage.

Policy 8.3

The City shall require the use of site appropriate, drought resistant plant material based upon appropriate hardiness zone, soil type and moisture conditions, exposure to sun, and mature plant size for public landscaping projects. The use of native vegetation shall be encouraged.

Policy 8.4

The City shall require the use of Florida Friendly landscaping practices and waterwise irrigation standards to promote efficient water use. Selection of plants species shall be made based upon Florida Friendly landscape concepts outlined in the UF/IFAS Florida Yards and Neighborhoods handbook and as identified in its Florida Friendly Plant List. The use of native vegetation shall be encouraged.

Objective 9

The City of Apopka shall regulate the operation, maintenance and reclamation of mining facilities to ensure protection of natural resources.

Policy 9.1

Mining shall be permitted, when complete reclamation is ensured, in industrial and agricultural land use classifications, and in residential land use classifications where:

1. It is confined to vacant properties of 100 acres or more; or

2. Residential units equal 20 or less measured within a quarter mile radius from the site to be mined; or in conservation land use classifications when necessary to restore a degenerated wetland.

Policy 9.2

Mining shall be defined as the removal of resources from their location, so as to make them more suitable for commercial, industrial, or construction use, but not including excavation for the sole purpose of aiding on-site farming or on-site construction, or the process of prospecting or investigating for resources

Policy 9.3

Peat mining shall be permitted only if it shall be beneficial to the lake or wetland ecosystem. If it is beneficial to the natural system, it shall be considered compatible with any land use.

Policy 9.4

Any party wishing to extract mineral resources shall be required to submit a reclamation plan and proof of financial responsibility. Reclamation plans must be determined to be consistent with the reclamation standards outlined in Rule 62C-39, F.A.C., as amended.

Objective 10

The City of Apopka shall maintain the Wekiva River Hydrologic Basin standards and design criteria as adopted in Rule 40C-4.091, F.A.C. within the Wekiva River Protection Area.

Policy 10.1

All new development within the Wekiva River Protection Area shall be very low suburban residential density of two units per acre or less in nature, unless a proposed development would have less impact on natural resources.

Policy 10.2

All hundred year floodplains within the Wekiva River Protection Area shall be designated as conservation areas on the Future Land Use Map. These areas shall be eligible for on-site transfer of development rights.

Policy 10.3

The alteration or filling of wetlands within the Wekiva River Protection Area shall be prohibited.

Policy 10.4

The use of septic tanks for new developments may be undertaken on an interim base, not to exceed five years, in cases where central sewer improvements necessary to serve the proposed development are scheduled for construction in the adopted Capital Improvements Program within that five year time-frame. The approval for and conditions of the use of septic tanks on an interim basis shall be at the sole discretion of the City.

Policy 10.5

The City shall permit development within the Wekiva River Protection Area to be clustered.

Policy 10.6

The subdivisions of land which interfere with the required setbacks of protection zones pursuant to Section 373.415, F.S. shall be prohibited.

Policy 10.7

Lands within the Wekiva River Protection Area shall be evaluated for transfer of development right eligibility.

Policy 10.8

The City of Apopka shall continue to require all new development to retain minimum of ½ inch of run-off from the entire project site. However, retaining 3 inches of runoff from the directly connected impervious area within the project site shall be required unless it is demonstrated that post-development recharge is equal or greater than pre-development recharge as stipulated in Section 40C-41, FAC.

Policy 10.9

Septic tanks shall be prohibited within the Wekiva River Protection Area.

Policy 10.10

The density/intensity of any development on parcels of property adjacent to the waterways or wetlands of the Wekiva River System shall be concentrated on those parcels farthest from waterways, wetlands or public lands.

Objective 11

The City of Apopka shall protect the health, safety, and welfare of the public from the harmful effects of hazardous wastes by cooperating with the Florida Department of Environmental Protection (FDEP) and Orange County Environmental Protection Department (OCEPD) in the regulation and disposal of hazardous wastes.

Policy 11.1

The City of Apopka shall continue to coordinate with Orange County in its emergency response plan to handle accidents involving hazardous wastes.

Policy 11.2

The City of Apopka shall promote the recycling of hazardous wastes by publishing a list of approved recyclers.

Policy 11.3

The City of Apopka shall coordinate with the Orange County Environmental Protection Department to hold household hazardous waste round-up programs in the Apopka area.

Policy 11.4

The City of Apopka Land Development Regulations shall require evidence of compliance with Orange County Small Quantity Generator Notification Program prior to issuance of an occupational license.

Policy 11.5

The City of Apopka shall distribute educational material, provided by FDEP, on household hazardous wastes to all city solid waste customers.

Policy 11.6

The City of Apopka shall continue to coordinate with Orange County Environmental Protection Department to hold household hazardous waste round-up programs in the Apopka area.

Objective 12

The City of Apopka shall protect the most sensitive resources within high recharge areas including the principal areas of ground water contribution and recharge, sinkholes, depressions and stream-to-sink features, and the area immediately adjacent to the spring and the spring run.

Policy 12.1

The City of Apopka will utilize, when possible, acquisition funding programs such as the Florida Forever Program, Florida Community Trust, Rural and Family Lands Protection Program and others to acquire fee simple or less-than-fee ownership through conservation easements on land within the delineated high recharge area that has been identified as a critical or sensitive resource.

Policy 12.2

The City of Apopka will utilize, when feasible, innovative approaches to protect sensitive resources, such as the transfer of development rights, performance zoning, open space zoning, on-site density transfer and other techniques to maximize the establishment of open space areas.

Policy 12.3

All new development proposals which are 10 acres or greater in site area shall be required to include a habitat analysis on the sensitive natural habitats that include Longleaf Pine, Sand Hill, Sand Pine, and Xeric Oak Scrub.

Policy 12.4

The use of landscaping best management practices as described in Guidelines for Model Ordinance Language for Protection of Water Quality and Quality Using Florida Friendly Lawns and Landscapes. (Florida Department of Environmental Protection, September 2, 2003) shall be required for all new developments.

Policy 12.5

The City will establish guidelines for managing existing and future lawns and landscapes at all City facilities using the educational guidelines contained in the University of Florida Extension's Florida Yards and Neighborhoods Program, Environmental Landscape Management (ELM) principles and Best Management Practices. Such guidelines shall include practices that are designed to reduce nitrate infiltration into ground and surface water.

Policy 12.6

All new golf courses siting, design, construction, and management shall implement the prevention, management, and monitoring practices, detailed in the golf course siting, design, and management chapter of the Protecting Florida's Springs Manual - Land Use Planning Strategies and Best Management Practices (November 2002.) These practices are derived from the Audubon International Signature program.

Policy 12.7

The City shall coordinate with the SJRWMD, Orange County and other appropriate agencies to develop and maintain programs to educate and encourage homeowners and private land owners to use best management practices to protect natural habitat and to protect water quality, especially on land within the mapped recharge areas of first magnitude springs.

Objective 13

The City of Apopka shall coordinate with the SJRWMD, Orange County and other appropriate agencies to establish programs to educate the public and community leaders about the importance of the high recharge area in Apopka and how to better protect them.

Policy 13.1

The City shall coordinate with Orange County Public Schools to assist with the development of environmental educational programs regarding springsheds.

Policy 13.2

The City shall make available to local residential, agricultural, and commercial land owners and developers, information related to best management practices that minimize the use of water, fertilizers, herbicides and pesticides, and that reduce erosion.

Policy 13.3

The City of Apopka will use the best available data from St. Johns River Water Management District to identify and protect sensitive resources and identified recharge areas.

Objective 14

Preserve and conserve through acquisition and management a minimum of percentage of most effective recharge areas, karst features, and sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine, and Xeric Oak Scrub.

Policy 14.1

The City will investigate establishing an agreement with a non-profit land conservation trust for the purpose of preserving environmentally sensitive lands.

Policy 14.2

The City shall continue to support and seek acquisition of environmentally sensitive land through joint City/County and State partnerships.

Policy 14.3

The City shall coordinate with appropriate state and regional land acquisition and wildlife agencies to identify natural area greenways and wildlife corridors that will link existing public parks and preserves areas for the purposes of aquifer recharge, conservation and habitat preservation.

Objective 15

The City of Apopka shall increase its efforts toward sustainable development by developing strategies to reduce greenhouse gas emissions and to implement energy-efficiency measures in public and commercial buildings, where feasible.

Policy 15.1

The City shall promote awareness of environmental issues related to the built environment by developing environmental

education content for the City's website, including "Green Building" benefits and highlighting sustainable initiatives of the City.

Policy 15.2

The City shall encourage the development community to obtain green certifications under the United States Green Building Council, Florida Green Building Coalition, Florida Yards and Neighborhoods Program, Energy Star and Florida Water Star™ programs by providing incentives that make these certifications advantageous.

Policy 15.3

The City shall consider design and construction of new public facilities based on the principles promoted by the Leadership in Energy and Environmental Design (LEED), Energy Star and Florida Water Star™ programs, as appropriate and financially feasible.

Policy 15.4

The City shall periodically conduct audits of every City facility to determine electric power usage and the potential for energy and cost savings in lighting, heating and cooling of air and water, equipment power usage, and potential alternative/renewable electric power generation sources. The City may create a central database, or other appropriate system, to track electric and other utility costs.

City of Apopka

Comprehensive Plan 2030

Recreation and Open Space Element

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RECREATION AND OPEN SPACE ELEMENT

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RECREATION AND OPEN SPACE ELEMENT

INTRODUCTION

PURPOSE AND SCOPE

The purpose and scope of the Recreation and Open Space Element is to identify open space and recreation facilities, establish level of service standards for the provision of such facilities, and analyze current and projected park and recreational needs based on population projections and the established level of service standards through 2030.

Parks conserve open space and natural resources and provide recreation opportunities. In general, parks are categorized as being either activity-based or resource-based. Activity-based parks provide user-oriented, recreation facilities designed for a specific purpose such as tennis, basketball, softball or soccer, while resource-based parks utilize the natural environment to provide more passive activities such as picnicking, hiking, fishing, swimming, or boating.

DESCRIPTION OF PARK TYPES

A description of the characteristics of each park type is included in this section. Only sites that are officially designated as public parks have been included. Vacant public lands and open space normally found in medians, buffers, retention areas and the like are not included.

NEIGHBORHOOD PARK

Neighborhood parks serve the population of a neighborhood and are generally accessible by bicycling or walking. These parks are usually located along streets where people can access them without encountering heavy traffic. The typical service area is a radius of up to one-half mile. The maximum population served is 5,000 people. Where possible it is desirable for the neighborhood park to abut an elementary school because the service areas of a neighborhood includes play apparatus, multi-purpose courts, sports fields, picnic areas and free play area.

Community Park

Community parks are usually located near major roadways and are meant to serve the needs of more than one neighborhood, usually

within a radius of up to three miles. The typical service area is a radius of up to three miles. The maximum population served is 10,000 people. Typical facilities may include swimming pools, ball fields, tennis courts, play areas, picnic areas, multi-purpose courts, recreation buildings, passive recreation areas and parking spaces.

Urban Open Space

Urban open spaces are landscaped sites or natural open areas located within developed areas. Their principal function is to provide congested urban environments with aesthetically pleasing buffer zones. These areas may vary in size from one-tenth of an acre to several acres depending on their intended use. These areas may serve as linear, pocket or traffic circle parks, boulevard medians, plazas, malls, courthouse squares or promenades.

The Conservation land use designation corresponds with critical environmental areas where ordinary development practices would likely cause significant environmental damage. Lands surrounding or adjacent to conservation areas can also be sensitive and development of these lands should consider negative impacts and methods to mitigate or eliminate these impacts. Wetlands, marshes, flood hazard areas, steep slopes, critical plant and wildlife habitats and stream banks are types of conservation areas. Lands designated for conservation are intended to remain in their natural state and are ideal for passive recreation.

EXISTING RECREATION AND OPEN SPACE FACILITIES

The City of Apopka provides a range of recreation opportunities in its 9 public parks, where its residents can enjoy both active and passive forms of recreation. In addition, recreation and open space facilities are provided to City of Apopka residents by other jurisdictions and agencies.

PARKS AND OPEN SPACE PROVIDED BY THE CITY

As of December 2009, the Apopka public park system included nine City parks encompassing 222.92 acres. **Table 6-1** shows an inventory of existing City-owned parks and their facilities in. **Map 6-1** shows the location of these parks. City parks have been classified based on a hierarchy of park types and facilities in order to better determine the level of recreation and open space opportunities available to City residents. The Apopka public park system includes approximately 216.22 acres of community parks and 6.70 acres of neighborhood parks.

The classification and standards for the different types of parks were derived from the standards recommended by the State of Florida Department of Environmental Protection (Outdoor Recreation in Florida – 2000, Florida's Statewide Comprehensive Outdoor Recreation Plan). Apopka presently has three neighborhood parks and six community parks.

PARKS AND RECREATION FACILITIES PROVIDED BY OTHER AGENCIES

National Parks or Forests

The closest national park accessible to the City of Apopka residents is the Canaveral National Seashore located approximately 55 miles from the City. This regional park is situated on a barrier island along Florida's east coast. Year-round recreation includes fishing, boating, canoeing, surfing, sunbathing, swimming, hiking, camping, nature and historical trails.

State Parks or Forests

The City of Apopka is unique in that it has three state parks within or near the city limits: Lower Wekiva River Preserve State Park(5,000 acres), Rock Springs Run State Reserve (14,000 acres) and Wekiva Springs State Park(8,000 acres). Canoeists and kayakers can paddle along the Wekiva River and Rock Springs Run. Thirteen miles of trails in Wekiva Springs State Park provide opportunities for hiking, bicycling, and horseback riding. All three state parks offer options for camping from full facility campgrounds to primitive camping areas.

TABLE 6- 1: CITY-OWNED FACILITIES

Classification	Acres	Resources & Facilities
Community Parks (216.22 acres)		
Apopka Athletic Complex	13.06	**Recreation Facilities:** 2 Softball Fields, 2 Multi-purpose Fields, Playground **Other Facilities:** 2,100 s.f. Operations Center
Doctor's Dog Park	5.00	**Other Facilities:** Off Leash Area
Fran Carlton Center	8.50	**Recreation Facilities:** 3 Beach Volleyball Courts **Other Facilities:** 7,000 s.f. Community Center
Kit Land Nelson Park	5.24	**Recreation Facilities:** 2 Racquetball Courts, 2 Tennis Courts, Playground
Northwest Recreation Complex	182.70	**Recreation Facilities:** 4 Softball Fields, 8 Baseball Fields, 16 Soccer/Football Fields, 4 Tennis Courts, 3 Basketball Courts, 4 Beach Volleyball Courts, 3 Playgrounds, Jogging Trail **Other Facilities:** 7,702 s.f. Operations Center
VFW Community Center	1.72	**Other Facilities:** 15,665 s.f. Community Center
Neighborhood Parks (6.70 acres)		
Alonzo Williams Park	3.90	**Recreation Facilities:** 1 Softball Field, 1 Soccer/Football Field, 2 Basketball Courts, 1 Playground **Other Facilities:** 1,640 s.f. Community Center
Dream Lake Park	1.90	**Natural Resources:** lake, green space
Lake Avenue Park	0.90	**Recreation Facilities:** Playground
Total City Acreage	**222.92**	

Source: City of Apopka Recreation Department, 2009

St. Johns River Water Management District

The St. Johns River Water Management District provides the Lake Apopka Restoration Area, a 19,825 acre preserve on the northwestern shores of Lake Apopka. Public recreation access is limited to the Clay Island portion of the property. Hiking, bicycling, horseback riding and wildlife viewing are allowed there. Group tours for environmental education are available on the restoration project area by appointment. Boating and canoeing opportunities are available on Lake Apopka; however, there are no launches located on the property.

County and County School District Parks

Recreational facilities owned by Orange County and the Orange County School Board that City residents are allowed to use are listed in **Table 6-2**.

Orange County operates and maintains 93 parks, facilities and trails. Five of Orange County's parks are within the Apopka City limits (Roosevelt Nichols Park, Tom Staley Historical Park, Magnolia Park, Wheatley Park and the West Orange Trail). Kelly Park/Rock Springs is just north of the city limits.

The City of Apopka has entered into an agreement with the Orange County School District regarding the provision of recreational facilities. Two new schools opened in 2006 – Wolf Lake Elementary and Wolf Lake Middle School. The Orange County School Board is in the process of rebuilding the Apopka High School Gymnasium and has built a second high school, Wekiva High.

TABLE 6-2: RECREATION AND OPEN SPACE FACILITIES OWNED BY OTHER AGENCIES

AGENCY	Classification	Facilities
Orange County School District		
Apopka Elementary School	Neighborhood Special Purpose	**Recreation Facilities:** Softball Field, 2 Soccer/Football Field, 2 Basketball Courts, Playground
Apopka High School and Ninth Grade Center	Neighborhood Special Purpose	**Recreation Facilities:** Softball Field, 2 Soccer/Football Fields, Baseball Field, 3 Basketball Courts **Other Facilities:** Gymnasium, Track
Wekiva High School	Neighborhood Special Purpose	**Recreation Facilities:** Softball Field, Football Field, 2 Multi-purpose Fields, Baseball Field, 3 Outdoor Basketball Courts, Indoor Basketball Court, 3 Tennis Courts **Other Facilities:** Stadium, Gymnasium
Apopka Memorial Middle School	Neighborhood Special Purpose	**Recreation Facilities:** Soccer/Football Field, 2 Basketball Courts **Other Facilities:** Gymnasium

AGENCY	Classification	Facilities
Dream Lake Elementary School	Neighborhood Special Purpose	**Recreation Facilities:** Softball Field, Soccer/Football Field, Baseball Field, 2 Playgrounds
Lakeville Elementary School	Neighborhood Special Purpose	**Recreation Facilities:** Soccer/Football Field, 2 Shuffleboard Courts, 4 Basketball Courts, Playground
Piedmont Lakes Middle School	Neighborhood Special Purpose	**Recreation Facilities:** Soccer/Football Field, 2 Baseball Fields, 6 Basketball Courts, 3 Tennis Courts, 4 Racquetball Courts **Other Facilities:** Gymnasium
Rock Springs Elementary School	Neighborhood Special Purpose	**Recreation Facilities:** Softball Field, 2 Basketball Courts, Playground
Wolf Lake Elementary School	Neighborhood Special Purpose	**Recreation Facilities:** Softball/Baseball Field, 2 Basketball Courts, 2 Playgrounds
Wolf Lake Middle School	Neighborhood Special Purpose	**Recreation Facilities:** Softball/Baseball Field, Soccer/Football Field, 3 Basketball Courts, 3 Tennis Courts, Track
Orange County		
Kelly Park/Rock Springs, 248 acres	Community	**Natural Resources:** Springs, Natural Vegetation, Sink Holes, Trails **Other Facilities:** Camping, Swimming, Tubing, Volley Ball, Playground, Restrooms, Full Service Concessions
Roosevelt Nichols Park, 6 acres	Neighborhood	**Recreation Facilities:** Multi-Use Field, Covered Basketball Court, 2 Playgrounds **Other Facilities:** 2 Large Picnic Pavilions, 2 Covered Picnic Tables, Port-o-lets
Tom Staley Historical Park, 1 acre	Special Purpose	**Historical Resource:**
West Orange Trail, 22 miles	Special Purpose Urban Open Space	**Recreation Facilities:** Linear Park/Trail, Playground **Other Facilities:** Trail Head (Apopka Station), Picnic Tables
Magnolia Park,	Community	**Recreation Facilities:** 2

AGENCY	Classification	Facilities
56 acres		Volleyball Courts, Basketball Court, 4 Tetherball Poles, 3 Playgrounds **Other Facilities:** 18 Camp Sites with Electricity and Water, 2 Group Camping Sites, 4 Picnic Pavilions with Grills, Numerous Picnic Tables with Grills, 4 Public Restrooms and 1 Shower/Restroom Facility for Campground. **Natural Facilities:** Lakeshore
Wheatley Park, 6 acres	Neighborhood	**Recreation Facilities:** Volleyball Court, Tennis Court, Basketball Court, Multipurpose Field, 2 Playgrounds, 1-mile Exercise Trail **Other Facilities:** Amphitheater, 5 Covered Picnic Tables, 1 Large Rental Pavilion, Restrooms

Source: City of Apopka Recreation Department, 2009

PRIVATE RECREATION AND OPEN SPACE FACILITIES

Recreational facilities and services such as bowling alleys, golf courses, or racquetball clubs are usually provided by the private sector, and are available to the public through a membership or a fee. The provision of this type of recreational resource is normally based on market studies. **Table 6-3** lists private facilities.

TABLE 6- 3: PRIVATE RECREATION AND OPEN SPACE

FACILITY NAME	Classification	Acres	Facilities
Bluegrass Estates	Active Recreation	30.50	Equestrian Center
Brunswick Bowling	Active Recreation	4.16	Bowling Lanes
Cambridge Commons	Active Recreation	0.49	Pool & Clubhouse
Cedar Glen	Active Recreation	0.77	Tennis Courts
Charter Oaks	Active Recreation	0.82	Open Space
Chelsea Park	Active Recreation Passive Recreation	4.45 total	Pool Open Space
Chandler Estates	Active Recreation	5.19	Park
Country Landing	Active Recreation	1.06	Open Space
Courtyards Coach Homes, Errol	Active Recreation	0.20	Pool & Clubhouse
Davis Place	Active Recreation	0.28	Park

FACILITY NAME	Classification	Acres	Facilities
Dunhill Estates	Active Recreation	0.21	Playground
Elks Lodge	Active Recreation	0.85	Clubhouse
Emerson Park	Active Recreation	62.30	Park/Open Space
Errol Estate	Active Recreation Open Space	405.06 15.55	Pool, Clubhouse, 27-hole Golf Course, 7 Tennis Courts, Playground
Golfside Village	Active Recreation	2.72	Open Space
Hawthorne Oaks	Conservation	0.38	Wetlands
Inter-United Soccer Club	Active Recreation	4.37	Soccer Field
Lake Alden	Open Space/Conservation	1.74	Lake/Open Space
JB Jurseries	Active Recreation	0.92	Park
Lake Doc Cove, Phase I	Active Recreation Passive Recreation	0.39 21.15	Park Wetlands/Open Space
Lake Heiniger	Active Recreation	10.75	Park
Lake Pleasant Estates	Active Recreation	0.75	Recreation Area
Linkside	Active Recreation	21.26	Recreation Area
Magnolia Oaks Ridge	Conservation	1.40	Wetlands
Magnolia Park	Active Recreation	2.48	Park
Margarette Crescent	Active Recreation	1.01	Recreation Area
Maudehelen, Phases I & II	Passive Recreation	12.99	Open Space
Meadow Oaks	Active Recreation	0.36	Playground
Muiurfield Estates	Conservation	0.67	Wetlands
Oaks of Wekiva	Active Recreation	0.34	Recreation Area
Piedmont Lakes	Open Space/Conservation Active Recreation	19.61 1.65	Lake/Open Space Pool, 2 Tennis Courts, Playground
Pines of Wekiva	Active Recreation Conservation	13.36 14.75	Playground Wetland/Open Space
Plymouth Harbor	Active Recreation	0.43	Park
Plymouth Landing	Active Recreation Conservation	1.30 7.90	Playground Wetland
Rock Springs Ridge	Active Recreation	300.70	18-hole Golf Course
Sheeler Oaks	Active Recreation	16.97	Basketball Court, 2 Playgrounds
Schopke Estates	Active Recreation	0.42	Park
Spring Harbor	Active Recreation	0.26	Playground
Spring Ridge	Active Recreation Open Space	1.37 12.56	Pool & Clubhouse Passive Recreation
Stanton Ridge	Active Recreation	0.62	Park
The Meadows of	Active Recreation	0.55	Park

FACILITY NAME	Classification	Acres	Facilities
Apopka			
Wekiva Run	Active Recreation	2.59	Park
Vick's Landing, Phase I	Active Recreation Passive Recreation	0.55 1.04	Park Wetland
Votaw Village	Open Space	21.00	Passive Recreation
Wekiva Park	Active Recreation	4.00	Playground
Wekiva Preserve	Conservation Open Space	5.50 7.30	Wetland Lake/Open Space
Wekiva Springs Reserve	Active Recreation	0.90	Playground
Wekiva Springs Reserve, Ph. II	Active Recreation	0.90	Park
Wekiva Village Townhomes	Active Recreation	0.158	Pool
Whispering Winds	Open Space	0.86	Passive Recreation
Woodfield Oaks	Conservation	0.002	Passive Recreation
	Total Acres	**1,059**	

Source: City of Apopka Community Development Department, 2009

INVENTORY OF RECREATIONAL FACILITIES

Table 6-4 lists the recreational facilities located within Apopka's municipal boundaries that are provided by the City, Orange County, Orange County School District and private establishments.

TABLE 6-4: CITY, OTHER AGENCIES AND PRIVATE RECREATION FACILITIES

Facility	Quantity	Facility	Quantity
Baseball/Softball Fields	**33**	Tennis Courts	**27**
Basketball Courts	**33**	18-Hole Golf Courses	**2.5**
Soccer/Football/Rugby Fields	**32**	Swimming Pools	**5**
Playgrounds	**35**	Gymnasium/Community Center	**9**
Volleyball	**10**	Racquetball Courts	**6**

Source: City of Apopka Community Development Department, 2009

FUTURE RECREATION AND OPEN SPACE NEEDS

LEVEL OF SERVICE STANDARDS

Level of service (LOS) standards are measures for determining the specific types and amounts of recreation and open space facilities necessary to accommodate the recreational needs of local communities. The criterion defines the acreage, facility type, and service area requirements for various types of recreation sites and areas. The City of Apopka has established LOS standards for park acreage and for recreational facilities.

In order to accommodate the recreation and open space needs of its residents, the City of Apopka adopted an LOS standard for overall parkland of three acres for every 1,000 residents. The inventory of parks and recreation facilities located within the municipal limits of Apopka, including those owned by the City, Orange County and other agencies, is currently comprised of 291.92 acres of park land (Note: this does not include the acreage of the Orange County School District facilities). Based on the estimated population of Apopka in 2009 (40,406 people) the City currently owns and maintains approximately 7.30 acres of recreation and open space lands per 1,000 residents, which is over the established LOS standard.

FUTURE RECREATION AND OPEN SPACE NEEDS

Recreation and Open Space Acreage Needs

Based on the City's park and open space acreage LOS standard of 3.0 acres per 1,000 residents, the City currently exceeds the required acreage standard. **Table 6-5** identifies the recreation and open space acreage needs through 2030 based on the City's population projections. As the table indicates, the City will need to develop an additional 84.69 acres from 2020 to 2030 to meet the adopted LOS standard.

TABLE 6- 5: PROJECTED PARK AND OPEN SPACE ACREAGE NEEDS

	2009(1)	2010	2020	2030
Population Projections(2)	40,406	41,983	74,289	125,538
Park Acreage (Active/Passive) (City/County parks within City limits)	291.92	291.92	291.92	291.92
LOS Standard (3 acres per 1,000 residents)	121.22	125.95	222.87	376.61
Surplus/(Deficiency)	170.70	165.97	69.05	(84.69)

(1) University of Florida, Bureau of Economic and Business Research (BEBR), April 1, 2009
(2) Does not include seasonal population

Source: City of Apopka; Land Design Innovations, Inc., 2010

RECREATIONAL FACILITIES NEEDS

The City of Apopka makes an effort to provide recreational facilities at levels based on the guidelines published in the FDEP's *Outdoor Recreation in Florida – 2000, Florida's Statewide Comprehensive Outdoor Recreation Plan*. These recreational facilities guidelines are not required for the purpose of meeting concurrency requirements. The City of Apopka may want to consider preparation of a Master Park Plan to properly evaluate its existing facilities and plan for future needs. Based on these FDEP guidelines, the recreational facilities needed through the planning timeframe are described in **Table 6-6**.

TABLE 6- 6: FUTURE RECREATIONAL FACILITIES NEEDS

Facility Type	Existing 2009		Projected 2010		2020		2030	
Population*	40,406		41,983		74,289		125,538	
Baseball / Softball (existing)	**33**		**33**		**33**		**33**	
Need @1 per 2,000/Surplus (Need)	21	12	21	12	38	(5)	63	(30)
Basketball Court (existing)	**33**		**33**		**33**		**33**	
Need @1 per 3,600/Surplus (Need)	12	21	12	21	21	12	35	(2)
Football/ Soccer/Rugby (existing)	**32**		**32**		**32**		**32**	
Need @1 per 7,000/Surplus (Need)	6	26	6	26	11	21	18	14
Playgrounds (existing)	**35**		**35**		**35**		**35**	
Need @1 per 3,000/Surplus (Need)	14	21	14	21	25	10	42	(7)
Golf Course 18-hole (existing)	**2.5**		**2.5**		**2.5**		**2.5**	
Need @1 per 25,000/Surplus(Need)	2	.5	2	.5	3	(.5)	6	(3.5)
Racquetball/ Handball (existing)	**6**		**6**		**6**		**6**	
Need @1 per 15,000/Surplus(Need)	3	3	3	3	5	1	9	(3)
Swimming Pool (existing)	**5**		**5**		**5**		**5**	
Need @1 per 35,000/Surplus(Need)	2	3	2	3	3	2	4	1
Tennis Courts (existing)	**27**		**27**		**27**		**27**	
Need @1 per 2,000/Surplus (Need)	21	6	21	6	38	(11)	63	(36)
Gyms/ Recreational Buildings (existing)	**9**		**9**		**9**		**9**	
Need @1 per 15,000/ Surplus(Need)	3	6	3	6	5	4	9	0

* Does not include seasonal population.
Note: The City has not adopted a LOS standard for recreational facilities; therefore, the facility “needs” identified in this table (denoted by parenthesis) are not concurrency deficiencies.

Source: City of Apopka, 2010

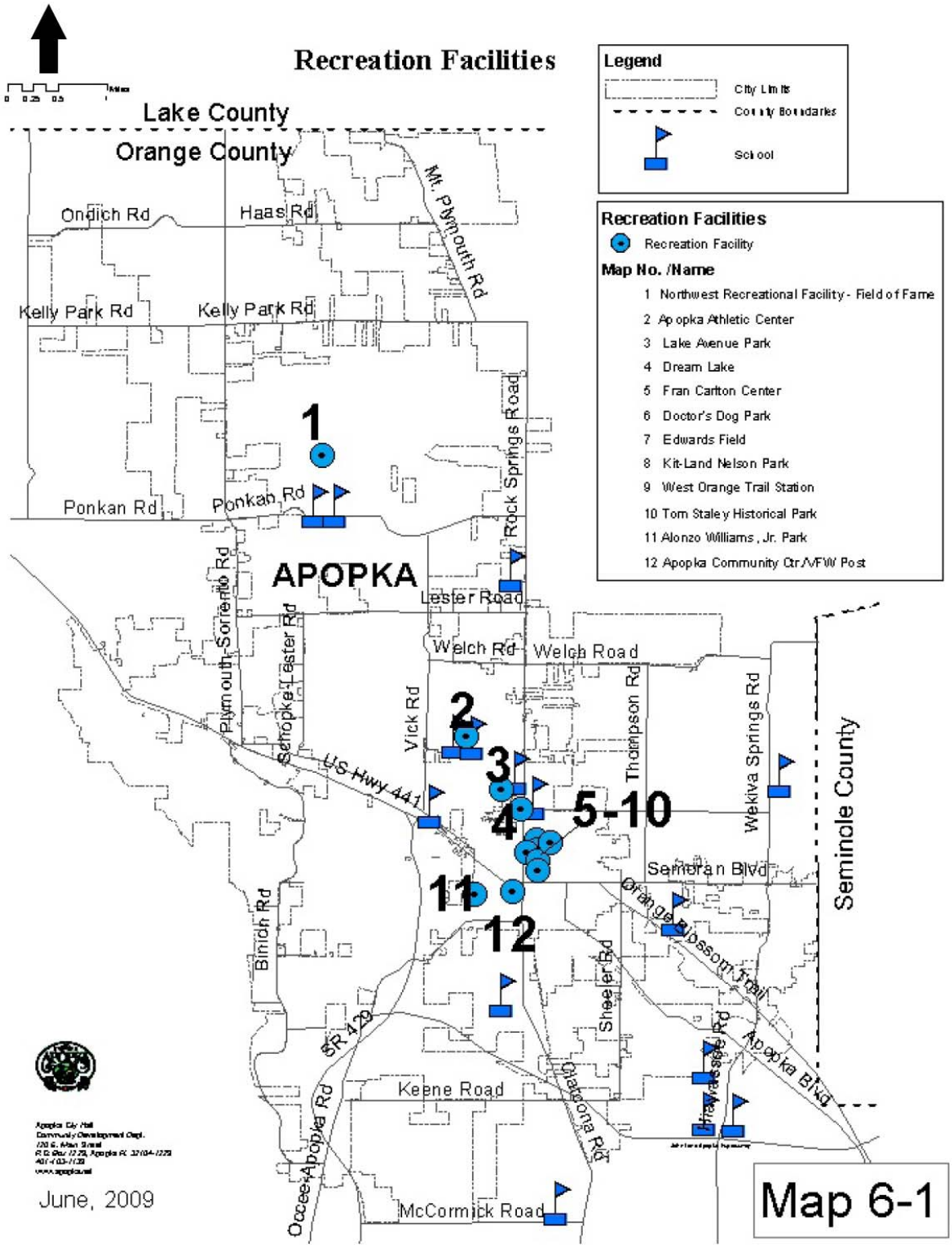
ACCESS TO RECREATIONAL SITES AND FACILITIES

Each special needs group has particular access problems, which will need to be addressed on a site-by-site basis at the time of new park development, to identify deficiencies in the access needs of special recreation groups (elderly people, young people, and people who are mobility impaired). According to the American Disabilities Act (ADA) of 1990, an important aspect of accessibility to be considered when constructing new parks or altering existing parks is the issue of stable ground surfacing, which allows a person with mobility impairment to maneuver with less resistance.

Based on ADA standards, consideration should be given to the general layout of youth play areas, particularly to the integration of elements and spaces that can be accessed by children who have different physical abilities. Specifically, in areas where elevated play components are provided, additional ground-level play equipment must be provided and incorporated into the same play areas. Additionally, the ADA requires that at least 50 percent of elevated play components be located on an accessible route and connected by a ramp.

The existing system of neighborhood and community parks affords access to cyclists and pedestrians by way of the public roads and rights-of-way. Bicycle path facilities should continue to be designed so as to link recreational areas to residential and businesses and to upgrade the accessibility for all citizens to recreation areas. Bicycle lanes or paths should be constructed to connect to the West Orange Trail where feasible.

MAP 6- 1: RECREATION FACILITIES



RECREATION AND OPEN SPACE ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL

To provide and maintain sufficient parks, recreational facilities and open space areas to meet the needs of existing and projected populations of the City of Apopka.

Objective 1

The City of Apopka shall adopt and maintain level of service standards to ensure that a comprehensive system of parks, recreation, freshwater beaches and shores and open space area are available and accessible from facilities provided by the city, other governments and the private sector.

Policy 1.1

The City of Apopka hereby adopts the following level of service standard for park land: 3.0 acres per 1,000 population.

Policy 1.2

The City shall conduct an annual review of all recreational facilities to assure public access to all publicly owned parks and recreation facilities and open space areas for all citizens, including physically challenged residents.

Policy 1.3

The City shall provide public pedestrian access to fresh water beaches and shores by maintaining the city park at Dream Lake and Buchan Pond.

Objective 2

Provide and finance capital improvements for parks and recreation facilities that achieve and maintain the adopted minimum level of service standard.

Policy 2.1

Annually monitor the City's current and projected population and update the analysis of needed park land and recreational facilities.

Policy 2.2

Neighborhood advisory committees and citizen groups will be established as needed to provide guidelines in determining priorities for acquisition of park land and development of recreation facilities.

Policy 2.3

Develop through the annual budget and the Capital Improvement Element a schedule of capital improvements to maintain existing facilities, including providing for repair and replacement of facilities when necessary, and to construct new or expanded parks and recreational facilities.

Policy 2.4
Modify land development regulations as needed, to ensure developer exactions are provided based upon the city's adopted level of service standard.

Objective 3

Identify and reserve open space, conservation and natural reservation areas.

Policy 3.1

The City of Apopka shall designate on the City's Future Land Use Map conservation restricted areas and prohibit any new development in such areas consistent with the policies within the Future Land Use and Conservation Elements. Conservation areas shall be preserved as development occurs and shall be preserved by reference on development plans.

Policy 3.2
The City of Apopka shall continue to enforce the land development regulations which have been adopted and are consistent with F.S. 163.3202 (1), as amended, which provide for specific open space definitions and standards.

Policy 3.2

The City of Apopka shall continue to enforce the adopted standards in the land development regulations wherein developers shall be required to provide their proportionate share of open space necessary to accommodate the needs of residents of such developments, and to protect environmentally sensitive lands.

Policy 3.3

By 2013, the City shall prepare a Parks Master Plan that includes a trail component that addresses the connection of existing and proposed parks and recreational facilities to residential neighborhoods.

Policy 3.4

Public view/access to natural lakes within the small study areas as referenced in the Future Land Use Element shall be preserved. Residential developments around public lakes should be required to provide public streets, sidewalks or public parks around those lakes instead of locating homes between the roads and the lakes.

Policy 3.5

The City shall explore possibilities to link existing recreational facilities to future parks associated with the Lake Apopka Restoration program through the development of pedestrian and bicycle facilities.

Objective 4

Develop and implement a program to coordinate the provisions of recreation facilities with Orange County, the Orange County School Board and the private sector.

Policy 4.1

The City of Apopka will meet with when necessary and continue to work jointly with Orange County to coordinate the planning, management and use of recreation and open space areas within the urban planning area.

Policy 4.2

The City of Apopka will meet with when necessary and continue to work jointly with Orange County School Board to maximize

the joint use of appropriate school facilities for recreational purposes.

Policy 4.3

The City of Apopka will continue to coordinate the provision of recreational facilities by the private sector by including the inventory of such facilities in the analysis of needed facilities.

City of Apopka

Comprehensive Plan 2030

Capital Improvements Element

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CAPITAL IMPROVEMENTS ELEMENT

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CAPITAL IMPROVEMENTS ELEMENT

INTRODUCTION

PURPOSE AND SCOPE

The purpose of the Capital Improvements Element (CIE) is:

a. to evaluate the need for public facilities as identified in the other comprehensive plan elements;

b. to estimate the cost of improvements for which the City of Apopka has fiscal responsibility;

c. to analyze the fiscal capability of the City to finance and construct improvements;

d. to adopt financial policies to guide the funding of capital improvements and schedule the funding and construction of improvements consistent with the City's Concurrency Management System (CMS);

e. to ensure that an adequate CMS will be implemented by the City.

The CIE differs from the City's Capital Improvement Program (CIP) in that the CIE is limited only to those improvements identified in the other elements of the comprehensive plan. The CIE demonstrates the economic feasibility of the comprehensive plan, focusing on the capital outlay required to meet existing deficiencies and maintain level of service (LOS) standards adopted in the plan.

The City's CIP is a schedule of all future capital improvements required to maintain current facilities and to expand facilities as necessary to provide services to new development in accordance with adopted LOS standards. The CIP is a direct input into the annual budgeting process, providing a list of capital improvements, including cost estimates and anticipated means of financing, and provides a detailed funding schedule for a five-year period. The priority and schedule for CIP projects are amended annually to ensure consistency with the comprehensive plan and to ensure adequate funding.

This element provides the framework the City of Apopka shall use to prioritize capital improvements, allocate financial resources, determine the timing and location of capital improvements and monitor compliance with the comprehensive plan. Discussion of local policies and practices as well as a detailed fiscal assessment are provided.

PUBLIC FACILITY NEEDS IDENTIFIED IN OTHER PLAN ELEMENTS

The applicable elements have identified various capital improvements necessary to meet the recommended level of service standards. In addition, Rule 9J-5.016, Florida Administrative Code (F.A.C.) requires the City to assure adequate public facilities to service public health and education needs. An assessment of the required public facilities is presented below.

TRANSPORTATION

Orange County and the Florida Department of Transportation (FDOT) are responsible for maintaining and improving county and state roads, respectively. The City's Five-Year Schedule of Capital Improvements adopts by reference the five-year Transportation Improvement Program (TIP) adopted annually by MetroPlan that identifies funding for county and state roads to address present or expected deficiencies. The City shall continue to participate in the MetroPlan planning process and in the development of the TIP and the five-year Transit Development Plan (TDP).

A portion of US 441 is listed as an FDOT "Constrained Facility" and a portion is listed as an FDOT "Backlogged Facility." US 441 is one of only two roadways in the City that are currently operating at or below the adopted LOS standard. US 441, from Park Avenue to SR 436, is operating at a LOS "F." The segment of Welch Road from Rock Springs Road to Thompson Road is operating at a LOS "E.". The City is coordinating with FDOT's consultant in the preparation of a corridor plan for US 441 to address these issues.

With the 2009 passage of Senate Bill 360, Apopka has been designated a "Dense Urban Land Area" (DULA) and, therefore, is exempt from state-mandated transportation concurrency. The City's entire municipal limits are designated as a Transportation Concurrency Exception Area (TCEA) and the City is required to adopt land use and transportation strategies that support and fund mbility. The DULA designation allows the City to address any transportation system concerns using a variety of comprehensive, multi-modal programs and facilities rather than focusing on individual roadway segments having to meet concurrency standards.

SOLID WASTE

The City of Apopka provides solid waste collection services to residential and commercial customers. The City has curbside pick-up service for residential solid waste collection and also provides collection services for recyclable waste. The City does not collect hazardous household waste. Orange County collects the hazardous waste or the citizens may dispose of the residential

hazardous waste at the landfill or at community pickup sites on advertised days throughout the year. All items collected by the City of Apopka are delivered to the Orange County Landfill.

Based on projections presented in the Solid Waste Element, Orange County currently has adequate landfill capacity to meet the City's needs through the planning timeframe.

STORMWATER MANAGEMENT

The City's Drainage Master Plan was updated in April 2009. The master plan has identified one problem area that needs to be addressed, the flooding that occurs within the Lake Avenue/Main Street Drainage Basin during heavy rainfall events. Recommended improvements for correcting this flooding problem include installation of two manholes, two junction boxes, and approximately 1,800 feet of 30-inch drainage pipe.

In order to address future development impacts upon the City's drainage system, the City will incorporate sustainable stormwater management principles into its Land Development Code (LDC). Sustainable stormwater management principles require or encourage the use of natural features and/or environmentally-friendly concepts to reduce flooding and waste rather than structural alternatives. The City will revise its LDC to include requirements or guidelines for sustainable stormwater management, including the use of swales and grassy channels, bioretention, infiltration, retention/detention ponds, and porous pavements and other pervious materials

POTABLE WATER

The City of Apopka owns, operates and maintains five water plants and a water distribution system. The City has not identified any current LOS standard deficiencies within the potable water treatment and distribution system; however, In order to meet the potable water consumption needs through 2030, the City will need one additional water plant. The City's CIP identifies various projects scheduled in the next five years, which represent facility upgrades or ongoing maintenance requirements.

All of the City's water treatment plants have consistently operated in compliance with criteria established by the Florida Department of Environmental Protection (FDEP) with respect to public water supplies. The City operates and maintains each plant in good operating condition and performs repairs and/or upgrades to each plant as required on an individual basis. Overall, the performance of the distribution system is adequate, provided the City performs regular maintenance.

RECREATION AND OPEN SPACE

As of December 2009, the Apopka public park system included nine City parks and four Orange County parks encompassing 291.92 acres. These park and recreation facilities provide approximately 273.22 acres of community parks and 18.7 acres of neighborhood parks.

The inventory of recreation and open space facilities indicates that the City of Apopka currently provides more than the established LOS standard of three acres of park land per 1,000 residents and will have no deficiencies through 2010. Based on population projections, by 2030 the City will have a deficit of 84.69 acres of parkland.

PUBLIC EDUCATION AND HEALTH SYSTEMS

PUBLIC EDUCATIONAL FACILITIES

The City of Apopka is served by– eleven elementary schools, three middle schools and two high schools. An inventory of these public education facilities, including enrollment and capacity information is presented in **Table 7-1** and their locations shown on **Map 7-1**.

TABLE 7 - 1: INVENTORY OF PUBLIC SCHOOLS

Name of School	2007-08 Enrollment	Adj. FISH Capacity	2007-08 LOS Adjusted. FISH Capacity.	Projected Enrollment 2011-12	Future LOS 2011-12
Elementary					
Apopka	524	944	56%	801	90%
Clay Springs	863	656	132%	788	120%
Clarcona	1,017	558	182%	1,518	272%
Dream Lake	829	612	135%	823	134%
Lakeville	909	596	153%	861	144%
Lovell	768	482	159%	867	180%
Rock Springs	764	550	139%	1,012	184%
Wheatley	398	815	49%	651	80%
Wolf Lake	930	828	112%	1,193	144%
Middle					
Apopka					
Piedmont Lakes	976	1,020	96%	1,200	118%
Wolf Lake	984	1,109	89%	1,210	109%
High Schools					
Apopka	2,941	3,329	133%	3,178	143%
Wekiva	1,746	2,449	98%	2,449	89%%

Source: Orange County PSFE, 2008 (for 2007-08 School Year)

The City of Apopka adopted a Public School Facilities Element (PSFE) in July 2008. The PSFE sets forth a comprehensive approach to school planning in coordination with the Orange County School Board and other municipalities in the county. The City is a party

to the "Interlocal Agreement for Public School Facility Planning and School Concurrency," which was executed in July 2006 and amended in 2008. The other parties to the agreement are the Orange County Public Schools, Orange County and the municipalities.

As the Orange County School District works through the development of its FY 2009/10 to 2013/14 Five-Year Plan, the utilization of any school above 100% capacity will be redistributed to meet the requirements of concurrency. With boundary adjustments, program changes, and the additional capacity projects identified in the proposed five-year capital plan, the number of schools utilized over 100% will be reduced even further. **Table 7-2** identifies the schools that are projected to exceed the LOS standard by 2011-12 and the solutions for addressing the deficiencies. New construction will be funded using Certificates of Participation (COP).

TABLE 7 - 2: ORANGE COUNTY SCHOOLS DEFICIENT IN 2011-12

School Names by CSA[1]	**2011 LOS**	**Seats Needed**	**Solution**
Elementary Schools			
Apopka/Wolf Lake	136%	525	Current 10-Year Plan contains a relief school for Wolf Lake/Zellwood
Dream Lake, Rock Springs	158%	500	Add new school to 10-Year Plan to relieve CSA
Clarcona	136%	625	Add new school to 10-Year Plan to relieve CSA
Clay Springs/ Lakeville/ Lovell/Wheatley			Rezone or move programs from Clay Springs, Lakeville or Lovell into another CSA
Middle Schools			
Apopka	118%	175	Current 10-Year Plan contains a relief school for Wolf Lake that will also relieve Apopka
Wolf Lake	109%	100	Current 10-Year Plan contains a relief school for Wolf Lake
High Schools			
Apopka	110%	175	Rezone or move programs

[1] Concurrency Service Area

Source: Orange County PSFE, 2008

PUBLIC HEALTH FACILITIES

There are no public health facilities located within the City limits of Apopka. The City is primarily served by Florida Hospital Apopka, a private institution.

The Apopka Fire Department provides the emergency operations center, including the 911 communications center for the cities of Apopka, Maitland and Eatonville. The City provides emergency management services (EMS) and generally transports patients to Florida Hospital in Apopka.

EXISTING REVENUE SOURCES AND FUNDING MECHANISMS

The following is an inventory of the revenue sources available to the City to fund capital improvements. The inventory includes all major financial resources available to the City and is not limited to only those sources that will be used for capital improvement projects.

MUNICIPAL REVENUES

Ad Valorem Property Taxes – are based on the assessed value of all real property and tangible personal property located within the City, less any authorized exemptions. The assessed value is determined by the Orange County Property Appraiser. The tax rate or millage is set by the City Council each fiscal year. One mill equals $1 tax per each $1,000 of taxable assessed value. There is generally no restriction on what property taxes can be spent. They can be used to fund personnel costs, operating expenses and capital expenditures. The 2009 City millage rate is 3.5168 mills. The City has traditionally used property taxes as one of the major funding sources for operating the general fund. In budget year 2008/09 property taxes accounted for approximately 27.5 percent of general fund revenue.

Local Option Gas Tax - are based on the City’s share of the local six-cent option gas tax levied in Orange County. In accordance with Section 336.025, Florida Statutes (F.S.) all expenditures from this tax must be transportation-related.

Municipal Utility Taxes - are assessed on the purchase of electricity, water, natural gas and propane within the City. Section 166.231, F.S. authorizes cities to levy these taxes, but sets the maximum rate at ten percent. The City’s current rate is ten percent

Telecommunication Taxes - are levied on telephone and cable users and right-of-way permit fees.

Franchise Fees - are levied on a utility or company in return for the privilege of doing business within the City's jurisdiction and/or for utilizing municipal rights-of-way. The rates are specified in the individual franchise agreements. The City currently collects franchise fees on electric, cable television, gas, water and sewer.

Licenses and Permits, Fines and Forfeits - This category primarily consists of: City occupational licenses, for which the rates have been limited by Florida Statutes; building and inspection permits; and court fines.

Charges For Services and User Fees - are charges for services provided by the City that are paid by the users of those services and are designed to fully or partially recover the costs incurred by the City in providing for the service. The primary sources of this revenue are the water, sewer and sanitation utility service charges received by the City's enterprise funds. There are also some general fund charges for services such as ambulance fees, recreation fees and zoning fees. As a general fund source, these revenues have relatively minor significance.

Interest Income – is revenue earned on funds invested by the City. These investments come from two sources, cash temporarily invested until it is to be spent and cash reserves maintained by the City in accordance with prudent fiscal policy. This is an important source of revenue both in the general and enterprise fund. Interest income can be a volatile revenue stream as it depends on factors such as current interest rates, the amount of cash available and federal regulations.

Miscellaneous Revenue - consists of such items as rental of City property, sale of surplus City property and contributions and donations from private sources. This is considered a very minor revenue source and an unstable revenue stream for future projections.

INTERGOVERNMENTAL REVENUES

This category is often referred to as "revenue sharing." These revenues are collected by one government and shared with other governmental units.

State Sources

Due to the steady decline of federal grant-in-aid programs over the past several years, as well as the elimination of federal revenue sharing in 1986, state-shared revenue programs have become the most important intergovernmental revenue source. Apopka, similar to

other cities in Florida, depends on annual disbursements from the state government to supplement its operating and capital budget revenues. Some of the specific programs are:

Local government half-cent sales tax - a percentage of the sales tax collected by the state is returned to the counties and cities and is distributed according to population.

State Revenue Sharing - the municipal portion of this is funded by sales tax and the municipal gas tax.

Other State Shared Sources - include mobile home licenses, alcoholic beverage licenses and motor fuel tax rebate.

Federal and State Grants and Loans

Federal funds are currently either allocated to state agencies that administer block grants or reserved at the federal agency level and are disbursed as block grants directly to state and local agencies or other eligible organizations and individuals. The purpose of the block grant program is to enable greater latitude by recipients in actual use of the funds, although recipients are still required to use the funds for specific categories of projects. These funds are not distributed by allocation, but rather require competitive applications. Consequently, these grant monies are generally a non-recurring source of funds, and as such, cannot be accurately projected for budgeting purposes.

Other grants are administered at the state level, with state executive departments acting as “pass-through agencies” for federally-funded project grants. An example of this type of grant program is the Community Development Block Grant (CDBG). The U.S. Department of Housing and Urban Development, which administers the program, allocates 70 percent of its CDBG funds for “entitlement communities,” or the larger urban areas. The remaining 30 percent of the funds are disbursed to state pass-through agencies. In Florida, the Department of Community Affairs (DCA) administers these grants for infrastructure improvements, housing projects and commercial revitalization, but restricts their availability to “small cities” and counties.

In addition to block grants, several federal agencies offer direct loan programs; however, their applicability to capital improvement projects is extremely limited. State loans, on the other hand, are usually available to finance such capital projects as land acquisition for low-income housing. The DCA Bureau of Housing administers loans and grants for these purposes through eligible local governments.

OTHER SPECIAL LOCAL SOURCES

Depending upon priorities assigned by the City Council and the availability of other revenue sources, it may be necessary to seek additional funding mechanisms. The following sources of revenue represent options available to the City of Apopka to finance required capital improvements.

Capital Facilities Fees or Impact Fees - are charges to developers at the time of development for construction of facilities to meet additional needs resulting from growth. These fees are charged in advance of new development and are designed to pay for infrastructure needs, but not ongoing operating costs. These funds must be equitably allocated to the specific group(s) which will directly benefit from the capital improvement, and the assessment levied must fairly reflect the true costs of these improvements. Sometimes developers are also required to construct infrastructure and donate it to the City. This can be in lieu of or in addition to paying impact fees. Impact fees can be an important revenue source for financing capital improvements. The City currently levies water, sewer and reuse impact fees. This is not a steady, reliable revenue source as it depends on the amount of growth and development that takes place within the City.

Special Assessments - are usually capital in nature and enhance the utility, accessibility or aesthetic value of the affected properties and generally provide improvements or additions to a government's general fixed assets or infrastructure. Examples are streets, sidewalks, parking facilities and curbs and gutters. Like impact fees, special assessments are levied against residents, agencies or districts which directly benefit from the new service or facility. For example, street paving for an existing neighborhood can be financed through a special assessment of that neighborhood's homeowners, rather than through the city's general fund. The City currently has no special assessments.

LONG-TERM DEBT

The high cost of many capital improvements sometimes requires local governments to resort to borrowing, either through short-term or long-term financing. Short-term financing, perhaps through local banks, is one option available to raise required revenue for periods of one to five years. It is more customary, however, to issue long-term bonds. The normal maturity on these is from five to forty years. The following are examples of long-term financing which the City might use:

General Obligation (GO) bonds - are also known as full faith and credit bonds because their repayment is backed by the general credit of the issuing local government. General obligation bond

issues are required to be approved by voter referendum. They usually carry lower interest rates than other bonds, as they are, in effect, secured by the taxing powers of the government. Revenues collected from real estate ad valorem taxes and other sources of general revenue are used to service the debt. Capital improvements financed through GO bonds should benefit the City as a whole rather than particular areas or groups. As GO bonds are generally not supported directly by the projects they finance, there is often not a direct correlation between the amount of borrowing and the value or useful life of the project. The City has issued no general obligation bonds.

Revenue Bonds - are financed by those directly benefitting from the capital improvements. They may be defined as obligations in which debt service requirements are payable exclusively from the earnings of a public enterprise. Proceeds of these bonds are used to finance publicly-owned facilities such as water and wastewater facilities. Charges collected from the users of these facilities are used to retire the bond obligations. Revenue bonds do not count against some legal debit limits and they may be approved by the City Council without voter referendum. Revenue bond interest rates tend to be higher than for general obligation bonds.

Loan Pools - is a technique in which a group of local governments form a joint financing agency. The agency then borrows money through some type of financing instrument. The proceeds go into the pool, from which individual governments can make long-term loans, to be used primarily for capital improvements. The City has no debt related to loan pools at this time.

Lease/Purchase Financing - is when the vendor or a third party purchases or constructs the asset and then leases it to the local government. At the end of the lease the City obtains ownership of the capital item. The lease/purchase is secured by a mortgage on the leased property. Furthermore, the lessor may sell Certificates of Participation in the lease (similar to tax-exempt bonds) to investors. Technically, the city is only obligated on a yearly basis, when the City Council appropriates the funds for the annual leave payments. Lease/purchase arrangements do not require voter approval and generally are not subject to legal debt restrictions; however, the interest rates are usually slightly higher than bonds and the project must have a high degree of essentiality to the city to be approved. The only lease/purchase agreements the City currently has are for the purchase of various types of equipment.

Other - The City carries from time to time notes payable to local banks and individuals for the purchase of real estate. The total amount of these loans is a very small portion of the City’s indebtedness.

CURRENT PRACTICES FOR FUNDING CAPITAL IMPROVEMENTS

Revenues have generally been used to meet mandatory or essential operating expenses in the past. The City utilizes its CIP to identify needed improvements and projects and guide fund allocation to ensure the adequate provision of public facilities and infrastructure. To provide a means to determine the relative priority of each capital project necessary to address existing deficiencies and provide facility expansion to meet projected growth, the City will decide whether the project:

- Is necessary to meet established levels of service
- Increases the efficiency of existing facilities or infrastructure
- Represents a logical extension of facilities within the urban service area
- Is coordinated with major projects of other agencies
- Implements the policies of the comprehensive plan as they pertain to concurrency requirements
- Eliminates a public hazard
- Is financially feasible

TIMING AND LOCATION OF CAPITAL IMPROVEMENTS

Capital projects planned through fiscal year 2013/2014 will occur in various locations throughout the City. The timing of new infrastructure takes into account the criteria for prioritizing capital projects and the proper phasing of projects so that construction activities that overlap are undertaken in the proper sequence. The numerous elements of this plan require City departments to provide an assessment of the City's infrastructure annually at budget time. The City is required to adopt an ordinance and transmit the revised Five-Year Schedule of Capital Improvements to the DCA on an annual basis.

IMPACTS OF PUBLIC SCHOOLS AND HEALTH FACILITIES ON PROVISION OF INFRASTRUCTURE

Impacts placed on public facilities and infrastructure serving school sites and public health care facilities will be addressed on a case-by-case basis and are not anticipated to have any significant effects on current or proposed levels of service for short- and long-range planning periods. As additional public school student stations are added to existing schools, or new schools are built, demand for and consumption of public services can be expected to increase proportional with the increase in student stations. The City includes future school demands when analyzing its transportation, water and sewer infrastructure needs. In addition, school demands on the City's water and sewer infrastructure are included in the level of service calculations for those services.

CITY'S ABILITY TO FINANCE CAPITAL IMPROVEMENTS

For purposes of assessing the City's financial capability to fund the capital projects identified in this element, projected revenue sources and expenditures through budget year 201314 are identified in this section.

PROJECTION OF DEBT SERVICE OBLIGATIONS

The City currently utilizes debt service financing to pay for capital projects including potable water, sanitary sewer and stormwater facilities. The City utilizes general fund revenues, water fund revenues, wastewater impact fees, stormwater fund revenues, infrastructure surtax fund revenues and impact fee revenues to fund their respective debt service payments. **Table 7-3** shows debt service obligations for the City. The following debt service indicators are monitored by the Finance Department and reviewed annually:

(a) Ratio of total debt service to total revenue should not exceed 1:5.23

(b) Ratio of total capital indebtedness to property tax should not exceed 1:250.

PROJECTION OF REVENUE AND EXPENSES

A schedule of the City's projected ad valorem taxes and special funds revenue projections are provided in **Table 7-4**. The revenues and expenses extracted from funds that provide revenues for each of the City's capital facilities are provided in **Table 7-5**.

TABLE 7 -3: PROJECTIONS OF DEBT SERVICE OBLIGATIONS

Fiscal Year Ending	Governmental Activities		Business-Type Activities		Total
	Principal	Interest	Principal	Interest	
2009	1,203,585	467,092	793,566	567,104	3,031,337
2010	1,006,681	425,309	822,425	1,029,911	3,031,337
2011	900,942	385,688	862,720	993,516	3,142,866
2012	935,374	351,165	757,849	968,028	3,012,416
2013	870,296	316,164	645,000	925,892	2,757,352
5-Year Total	**4,916,878**	**1,945,418**	**3,881,550**	**4,484,451**	**$15,228,297**
2014-2032	**6,964,500**	**1,261,882**	**19,615,000**	**10,060,016**	**37,901,398**
Total Debt Service	**$11,881,378**	**$3,207,300**	**$23,496,550**	**$14,544,467**	**$53,129,695**

Source: City of Apopka, Annual Budget Fiscal Year 2009/10

TABLE 7 -4: PROJECTION OF REVENUE BY CAPITAL IMPROVEMENT FUND

Special Fund	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	5 Year Total
Traffic Impact Fund	711,500	1,500000	4,280,000	1,680,000	3,180,000	11,351,500
Utility Impact Fee - Reuse	275,300	275300	2,875,000	1,100,000	3,640,000	8,165,600
Utility Impact Fee - Reuse	780,600	780600	16,100,000	16,100,000	77,000	33,838,200
Utility Impact Fee - Reuse	175,600	175600	173,007,315	24,484,675	1,253,930	43,397,120
Sanitation Fund	230,000	2,30,000	480,000	240,000	360,000	1,540,000
Stormwater Fund	350,000	3,50,000	3,50,,000	350,000	350,000	1,750,000
Recreation & Open Space	52,000	52,000	52,,000	52,000	52,000	260,000
TOTAL FUNDS	**$2,575,000**	**$3,363,500**	**$41,444,315**	**$4,406,675**	**$8,912,930**	**$100,302,420**

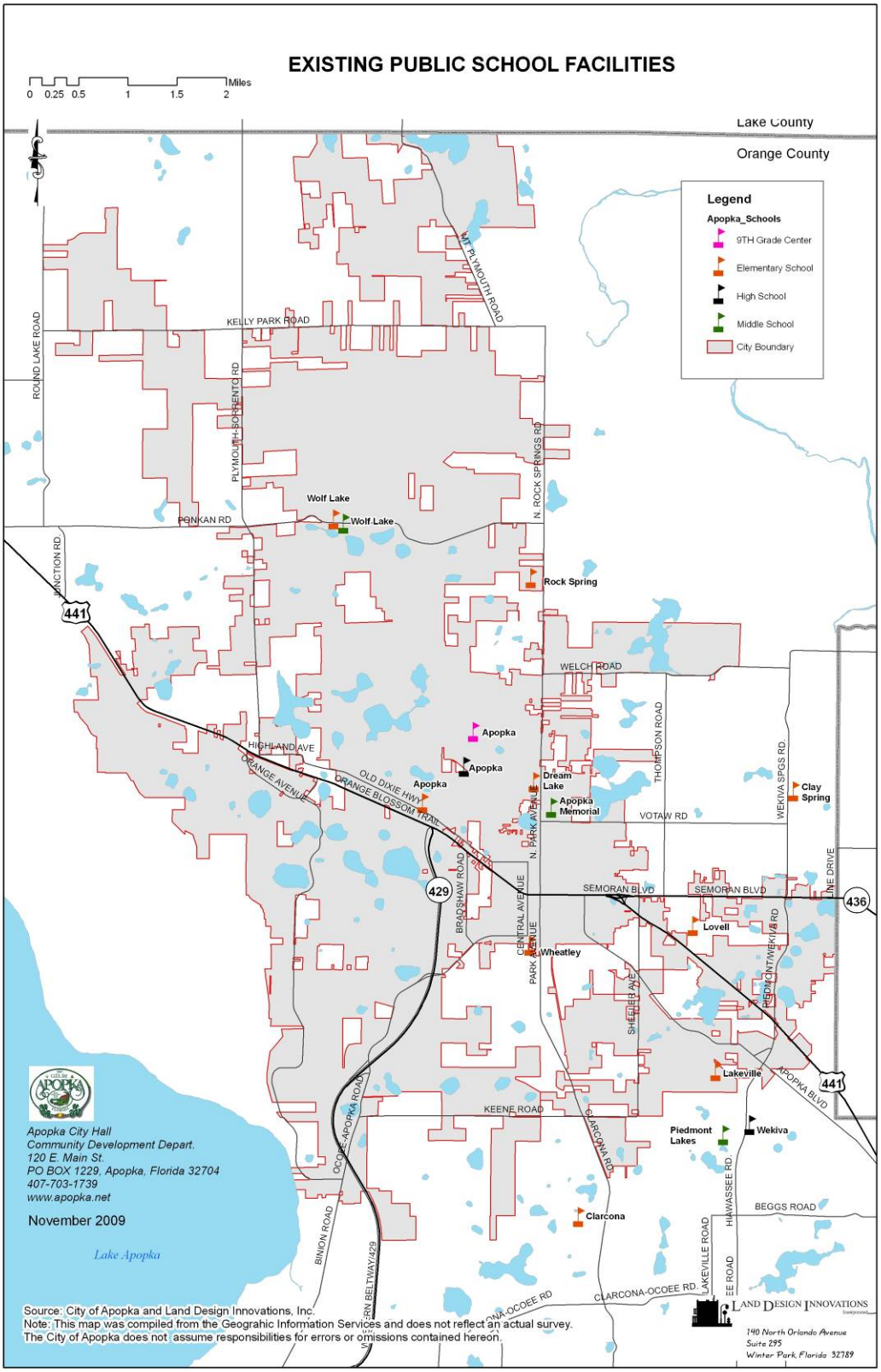
SOURCE: APOPKA FINANCE DEPARTMENT, 2009

TABLE 7 -5: PROJECTION OF GENERAL FUND REVENUES AND EXPENDITURES

	FY09/10	FY10/113	FY11/12	FY12/13	FY13/14
REVENUES:					
Taxes	12,920,100	13,178,502	13,442,072	13,710,913	13,985,132
Licenses & Permits	4,267,300	4,309,973	4,353,073	4,396,603	4,440,569
Intergovernmental Revenue	5,915,400	6,004,131	6,094,193	6,185,606	6,278,390
Charges for Service	1,891,450	1,986,023	2,085,324	2,189,590	2,299,069
Fines & Forfeits	294,700	300,594	306,606	312,738	318,993
Miscellaneous Revenue	751,750	759,268	766,860	774,529	782,274
Transfers & Other	3,312,500	3,478,125	3,652,031	3,834,633	4,026,364
TOTAL REVENUE:	**$29,353,200**	**$30,016,615**	**$30,700,159**	**$31,404,612**	**$32,130,791**
EXPENDITURES:					
General Government Serv	3,899925	3,938924	3,978313	4,018097	4,058278
Public Safety	18,041300	18,593128	19,135050	19,695875	20,276388
Community Development	1,395950	1,402930	1,409944	1,416994	1,424079
Public Works	1,395950	2,186448	2,230177	2,274780	2,320276
Culture/Recreation	1,380825	1,387729	1,401606	1,415622	1,429779
Transfers/Debt Service	2,470400	2,507456	2,545068	2,583244	2,621993
TOTAL EXPENDITURES:	**$29,353200**	**$30,016615**	**$30,700159**	**$31,404612**	**$2,621993**

Source: City of Apopka, Human Resource/Budget Department, 2009

MAP 7- 1 LOCATION OF PUBLIC SCHOOLS SERVING APOPKA – 2009



APPENDIX 7-1: FIVE-YEAR SCHEDULE OF CAPITAL IMPROVEMENTS

Comprehensive Plan Element/Project	Source of Funding	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
SOLID WASTE						
Auto Loader Mack	Sanitation Fund			$240,000		
Auto Loader Mack					$240,000	$240,000
Auto Loader Mack		$230,000				
Claw Truck (replacement unit)						$120,000
Front End Loader (replacement unit)			$230,000			
TOTAL SOLID WASTE		**$230,000**	**$230,000**	**$490,000**	**$240,000**	**$360,000**
STORMWATER MANAGEMENT						
Drainage Upgrades - Citywide	Stormwater Fund	$350,000	$350,000	$350,000	$350,000	$350,000
TOTAL STORMWATER MANAGEMENT		**$350,000**	**$350,000**	**$350,000**	**$350,000**	**$350,000**
SANITARY SEWER						
	Reclaimed Impact Fund					
Binion Rd – 36” RWM from Lust Rd to Harmon Rd		$1,097,550				
Binion Rd – 30” RWM from Lust Rd to Old Dixie Hwy		$2,600,000				
Rogers Rd – 30” RWM from Lester Rd to Ponkan Rd			$872,100			
Boy Scout Rd – 16” RWM from Binion Rd to Bronson Property			$176,000			
Clarcona Rd – 48” RWM from Keene Rd to WWTP			$1,514,596			
Keene Rd – 48” RWM from Marden Rd to Clarcona Rd			$2,177,856			
Kelly Park – RWM II from Jason Dwelley to Plymouth Sorrento Rd						
Kelly Park – RWM from Jason Dwelley Pkwy to Mt. Plymouth Rd						$677,760

Comprehensive Plan Element/Project	Source of Funding	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Lake Apopka Plant - NSRA	Reclaimed Impact Fund		$1,000,000	$4,900,000	$5,900,000	
Lester Rd – RWM from Vick Rd to Rock Springs Ridge						$317,000
Lust Road – 36" RWM from Binion Rd to Lake Apopka Plant				$473,040		
Marden Rd – 20" RWM from Keene Rd to Emerson Park					$542,200	
Miscellaneous RWM		$50,000	$50,000	$50,000	$50,000	$50,000
Reclaim Master Plant Update				$50,000		
Schopke Rd – RWM from Schopke-Lester Rd to Plymouth Rd						$288,000
TOTAL RECLAIMED IMPACT FUND		$3,747,550	$5,790,552	$5,473,040	$6,492,200	$1,332,760
Miscellaneous Sewer Mains	Sewer Impact Fund	$100,000	$100,000	$100,000	$100,000	$100,000
Plymouth Sorrento Rd. FM,Ponkan Rd. to Yothers Rd., 5,840 LF 12"			$350,400			
WWTP Expansion to 8 MGD			$13,000,000	$18,500,000		
Sewer Master Plan Update				$50,000		
Plymouth Rd. FM, Ponkan Rd to Kelly Park, 1,095 LF 12"					$657,060	
Junction Rd. FM, US 441 to Sadler Rd, 13,025 LF 16"						$651,250
TOTAL SEWER IMPACT FUND		**$1,000,000**	**$13,450,400**	**$18,650,000**	**$757,060**	**$751,250**

Comprehensive Plan Element/Project	Source of Funding	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
TOTAL SANITARY SEWER		**$4,747,550**	**$19,240,952**	**$24,123,040**	**$7,249,260**	**$2,084,010**
POTABLE WATER						
Lester Road Water Main – Vick Rd to Rock Springs Ridge	Water Impact Fund					$350,000
Miscellaneous Water Mains		$100,000	$100,000	$100,000	$100,000	$100,000
Plymouth Water Plant HSP Upgrade			$125,000			
Northwest WTP High Speed Pump		$170,000				
Northwest WTP (1MG Storage Tank)					$750,000	
Plymouth Sorrento Rd WM, Yothers Rd to Ponkan Rd.						$390,744
Plymouth Water Plant – Well and 1MG Storage Tank				$1,900,000		
Water Master Plan Update				$50,000		
TOTAL POTABLE WATER		**$270,000**	**$225,000**	**$2,050,000**	**$850,000**	**$840,744**
PROJECT TOTALS		**$5,597,550**	**$20,045,952**	**$27,013,040**	**$8,689,260**	**$3,634,754**

Note 1: The City of Apopka adopts by reference the Transportation Improvement Program (TIP) for Fiscal Years 2009/2010-2013/14 as formally adopted by MetroPlan Orlando on July 8, 2009, as amended, into the City's Five-Year Schedule of Capital Improvements.

Note 2: The City of Apopka adopts by reference the District Capital Outlay Plan (DCOP) for FY 2009/2010-2013/14 as formally adopted by the Orange County School Board on September 8, 2009, as amended, into the City's Five-Year Schedule of Capital Improvements.

Source: City of Apopka Budget for Fiscal Year 2009/2010

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CAPITAL IMPROVEMENTS ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL:

To develop a financially feasible capital facilities improvement strategy which prioritizes improvements to meet existing deficiencies, accommodates future facility needs and equitably apportions the costs among the beneficiaries. *[Note: Since the City of Apopka is not located within a coastal high-hazard area, the objective regarding limitation of public expenditures that subsidize development in high-hazard coastal areas does not apply.]*

Objective 1

The City of Apopka shall schedule and provide capital improvements to meet existing deficiencies, accommodate desired future growth, and to replace obsolete or worn-out facilities. This objective shall be made measurable by the following policies.

Policy 1.1

The City of Apopka shall prepare an annual Capital Improvements Program (CIP), comprised of physical improvements with a minimum cost of $50,000 and minimum useful life of 5 years, to guide the timing and location of capital expenditures.

Policy 1.2

The capital improvement budget shall be adopted and incorporated into the annual City budget and utilized to monitor the implementation of the Capital Improvements Element (CIE).

Policy 1.3

The City of Apopka shall evaluate all new capital facility proposals based on the following criteria in the order shown below:

1. An immediate hazard to public health or safety

2. Correction of deficiencies not previously identified

3. Consistency with the adopted Comprehensive Plan

4. Financial feasibility and local budget impact

5. Support of central area redevelopment

6. Support of new development within the corporate City limits or the utility service area as depicted on Map 4-1 of the Infrastructure Element.

7. Consistency with plans of state agencies and surrounding jurisdictions

Policy 1.4

The Capital Improvement Program (CIP) will be prepared and reviewed annually by a committee consisting of at least one staff representative from the following departments: Public Services, Community Development, Police, Fire and Finance. The CIP shall be reviewed and adopted by the City Council as part of the comprehensive planning process.

Policy 1.5

Capital improvements proposed in the CIP shall be consistent with those identified in each individual element of the comprehensive plan and with other master plans applicable to City facilities.

Policy 1.6

The City shall plan and schedule the correction of any existing deficiencies within one year of identification of the problem.

Policy 1.7

Sources of revenue identified within the CIE shall provide direction in expenditures for capital improvements, and efforts shall be made to secure grants whenever available to supplement these revenue sources.

Policy 1.8

The City shall maintain all its assets at a level adequate to protect the city’s capital investment and to minimize future maintenance and replacement costs.

Objective 2

The City of Apopka shall maintain the development permit management system adopted in the Land Development Code (LDC) which ensures that minimum levels of service standards are maintained.

Policy 2.1

The City of Apopka hereby adopts the following level of service standards as the basis for capital facility improvements:

a. Sanitary Sewer

1. The minimum level of service standard for the City's wastewater system, expressed as a per capita flow to be collected, treated and reclaimed, shall be 81 gallons per capita per day. This level of service is an average daily flow based on the population served by the system and the system-wide flows generated within the utility service area.

2. Peak design flows for the wastewater collection facilities shall range from 2.5 to 4.0 times the average daily flow.

3. Peak hydraulic design flows for wastewater treatment facilities shall be no less than 2.0 times the average daily flow as calculated using the minimum level of service standard.

b. Potable Water

1. The minimum level of service standard for the potable water system expressed as a per capita flow to be supplied, treated and distributed shall be 177 gallons per capita per day. This level of service is an average daily flow based on the population served by the system and the system-wide flows generated within the utility service area, including water demands for commercial, residential and unaccounted-for water.

2. The City shall seek to reduce the level of service standard from 177 gpcd to 166 gpcd in 2015; 154 gpcd in 2020; 144 gpcd in 2025; and 137 gpcd in 2030.

3. The minimum level of service standard for system pressure, under normal operating conditions, shall be 30 pounds per square inch (psi), as measured in

the water main. During emergency conditions, power failures and/or fire flow conditions, water pressure shall be maintained at a minimum level of 20 psi or greater.

4. The City of Apopka shall provide sufficient water storage facilities to store a fire volume equal to four hours of fire flow, plus necessary operational storage. Operational storage shall be equal to the volume of water equivalent to the difference between peak hour and maximum day flow over a period of eight hours.

c. Solid Waste

The City of Apopka shall use a level of service standard of 4 pounds per capita per day for residential and 2 pounds per capita per day per 1,000 square feet for commercial development.

d. Stormwater Management

1. The City of Apopka shall continue to require that the post-development peak rate of discharge must not exceed the pre-development peak rate of discharge for the 25-year, 24-hour storm (8.6 inches of rainfall).

2. The City of Apopka shall continue to require that pollution abatement be accomplished by retention of one-inch of runoff from the developed site with filtration into the soil through the bottom of the retention pond or through an approved filtering media. Stormwater treatment facilities shall be designed so that the quality of the stormwater runoff will not degrade the receiving water quality below the minimum conditions necessary to assure the suitability of the water body for the designated use in accordance with the classifications established in rules 17-302 and 62-302.400, F.A.C.

3. The City of Apopka shall continue to require, where a positive outfall is not available for stormwater discharge, the 100-year, 24-hour storm (10.6 inches of rainfall) be retained on the site of the development. The retention pond shall be designed to percolate the total runoff volume within 72 hours following the rainfall event.

4. The City of Apopka shall continue to require, when runoff from a project is to be discharged to a landlocked lake with no positive outfall, that the on-site stormwater facilities be designed to detain the 25-year, 96-hour storm (12 inches of rainfall).

e. Recreation and Open Space

The City of Apopka hereby adopts the following level of service standards for land and recreation facilities: Park Land - 3.0 acres per 1,000 population.

f. Public School Facilities

The adopted LOS standard, except for backlogged facilities, shall be as follows:

a. Elementary School LOS – 110% of Adjusted FISH Capacity

b. K through 8 – 110% of Adjusted FISH Capacity

c. Middle School LOS – 100% of Adjusted FISH Capacity

d. High School LOS – 100% of Adjusted FISH Capacity

The adopted LOS standard shall be used to determine the available capacity of elementary, middle and high schools within the designated Concurrency Service Area (CSA). The adopted LOS standard must be achieved in all CSAs by April 1, 2013, except for deficient CSAs where improvements are needed to achieve adequate classroom capacity, as specifically identified in the Orange County Public Schools Ten-Year District Capital Outlay Plan for funding by April 1, 2018. For the aforementioned deficient CSAs, the adopted LOS must be achieved by April 1, 2018.

g. TRANSPORTATION

(1) Through adoption of this Transportation Element, for planning purposes only, the City of Apopka shall establish that all road should operate at LOS "E" or better on a daily and peak hour basis within the city.~~: and the maximum service volumes established in Table 4-4, the City of Apopka shall establish the following daily and peak hour Level of Service standards for roads within the city:~~

~~a. All city "local" facilities shall operate at LOS "C" or better on a daily and peak hour basis.~~

~~b. All city collector facilities (minor and major) shall operate at LOS "D" or better on a daily and~~

~~peak hour basis.~~

c. ~~All county minor arterial and collector facilities that are within the city and are not designated as backlogged shall operate at LOS "E" or better on a daily and peak hour basis.~~

d. ~~All state principal arterial facilities that are within the city and are not classified as backlogged or constrained within a proposed Special Transportation Area shall operate at LOS "D" or better on a daily and peak hour basis.~~

e. ~~All backlogged and constrained facilities shall operate according to the standards set forth in Policies 2.3 and 2.4. of the Transportation Element.~~

~~1. For county maintained facilities that may be designated as backlogged, the City of Apopka shall coordinate with Orange County to establish maximum percentage increases in peak hour traffic volumes, or, if available, maximum percentage decreases in peak hour travel speeds.~~

~~3. For state maintained facilities designated as backlogged, the city shall not approve developments generating more than 15 percent total increase in peak hour traffic volumes over the most recent peak-hour traffic count taken prior to adoption of this element. State maintained facilities designated as backlogged by the city include:~~

~~US 441 - from Errol Pkwy. to Bradshaw Rd. (LOS E)~~

~~4. Prior to January, 2005, the city will conduct an operational study on US 441. The city shall reanalyze the road network and amend Policy 2.3 to reflect altered conditions.~~

~~5. For state maintained facilities that are designated as constrained, the city shall not approve developments generating a more than 15 percent increase in peak hour traffic volumes over the most recent peak hour traffic count taken prior to adoption of the Comprehensive Plan. State maintained facilities designated as constrained by the city and within a proposed Special Transportation Area include:~~

~~US 441 - from SR 436 to Bradshaw Rd.~~

Policy 2.2

The City of Apopka will continue to implement the concurrency management system which includes a determination of compliance with the level-of-service standards prior to the initiation of the permitting process.

a) For potable water supplies and facilities, sewer, solid waste, and drainage, at a minimum, the following standards will satisfy the concurrency requirements:

1. The necessary facilities and services are in place at the time a development permit is issued; or

2. A development permit is issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or

3. The necessary facilities are under construction at the time a permit is issued; or

4. The necessary facilities and services are guaranteed in an enforceable development agreement that includes the provisions of Rule 9J-5.0055(2)(a)1.-3, F.A.C. An enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, F.S., or an agreement or development order issued pursuant to Chapter 380, F.S.. The agreement must guarantee that the necessary facilities and services will be in place when the impacts of the development occur.

5. With respect to potable water, the Concurrency Management System will also require consultation with all applicable water suppliers, including internal coordination within the City of Apopka, prior to approval of a building permit, to determine if adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy or functional equivalent.

b) For parks and recreation, the concurrency requirement shall be met by complying with the above standards, Policy 2.2.a. 1 through 4, or by ensuring that the following standards will be met:

1. At the time the development permit is issued, the necessary facilities and services are the subject of a binding executed contract which provides for the commencement of the actual construction of the required facilities or the provision of services within one year of the issuance of the development permit; or

2. The necessary facilities and services are guaranteed in an enforceable development agreement which requires the commencement of the actual construction of the facilities or the provision of services within one year of the issuance of the applicable development permit. An enforceable development agreement may include, but is not limited to, development agreements pursuant to Section 163.3220, Florida Statutes, or an agreement or development order issued pursuant to Chapter 380, Florida Statutes.

Policy 2.3

Concurrency determination shall be made prior to issuance of a final development order which shall be defined as the last order or approval in the City's development permit process as defined by Chapter 380.04, Florida Statutes, or as otherwise required by State Statutes, the interlocal agreement or policies of the City's comprehensive plan.

Policy 2.4

Projects which have received a final development order must initiate construction within twelve months and be at least substantially completed within thirty-six months unless there is an executed developer's agreement which provides otherwise.

Objective 3

The City shall require all development to bear a fair, equitable and proportionate share of facility improvements required to maintain the adopted minimum level of service standards.

Policy 3.1

All new developments will be assessed a pro rata share of the costs necessary to ensure the public facility improvements generated are available at the time the impacts of the development occur, including consistency with the City's Transportation Proportionate Fair Share Ordinance.

Policy 3.2

The City of Apopka shall evaluate impact fees every five years, at a minimum, to ensure the rates are consistent with the required construction costs for public facility needs generated by new development.

Policy 3.3

The City of Apopka shall continue to use the stormwater utility as authorized by the City Council using the non-ad valorem fee collection method, as provided in Section 403.0893, F.S., as the source to fund stormwater capital improvement projects.

Policy 3.4

The City of Apopka shall evaluate the need for additional fees for public facility needs generated by new development at least every five years. Such new fees may require review by an ad-hoc citizens' advisory committee and at least one public hearing by the local planning agency before the additional fees are adopted by the city.

Policy 3.5

The City of Apopka shall evaluate, on an annual basis, the use of mandatory dedication or fees in lieu of financing systems for public facilities.

Policy 3.6

The City of Apopka will accept dedications, or construction in lieu of, as an alternative to the payment of all, or a portion of any, required fees provided there is an executed developer's agreement.

Objective 4

The City of Apopka will at least annually establish financial indicators in order to ensure the ability to fund the City's share of needed improvements is within acceptable limits.

Policy 4.1

In no case shall the City incur debt for those capital facilities which exceed the capacity to issue bonds or other financial mechanisms as determined in part by the indicators described below, which shall be monitored by the Finance Department and reviewed annually:

1. The ratio of total debt service to total revenue shall not exceed 1:5.23.

2. The ratio of total capital indebtedness to property tax shall not exceed 1:250.

Objective 5

In order to maintain adopted LOS standards, the City of Apopka shall coordinate land use decisions and available or projected fiscal resources to correct existing deficiencies identified in the comprehensive plan, accommodate desired future growth and replace worn out or obsolete facilities through the annual adoption of a Five-Year Schedule of Capital Improvements.

Policy 5.1

Capital projects included in the Five-Year Schedule of Capital Improvements shall be defined as those projects identified within the comprehensive plan that are necessary to maintain adopted LOS standards, including increasing the capacity or efficiency of existing facilities and/or replacing failing facilities.

Policy 5.2

The City adopts by reference the Five-Year Facilities Master Plan FY 2009-2013 as formally adopted by Orange County Public Schools, as amended, into the City's Five-Year Schedule of Capital Improvements.

Policy 5.3

The City hereby adopts the Five-Year Schedule of Capital Improvements included as **Appendix A** of this element, which will be updated on an annual basis.

Policy 5.4

The City of Apopka will utilize the following list of proposed improvements within the Wekiva Parkway Interchange Vision Plan as a working list for the 5-Year and 10-Year Capital Improvement Schedule for when future development occurs within this area.

Proposed Water Main Improvements

- Haas Road, from Plymouth-Sorrento Road to Foliage Way
- Ponkan Road, from Round Lake Road to Foliage Way
- Round Lake Road, from Ponkan Road to Ondich Road
- Golden Gem Road and Effie Drive, from Ponkan Road to Ondich Road
- Plymouth-Sorrento Road, from Kelly Park Road to Ondich Road
- Foliage Way, from Kelly Park Road to Haas Road

Proposed Sanitary Sewer System Improvements

- Round Lake Road, Pump Station #30 to from U.S. 441
- Golden Gem Road, from Pump Station #29 to Ponkan Road
- Ponkan Road, between Junction Road and Golden Gem Road
- Ponkan Road, between Golden Gem Road and east side of Zellwood Station
- East side of Zellwood Station, from Ponkan Road to Yothers Road
- Yothers Road, from Zellwood Station site to Plymouth-Sorrento Road
- Kelly Park Road, from Pump Station #22 to Plymouth-Sorrento Road
- From Pump Station #28 to Plymouth-Sorrento Road
- Kelly park Road, from east of Plymouth-Sorrento Road to Foliage Way
- From Pump Station 17 to Foliage Way

PROGRAMS TO ENSURE IMPLEMENTATION

The following implementation measures will ensure that level of service standards will be maintained:

1. Development Order and Building Permit Review

   As part of the review of all applications for development orders and/or building permits, the City will determine whether or not there will be sufficient capacity of public facilities to meet the standards for levels of service for the existing population and for the proposed development in accordance with the requirements of the concurrency management system.

2. Annual Report

   The mandatory semiannual report to the Department of Community Affairs concerning amendments to the comprehensive plan due to emergencies, developments of regional impact and selected small developments will report on changes, if any, to adopted goals, objectives and policies in the Capital Improvements Element.

3. Update of Capital Improvement Element

   Beginning in April of each year, the CIE shall be updated in conjunction with the City's budget process and the release of the official Bureau of Economic and Business Research (BEBR) population estimates and projections. The update will include:

   1. Update of facilities inventory
   2. Update of unit costs
   3. Update of facilities requirements analysis to project five year needs (by fiscal year) in order to program projects to meet adopted LOS standards
   4. Update of revenue forecasts in order to evaluate financial feasibility and the City's ability to finance capital improvements needed to meet adopted LOS standards
   5. Revise and develop capital improvements projects for the next five years. The first year's schedule of projects will be incorporated into the City's budget effective October 1 each year.
   6. Update of the public school and health facilities analysis

4. Concurrency Management System

   The City shall maintain, by ordinance, a concurrency

management system. The system shall consist of the following components:

A. Annual monitoring report on the capacity and levels of service of public facilities compared to the standards for levels of service adopted in this element. The report shall summarize the actual capacity of existing public facilities and forecast the capacity of existing and planned public facilities for each of the five succeeding fiscal years. For the purposes of long range capital facility planning, a ten year forecast of projected needed capacity will also be done. These forecasts will be based on the most recently updated schedule of capital improvements in this Capital Improvement Element. This annual report will constitute the evidence of the capacity and levels of service of public facilities for the purpose of issuing development orders during the 12 months following completion of the annual report.

B. Review of changes in planned capacity of public facilities. The City shall review each amendment to this Capital Improvement Element, in particular any changes in standards for levels of service and changes in the schedule of capital improvements in order to enforce the policies of this element.

5. Evaluation and Appraisal

The required evaluation and appraisal report will address the implementation of the goals, objectives and policies of the Capital Improvements Element. The monitoring procedures necessary to enable the completion of the evaluation and appraisal include:

a. Review of annual reports of the concurrency management system.

b. Review of annual reports to DCA concerning amendments to the Apopka Comprehensive Plan.

c. Review of annual updates of this Capital Improvements Element, including updated supporting documents.

City of Apopka
Comprehensive Plan 2030

Intergovernmental Coordination Element

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INTERGOVERNMENTAL COORDINATION ELEMENT

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INTERGOVERNMENTAL COORDINATION ELEMENT

INTRODUCTION

PURPOSE AND SCOPE

One of the principal tenants of the Growth Management Act is to improve coordination and cooperation among the various levels of government and in some cases with the private sector. For the City of Apopka, the sphere of concern mostly involves the continued cooperation and coordination with Orange County. The City is within a few miles of the City of Ocoee and the communities of Zellwood (west) and Clarcona (south), and is adjacent to a small portion of Seminole county to the east. The City of Apopka is also within two miles of Lake County to the north..

DATA AND ANALYSIS

COORDINATION AGREEMENT INVENTORY

The City of Apopka has numerous agreements of one kind or another currently in place with many of the surrounding governments and special districts. **Table 8-1** identifies the current agreements between the City, adjacent counties, the Orange County School Board, regional and state agencies; the nature of the agreement; the City department primarily responsible for maintaining the relationship; and a general statement of the current effectiveness of the agreement.

In general, the agreements shown in **Table 8-1** represent cooperative efforts for solving intergovernmental problems and are a means of achieving greater efficiency for both parties involved. For example, the City has joint use agreements and reciprocal agreements with the Orange County School Board for recreation facilities.

INTERGOVERNMENTAL NEEDS AND PROBLEMS

Table 8-1 summarizes the current inventory of agreements between the City, other adjacent cities, other counties, regional, state, federal, utility companies and other agencies in the area. In 2004, the City and Orange County executed a Joint Planning Area Agreement to address annexation, land use strategies and other planning functions. The greatest multi-jurisdictional need is for additional funding sources, particularly for transportation and utility needs.

Even though the City has several kinds of agreements in effect, there are several issues which would benefit from improved levels of cooperation and coordination. Some of the issues result from the need to establish new relationships between the City and various local governments. The issues are identified below. There is no significance to the order of the issues presented.

TABLE 8 - 1: INVENTORY OF INTERGOVERNMENTAL COORDINATION AGREEMENTS

Coordinating Entity		Subject	Coordinating Mechanism	Lead City Department	Effectiveness
Adjacent Cities	Altamonte Springs	Mutual aid agreement for fire protection & rescue services	Interlocal Agreement	Fire Dept.	Satisfactory
	Ocoee	Mutual aid agreement for fire protection & rescue services	Interlocal Agreement	Fire Dept.	Satisfactory
	Ocoee	Transportation planning coordination	Informal Coordination	Community Development	Satisfactory
	Orlando	Mutual aid agreement for fire protection & rescue services	Interlocal Agreement	Fire Dept.	Satisfactory
	Eatonville	Police Dispatching Services	Interlocal Agreement	Fire/Police Departments	Satisfactory
	Maitland	Police Dispatching Services	Interlocal Agreement	Fire/Police Departments	Satisfactory
County	Orange	Accept county Animal Control Ord. to regulate possession, ownership, care and custody of animals on Apopka. Orange County enforces Ord.	Orange Co. Ord. No.95-32 & City Ord. No.893	~~Community Development~~ Police Dept./ Code Enforcement	Satisfactory
	Orange	Establishment of Urban Service Areas	Interlocal Agreement	Public Services	Satisfactory
	Orange	Emergency water supply interconnect agreement	Interlocal Agreement	Public Services	Satisfactory
	Orange	Interconnect to Apopka's water system to provide temp. fire flow backup to Plymouth Service Area water system	Letter Agreement	Public Services & Fire Dept.	Satisfactory
	~~Orange~~	~~Widening to four lanes and improvements to Rock Springs Road from Welch Road to Ponkan Road~~	~~Interlocal Agreement~~	~~Public Services~~	~~Satisfactory~~
	Orange	Traffic Signal installation, operation and maintenance for the intersection of Rock Springs Road and Welch Road.	Interlocal Agreement	Public Services	Satisfactory
	Orange	Distribution of "9-1-1" Emergency Phone System Fee	Interlocal Agreement	Fire & Police Departments	Satisfactory
	Orange	Combined operational assistance and voluntary cooperation mutual aid agreement	Mutual Aid Agreement	Police Dept.	Satisfactory
	Orange	Solid Waste Management	Interlocal Agreement	Public Services	Satisfactory
	Orange	~~Land Use Planning~~ Joint Planning Area (JPA)	Interlocal Agreement	Community Development	~~Under negotiation~~ Satisfactory
	Orange	Public Schools Facilities Planning and Implementation of Concurrency	Interlcoal Agreement	Community Development	Satisfactory
	Orange	Regulation of Solid Waste Management Facilities	Interlcoal Agreement	Community Development	Satisfactory
	Orange	Intergovernmental Radio Communication Program	Interlocal Agreement	Fire Dept	Satisfactory
	Lake	Mutual aid agreement for fire protection & rescue services	Interlocal Agreement	Fire Dept.	Satisfactory
	Lake	Transportation planning coordination	Informal Coordination	Community Development	Satisfactory
	Seminole	Mutual aid agreement for fire protection & rescue services	Interlocal Agreement	Fire Dept.	Satisfactory

	Coordinating Entity	Subject	Coordinating Mechanism	Lead City Department	Effectiveness
	Seminole	Combined operational assistance and voluntary cooperation mutual aid agreement	Mutual Aid Agreement	Police Dept.	Satisfactory
State	DCA	Small Cities Community Development Block Grant program (CDBG): Commercial Revitalization, Housing, Neighborhood Revitalization, & Economic Development	Contracts as applicable	Community Development	Satisfactory
	DCA	Comprehensive Planning, Florida Building Codes, National Flood Insurance Program	Review and Regulation	Community Development	Satisfactory
	St. John's River Water Management District	Wekiva River Protection Act	State Regulations, Comp. Plan	Community Development	Satisfactory
	St. John's River Water Management District	Water Use Permit, Well Construction Permit, Regional Water Supply Planning, Water Conservation , Reclaimed Water Projects.	Permitting, Review and Regulation	Community Development	Satisfactory
	St. John's River Water Management District	Central Florida Aquifer Recharge Enhancement Water Resource Development Project	Informal Coordination	Public Services	Satisfactory
	St. John's River Water Management District	Use of water from the north shore restoration area at Lake Apopka	Memorandum of Agreement	Public Services	Satisfactory
	State Bureau of Historic Resources	Coordination and review for historical preservation activities/awareness	Apopka Historical Properties Survey, National Register of Historic Properties, State Master Site File	Community Development	Satisfactory
	DCA	Support and participation in the State Emergency Management Plan for the provision of Emergency Assistance	Statewide Mutual Aid Agreement	Fire Dept.	Satisfactory
	FDOT	Level of Service Agreements with FDOT & Orange County	Level of Service Agreements	Community Development	Satisfactory
	FDOT	Maintenance Agreement for all paved, landscaped and/or turfed areas withing FDOT rights-of-way for US 441 and SR 436.	Highway Maintenance Memorandum of Agreement	Public Services	Satisfactory
	FDOT	Waiver of fees for application processing, review and inspection of access permits	Permitting	Public Services	Satisfactory
	FDOT	Traffic Signal maintenance for Main St. intersections at Midland Ave./Edgewood Dr., Park Ave. and Central Ave.	Interlocal Agreement	Public Services	Satisfactory
	FDOT & Fl. Central Railroad	~~Installation and~~ maintenance of RR grade crossing traffic control devices ~~at 4th St.~~	Railroad Reimbursement Agreement	Public Services	Satisfactory
	Fl. Central Railroad Company	License Agreement	Agreement	Public Services	Satisfactory
	State of Florida	State Emergency Management Plan and Program for State Emergency Assistance	Statewide Mutual Aid Agreement	Fire Dept.	Satisfactory
	Florida Dept. of Corrections	Inmate Labor Work Program	Agreement	Police Dept.	Satisfactory

	Coordinating Entity	Subject	Coordinating Mechanism	Lead City Department	Effectiveness
Federal	Department of Environmental Protection	Development regulations in the Wekiva River Protection Area	Informal Coordination	Community Development	Satisfactory
	FEMA	Joint Hazard Mitigation Grant Program	Agreement	Fire Dept.	Satisfactory
	FEMA	Flood Insurance Rate Map (FIRM) updates	Review, Regulations	Community Development	Satisfactory
Utilities	~~Sprint~~ Embarq	Telephone Service	Franchise Agreement	Admin.	Satisfactory
	~~Florida Power~~ Progress Energy	Electricity	Franchise Agreement	Admin.	Satisfactory
	~~Time Warner~~ Brighthouse	Cable Service	Franchise Agreement	Admin.	Satisfactory
	Lake Apopka Gas District	Natural Gas	Franchise Agreement	Admin.	Satisfactory
	City of Apopka	Amended and Restated Potable Water, Wastewater and Reclaimed Water (reuse)	City is provider	Public Services	Satisfactory
	City of Apopka	Solid Waste Collection & Recycling	City is provider	Public Services	Satisfactory
	Orlando Utilities Commission	Renew Reclaimed Water Agreement - PROJECT ARROW	Agreement	Public Services	Satisfactory
	Zellwood Station Co-Op, Inc.	Joint Planning Area - Wholesale Reclaimed, Potable Water, and Wastewater	Agreements	Public Services	Satisfactory
Other	OOCEA - Orlando Orange County Expressway Authority	Transportation Planning	Formal coordination	Community Development	Satisfactory
	Metroplan Orlando	Transportation Planning ~~(FDOT)~~ and Funding Agreement	Technical Advisory Committee and Agreement	Community Development	Satisfactory
	Orange County School Board	Provide 5 school resource officers	Agreement	Police Dept.	Satisfactory
	Orange County School Board	Mutual agreement for use of 9th Grade Center parking lot and city's athletic complex adjacent to 9th Grade Center	School Facility Use Agreement	Recreation Dept.	Satisfactory
	Orange County School Board	School Impact Fee Distribution	Interlocal Agreement	Admin.	~~Satisfactory~~ Under negotiation
	~~Kiwanis Club of Apopka, Inc.~~	~~"Adopt-A-Highway" program for 2nd St. from Park Ave. to Christiana Ave.~~	~~Agreement~~	~~Public Services~~	~~Satisfactory~~
	~~Lynx~~	Transit Station License	Agreement	Public Services	Satisfactory
	Keene Road Landfill, Inc Buttrey Dev.	Landfill Management	Agreement	Community Development	Satisfactory

NOTE: Lead City Department lists the City of Apopka office which handles coordination.
Source: Apopka Community Development Department, ~~2001~~ 2008

Issue 1 - School Board Coordination

Pursuant to the Growth Management Reform Act of 2005, the City adopted the required Public School Facilities Element and executed an amended Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency with Orange County, Orange County School board and other municipalities in the County. This has enabled the City of Apopka and the Orange County School Board to coordinate the development of school sites in association with residential development. The City has also been successful in coordinating with the school board on the provision of recreational facilities.

In addition, a school board representative serves on the Planning Advisory Board. This helps to ensure that school site development is coordinated with the City's Future Land Use Element. The City also notifies the school board of new development proposals within the City at the earliest stage possible in the review process, and must continue this coordination.

Issue 2 - Joint Planning Area Agreement

Chapter 163, F.S. requires the comprehensive plan to "provide for procedures to identify and implement joint planning areas, especially for the purposes of annexation, municipal incorporation, and joint infrastructure service areas." The City of Apopka and Orange County entered into a Joint Planning Area Agreement (JPA) on October 26, 2004. The agreement addresses the conflict resolution process, notification, annexations, joint land use planning, site development standards, the elimination of enclaves, and issues relating to South Apopka's redevelopment. The JPA also addresses the protection of the Wekiva River, along with open space, buffers and density requirements for development in the Northern Study Area. The JPA has worked well to define the potential growth boundary for Apopka and assist in annexations. The JPA has also provided for cooperation between the City and County to address the elimination of enclaves. The JPA set land use strategies, which ultimately reflected the mandates of the 2005 Wekiva Parkway and Protection Act in terms of open space requirements.

Apopka and Orange County currently notify the other jurisdiction when development proposals are occurring that might affect the adjacent jurisdiction. Land use compatibility between the City and Orange County has continued to be an issue; however, the City is working to coordinate land issues with the county to improve on incompatible adjacent land uses. The City and County will be working together to develop future small area studies, particularly related to the northern area along the planned Wekiva Parkway and the interchange.

Issue 3 - Housing

In 1989, Orange County completed a study of the affordable housing needs for the unincorporated area of the county. The study made several recommendations for solutions to the problem of supplying affordable housing. Seminole County has also completed a similar study and the ECFRPC has initiated a similar study for the region as well.

The Orange County Community Development Department administers the Community Development Block Grant (CDBG) program in the area south of, and adjacent to, the City limits of Apopka; however, the City has opted out of the county's CDBG program and will focus its efforts on housing and neighborhood revitalization in the coming years. There is no coordinated, multi-jurisdictional approach to the provision of affordable housing, particularly in and around the City of Apopka. One possible mechanism for improving the provision of affordable housing is the establishment of a City/County housing finance authority. The authority's primary responsibility would be to improve affordable housing conditions in the Apopka area.

Issue 4 - Seminole County Land Use Compatibility

The City's boundaries are adjacent to the Seminole County line. There is no existing process to notify Seminole County of development proposals within the City. Likewise, Seminole County does not currently notify Apopka of development proposals adjacent to the City limits. There is a need to improve the notification process between the Apopka and Seminole County governments regarding new development proposals.

Issue 5 - Lake County Transportation Planning

The City's boundary is adjacent to the Lake County line along Mt. Plymouth Road; therefore, transportation facilities in Lake County affect the traffic conditions within Apopka. Coordination is particularly important because Lake County is outside the Orlando Urban Area Transportation Study (OUATS) area. The City should consider an interlocal agreement with Lake County/Lake Sumter Metropolitan Planning Organization to improve the transportation coordination process between the two jurisdictions.

Issue 6 - Wekiva Parkway Stormwater

The Wekiva Parkway and Protection Act, enacted in 2005, required a master stormwater management plan and a wastewater facility plan for joint planning areas and utility service areas where central wastewater systems are not readily available. The Stormwater Master

Plan update has been submitted to the city's consultant for review, which is expected to be completed by December 2012. A portion of the City of Apopka is located within the Wekiva Protection Area, which has been designated an Area of Critical State Concern. Because of this, the City analyzes individual development projects for impacts to the area and requires that development meet the SJRWMD's regulations to ensure that there are no negative impacts to the water quality of the protection area.

Issue 7 - Road Funding

The City will be working toward increasing cooperation with other local governments in the region and the state to find additional sources of revenue for road projects. The City of Apopka has executed an agreement with the Florida Department of Community Affairs to initiate a corridor capacity enhancement study for US 441, which should identify the needs and sources of funding for improvements to this regional facility.

Issue 8 - Recreation

The City provides various services outside of its limits with no financial or operational contribution from Orange County. The city has included a policy in the adopted intergovernmental coordination element to enter into an agreement with the county regarding use and operation of recreational facilities. The only agreement to this date involves the West Orange Rails-to-Trails project, specifically the trailhead property.

Issue 9 - Regional

Legislative changes resulting from the Environmental Land Management Study (ELMS) recommendations included requirements that regional planning councils develop strategic regional policy plans (SRPP). These plans were to address five issues - affordable housing, economic development, emergency management, natural resources and transportation. The East Central Florida Regional Planning Council (ECFRPC) is currently in the process of updating the 1998 SRPP, which will be renamed the "*Central Florida 2050: Regional Policies for a Sustainable Future*." The City of Apopka's policy is to utilize the SRPP policies where applicable.

Issue 10 – Utilities

The City of Apopka purchased the Orange County Northwest Utility Service Area in 2006. This purchase was finalized with the First Amendment to the City of Apopka/Orange County Amended and Restated Water, Wastewater, and Reclaimed Water Territorial Agreement approved by the Orange County Board of Commissioners and Apopka

City Council in March 2006. Closing documents were finalized in April 2006. In March 2006 the City of Apopka/Zellwood Station Co-op Inc. Wholesale Potable Water and Wastewater Agreement was executed, whereas the Zellwood Station water and wastewater utility services are now provided by the City of Apopka. Under the terms of the agreement, the City generally provides water and wastewater service to areas inside the utility service area, City Territorial Area, and Orange County generally provides service to those areas located outside the service area, Adjacent Territorial Area. There are certain exceptions, however. The County may also serve utility customers within the Adjacent Territorial Area even after they are annex into the City of Apopka. Currently there is a small area that is served by the County within the City limits. Water demands for this area are not calculated within the City of Apopka calculations because they are calculated within Orange County calculations.

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INTERGOVERNMENTAL COORDINATION ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL

To achieve the goals, objectives and policies of the Comprehensive Plan and further the appropriate goals and policies of the State Comprehensive Plan and the East Central Florida Regional Planning Council (ECFRPC) Strategic Regional Policy Plan (SRPP) through increased intergovernmental coordination.

Objective 1

The City shall continue to improve its level of coordination with Orange County Public Schools (OCPS) to ensure that sufficient school capacity is available to support proposed development and that necessary infrastructure is available to accommodate new schools.

Policy 1.1

The City and OCPS shall review opportunities to fund joint use recreational facilities located at school sites within the City.

Policy 1.2

The City of Apopka shall coordinate development plans for expansion of existing schools or development of new school facilities within the City to address issues such as the impact of facilities on adopted level of service (LOS) standards for public school facilities, potable water, sanitary sewer, stormwater management and solid waste services consistent with its interlocal agreement with OCPS.

Policy 1.3

The City and OCPS shall develop a publicity program, including but not limited to, such programs as public service announcements and The Apopka Horizon, to inform area residents of the joint use recreational facilities that are available to them

Policy 1.4

The City shall consider entering into an interlocal agreement with OCPS and the County to jointly plan and provide parks and recreation facilities.

Policy 1.5

The City shall coordinate with OCPS regarding the location of schools near or adjacent to public facilities, such as parks, libraries, community centers, etc.

Policy 1.6

As a member of the OCPS Technical Planning Committee, the City shall review OCPS model projections for consistency with the City's projections and, if necessary, shall recommend additions or modifications to the model results consistent with its interlocal agreement with OCPS.

Policy 1.7

The City shall provide projected development data to OCPS on a regular basis to assist in development of a long-range planning model to project student enrollment consistent with its interlocal agreement with OCPS.

Policy 1.8

The City shall designate a representative to serve on the OCPS Technical Planning Committee to discuss issues and formulate recommendations regarding the coordination of land use and schools consistent with its interlocal agreement with OCPS.

Policy 1.9

The City shall include a member of OCPS as an ex-officio member on the Local Planning Agency to comment on proposals that have the potential to increase residential density.

Objective 2

The City of Apopka will continue to coordinate and if needed complete execution of agreements with adjacent local governments to improve land use compatibility between the respective governments.

Policy 2.1

The City shall continue to pursue Joint Planning opportunities with Orange County outlining the following:

1. Establishment of a joint planning area for the purpose of annexation and identification of infrastructure service areas. The boundaries of the joint planning area would be

consistent with the small study areas referenced within the Future Land Use Element.

2. Agreement by the County for the City to include those unincorporated areas of the small study area within the City's Future Land Use Map, so long as the land uses for such lands are consistent with the Small Study Area Master Plans, which would be included in the Joint Planning agreement. The City would not exercise municipal jurisdiction over those lands unless they are annexed. The County Comprehensive Policy Plan would control those lands until annexed.

3. Agreement to coordinate the provision of utilities to avoid duplication/overlap of facilities and services.

4. Agreement to establish procedures for annexation, so that upon approval of an annexation ordinance, the City's comprehensive plan and Land Development Code shall apply. Concurrent with the annexation, the City may establish an initial zoning and rezone the annexed property consistent with the City comprehensive plan and the interlocal agreement.

5. Agreement that the areas within the small area study are logical candidates for annexation, provided they meet the provisions of Chapter 171, Florida Statutes.

6. Agreement to apply, where possible, to City development standards.

Policy 2.2

The City shall coordinate with Seminole County and Lake County, through interlocal agreements if necessary, to improve the notification process regarding new development proposals within one mile of the common boundary that may impact the other jurisdiction in the provision of public facilities.

Policy 2.3

The ECFRPC's conflict resolution process will be used for any disputes that can not be otherwise resolved.

Policy 2.4

The City of Apopka will coordinate with the City of Ocoee to provide for provisions establishing adjacent land use

compatibility; boundaries of future annexations; and a dispute resolution mechanism.

Policy 2.5

Should it become necessary to achieve the agreements described throughout the plan, the City of Apopka will utilize all possible enforcement mechanisms, including, but not limited to, formal and informal dispute resolution mechanisms, litigation and/or the administrative assistance of the appropriate state agencies.

Policy 2.6

The City, in cooperation with the County, will continue to implement and annually reevaluate its Joint Planning Area (JPA) Agreement. This Agreement is based largely upon an intent to protect the Wekiva River by providing for mutual cooperation, a joint future land use plan, clustering and open space protection provisions, adequate public facilities and services, limited residential densities, and limited non-residential uses.

Policy 2.7

The City will look for support and assistance from the Department of Health, the St. Johns River Water Management District, the Department of Environmental Protection, and the Wekiva River Basin Commission in implementing the Wekiva Parkway and Protection Act of 2004.

Policy 2.8

The City in Cooperation with the County shall evaluate and promote, if viable, the establishment of regional wastewater entity or program for facilities operations and planning within the Wekiva Study Area. The general purposes of the regional wastewater entity would be to minimize the number of septic systems, to minimize groundwater and surface water contamination, to maximize the reuse of reclaimed water, and to reduce future ground water demand through beneficial reuse.

Policy 2.9

The City shall prioritize in the Capital Improvements Element, the recommendations of the adopted Master Stormwater Management Plan prepared in collaboration with multiple jurisdictions and the Water Management District.

Objective 3

The City of Apopka shall maintain existing mechanisms, and establish new mechanisms where necessary to coordinate with adjacent jurisdictions to address issues regarding infrastructure and transportation impacts of new development that affects more than one jurisdiction.

Policy 3.1

The City of Apopka shall coordinate with Orange County, MetroPlan Orlando and the Florida Department of Transportation (FDOT) to monitor operating conditions of major roadways in and around the City of Apopka.

Policy 3.2

The City shall coordinate with the SJRWMD, FDEP, Federal Emergency Management Agency (FEMA) and other appropriate state and federal agencies that have jurisdictional authority or responsibility in the City to ensure that water quality, stormwater drainage and flood control measures are addressed consistent with impacts of development

Policy 3.3

The City shall continue to cooperate with other local governments, primarily through participation with the Orlando Metropolitan Planning Organization and the Orange-Seminole-Osceola Transit Authority, to secure additional sources of funding and coordinate facilities' improvements for all transportation needs throughout the metropolitan Orlando area.

Objective 4

The City of Apopka shall continue to work with other governmental and non-profit agencies to address housing and redevelopment issues.

Policy 4.1

The City of Apopka shall coordinate with Orange County and the East Central Florida Regional Planning Council in the development and dissemination of housing information for housing programs and shall partner with these and other non-profit agencies to develop regional housing programs to address affordable housing.

Policy 4.2

The City shall continue both formal and informal communication with appropriate state and regional agencies, such as the Department of Community Affairs (DCA) and the ECFRPC, to obtain information on specific programs, projects and legislation pertinent to local governments and to provide technical assistance for potential grant funding.

Policy 4.3

The City will continue to participate in the Small Cities Community Development Block Grant programs, as appropriate, and review its applicability on an annual basis.

Objective 5

The City of Apopka shall continue to coordinate with state water resource agencies to ensure better protection of the resources in the area.

Policy 5.1

Public potable water wellfields shall be protected from the incompatible lands uses; including but not limited to, such measures as minimum open space requirements, septic tank leachate and pesticide use.

Policy 5.2

The City of Apopka shall protect its potable water service by enforcing a wellhead protection zone, consisting of a 500' radius from the wellhead, in which potentially high risk land uses such as, but not limited to, industrial and manufacturing which use or store hazardous materials as defined by the U.S. Resource Conservation and Recovery Act and implemented by EPA are prohibited, consistent with FAC 62-521.200(7).

Policy 5.3

Upon receipt of the groundwater model data and a model wellfield protection ordinance being developed through a cooperative effort among Orange County, its cities and the SJRWMD, the City will amend the Comprehensive Plan and the Land Development Code to be consistent with those recommendations.

Policy 5.4

The City shall ensure that SJRWMD is provided an opportunity to comment on proposed developments as early as possible in the land development review process.

Policy 5.5

The City shall regularly review its Land Development Code to ensure compliance with the appropriate provisions of the Wekiva River Protection Act applicable to the City.

Policy 5.6

The City shall support and coordinate with the ECFRPC, the SJRWMD, and other agencies participating in the Lake Apopka Planning Initiative, to address the following:

1. Proposed parks.
2. A proposed boulevard.
3. Proposed trails around Lake Apopka.

Policy 5.7

The City shall ensure its stormwater management, aquifer recharge, and reuse water policies and projects are consistent with the goals of the SJRWMD Lake Apopka Surface Water Improvement and Management (SWIM) Plan and the Upper Ocklawaha River Basin SWIM Plan to protect or enhance water quality and natural systems.

Policy 5.8

The City shall coordinate appropriate activities with the FDEP, SJRWMD (including consistency with the District’s ERP and CUP rules) and Orange County to effectively manage the preservation and protection of surface and ground water quality and quantity, and aquifer recharge areas.

Policy 5.9

The City shall coordinate appropriate activities with the plans, programs and administered legislative actions of FDEP and Orange County to implement proper operation, storage and disposal of both solid and hazardous waste.

Policy 5.10

The City shall coordinate with existing resource protection plans of other government agencies and entities, including the FDEP, SJRWMD and Orange County, to appropriately conserve and manage natural areas and open space.

Objective 6

The City of Apopka will continue to further the appropriate goals and policies of the State Comprehensive Plan and the ECFRPC Strategic Regional Policy Plan (SRPP) through amendments to the Apopka Comprehensive Plan.

Policy 6.1

Amendments to the Apopka Comprehensive Plan will include an evaluation of effects on the appropriate policies of the State Comprehensive Plan and the SRPP.

Policy 6.2

The City of Apopka shall continually review the implementation of its Land Development Code and public facilities systems to ensure that the appropriate policies of the State Comprehensive Plan and the SRPP are implemented.

Objective 7

The City shall continue to participate in water and sewer service area agreements and a solid waste disposal agreement with Orange County through implementation of the current agreements.

Policy 7.1

The City shall continue to participate in the Interlocal Solid Waste Agreement with Orange County.

Policy 7.2

The City of Apopka shall continue to implement its Utility Service Area Agreement with Orange County for water and sewer service provision. The City will function as the primary provider for potable water service, reclaimed water and wastewater services within the City and within areas of unincorporated Orange County that lie within the City's utility service areas. The County will continue to serve

potable water service, reclaimed water and wastewater services within the Adjacent Territorial Area even after they are annex into the City of Apopka, as defined in the City of Apopka/ Orange County Amended and Restated Water, Wastewater and Reclaimed Water Territorial Agreement.

Policy 7.3

The City shall participate in the development of updates to the SJRWMD's Water Supply Assessment and District Water Supply Plan and in other water supply development-related initiatives facilitated by SJRWMD that affect the City.

Objective 8

Upon adoption of the Plan, the policies, objectives, capital improvement projects, including facility master plan studies, and/or the level of service standards shall not be revised without completion of the plan amendment process required by Chapter 163, Florida Statutes.

Policy 8.1

The City shall provide the adjacent local governments, the ECFRPC and the affected state agencies with an opportunity to provide comment regarding all proposed plan amendments consistent with State Statutes.

Policy 8.2

The evaluation format for a plan amendment shall be reviewed annually by the Community Development Department to ensure that it includes, at a minimum, an analysis of the proposed amendment's impacts on the Apopka Comprehensive Plan and affected governmental entities. The combined effect of all the proposed amendments, as may be appropriate, and shall include findings of fact for each proposed plan amendment. The evaluation format shall be designed so as to include the actions of each preceding body in the report for reference by subsequent bodies.

Policy 8.3

The Community Development Department shall prepare the departmental evaluation of all plan amendment applications received by established deadlines and shall provide copies of this evaluation to the applicants, the Local Planning Agency, the adjacent local governments, the affected state agencies and the ECFRPC consistent with State Statutes.

Policy 8.4

The Local Planning Agency, consistent with State Statutes shall, after proper public notice, consider each proposed amendment separately and make separate recommendations to the Apopka City Council regarding each proposed amendment.

Policy 8.5

The Local Planning Agency, after due public notice as required by Chapter 163.3184 and 163.3187, shall hold a public hearing to consider each proposed plan amendment and shall make recommendations to the City Council for each proposed amendment.

Policy 8.6

The City Council, after due public notice as required by Chapter 163.3184 and 163.3187, shall hold a public hearing to consider each proposed plan amendment and shall take preliminary actions regarding each proposed amendment prior to forwarding the actions to the Department of Community Affairs (DCA) for its review and comment.

Policy 8.7

Upon receipt of the DCA Objections, Recommendations and Comments report, the City Council shall hold a public hearing, after due public notice as required by Chapter 163.3184 and 163.3187, to consider final adoption of the proposed plan amendments. All interested parties, including, but not limited to, the appropriate state agencies, the ECFRPC, and the adjacent local governments, shall receive a copy of the DCA report consistent with Florida Statutes.

Policy 8.8

The proposed plan amendments shall be considered final upon receipt of the Notice of Intent to find the proposed plan amendment in compliance with the requirements of Chapter 163, Florida Statutes.

Objective 9

Objectives and Policies of the Apopka Comprehensive Plan which cite sections of the Florida State Statutes or the Florida

Administrative Code shall be consistent with the referenced sections of the Statutes or Administrative Code.

Policy 9.1

Objectives and Policies of the Apopka Comprehensive Plan which adopt sections of Florida State Statutes or the Florida Administrative Code shall be evaluated annually to determine if amendments to the Plan are appropriate.

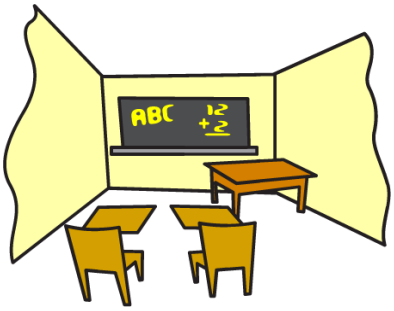
CHAPTER 9

PUBLIC PARTICPATION

ENTIRE CHAPTER DELETED

Chapter 10

Public Schools Facilities Element



PUBLIC SCHOOLS FACILITIES ELEMENT

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PUBLIC SCHOOLS FACILITIES ELEMENT

PREFACE / INTRODUCTION

The State of Florida's 1985 Growth Management Act (1985 Act) introduced the concurrency principle throughout the state by requiring that adequate public services and facilities be in place prior to the approval of new development. The 1985 Act identified sanitary sewer, solid waste, drainage, potable water, parks and recreation, and transportation facilities as facilities subject to concurrency. Consistent with the 1985 Act, a local government may approve new development only if infrastructure is available, or will be available, to sufficiently absorb the impacts of new development. A Level of Service (LOS) is adopted for each of the facilities and is the mechanism by which the capacity is measured.

The 2005 Growth Management Reform Act, commonly referred to as Senate Bill 360 (SB 360), mandates that all non-exempt Florida jurisdictions add public schools as a facility subject to concurrency. Consequently, the approval of new residential development becomes contingent upon available school capacity measured, in part, against an adopted LOS for public schools. Per the legislation, adequate school capacity is considered to be available if the needed school facilities are currently available or scheduled for construction within three (3) years of the development's final approval. If capacity is not available, SB 360 permits mitigation in the form of a proportionate share payment/allocation.

The technical components of this amendment have been developed through an ongoing collaborative process amongst Orange County Public Schools (OCPS), Orange County, and the non-exempt municipalities within Orange County. OCPS facilitated the process through the creation of the Technical, Stakeholders, Policy, and Legal Committees.

In addition to amending each municipalities' Comprehensive Plan, SB 360 requires that each local government enter into an interlocal agreement (ILA) with OCPS. The ILA will ensure that school concurrency is uniformly implemented throughout Orange County.

GOAL 1: IMPLEMENT A COUNTY WIDE SCHOOL CONCURRENCY PROGRAM

The City of Apopka (the City) shall establish plans, regulations and programs, in conjunction with Orange County Public Schools (OCPS), to facilitate the future availability of public school facilities to serve residents, consistent with the adopted level of service for public schools and with State of Florida concurrency statutes and regulations.

Objective 1: Level of Service Standards

The City shall coordinate with Orange County Public Schools (OCPS) to implement a Concurrency Management System that ensures adequate classroom capacity to accommodate the impacts of new residential development throughout the planning period. This objective shall be measurable through the associated policies, below.

Policy 1.1 The Concurrency Management System shall include standards and procedures to ensure that new residential development complies with the Level of Service (LOS) Standards provided in the Interlocal Agreement between Orange County Public Schools (OCPS) and the City and the adopted Capital Improvements Element. The adopted LOS shall be used to determine the available capacity of elementary, middle and high schools within the designated Concurrency Service Area (CSA). The adopted LOS, except for backlogged facilities, shall be as follows:

Elementary School LOS – 110% of Adjusted FISH Capacity
K through 8 – 110% of Adjusted FISH Capacity
Middle School LOS – 100% of Adjusted FISH Capacity
High School LOS – 100% of Adjusted FISH Capacity

Backlogged facilities should reference Capital Improvements Element 2.1.g.

Policy 1.2 The adopted Level of Service (LOS) must be achieved in all Concurrency Service Areas (CSAs) by April 1, 2013, except for deficient CSAs where improvements are needed to achieve adequate classroom capacity as specifically identified in the Orange County Public Schools Ten-Year District Capital Outlay Plan for funding by April 1, 2018; for the aforementioned deficient CSAs, the adopted LOS must be achieved by April 1, 2018.

Policy 1.3 The City shall support Orange County Public Schools efforts to initiate any of the following strategies to ensure compliance with adopted Level of Service (LOS) standard.

a) Building new schools to relieve over-capacity schools in CSA that exceed the adopted LOS,

b) Renovating over-capacity schools to add permanent capacity and replace on-campus portables,

c) Rezoning students from over-capacity schools to under-capacity schools,

d) Moving special programs from over-capacity schools to under-capacity schools to utilize excess permanent capacity where it exits.

Policy 1.4 The City shall utilize the Orange County Public Schools (OCPS) calculation of school capacity, which is determined annually by OCPS using the Adjusted Florida Inventory of School Houses (FISH) Capacity for each school within each Concurrency Service Area (CSA) within the school district. Adjusted FISH Capacity shall be defined as the Permanent FISH Capacity, adjusted to include the design capacity of modular ("in-slot") schools, not to exceed the adopted Core Capacity for that school.

Policy 1.5 The student generation rate shall be defined as the estimated number of elementary, middle and high school students generated by a single unit of residential development, as calculated by Orange County Public Schools using a GIS analysis to determine the ratio of current students to existing residential unit by residential development type.

Policy 1.6 The City shall support Orange County Public Schools' (OCPS's) efforts to meet adopted Level of Service (LOS) standards through the adoption of a Ten-Year financially feasible District Capital Outlay Plan (DCOP). Where the LOS cannot be achieved through the construction of new school capacity as provided in the Ten-Year DCOP, the City shall cooperate with OCPS's efforts to adopt a long range Ten-Year District Capital Outlay Plan as part of the OCPS's annual capital planning process.

Policy 1.7 Where adequate school facilities will be in place, or under actual construction within three (3) years after the issuance of final subdivision or site plan approval, or the functional equivalent, the City shall not deny an application for site plan approval, final subdivision approval, or the functional equivalent thereof, for any development, or phase of a development, that includes residential uses, based solely on failure to achieve and maintain the adopted Level of Service in a Concurrency Service Area.

Policy 1.8. The City, in conjunction with Orange County Public Schools, shall review Level of Service standards for public school facilities annually, and any changes to those standards shall be processed as amendments to the City's Capital Improvements Element.

Policy 1.9 A development shall be deemed to meet concurrency if there is sufficient capacity in the Concurrency Service Areas (CSA) where the development is located or where sufficient capacity exists in one or more contiguous CSAs, so long as the Level of Service (LOS) in the adjacent zone does not exceed 95% of the adopted LOS, or when the LOS for the specific school type when considered countywide does not exceed 100% of the Adjusted Florida Inventory of School Houses (FISH) capacity, and approval of the Development does not result in a violation of a court ordered desegregation order.

Policy 1.10 Proposed developments of five (5) single-family, or seven (7) multi-family dwelling units, on an existing platted lot shall be considered de minimis and therefore exempt from concurrency determination. For the purposes of school concurrency, a single-family dwelling unit shall be defined as one dwelling unit designed for occupancy by one family and not attached to any surrounding dwelling unit. A multi-family dwelling unit shall be defined as more than one dwelling unit located in the same building, a dwelling unit attached to one or more other dwelling units, or a mobile home.

Objective 2: The City of Apopka shall work in conjunction with Orange County Public Schools (OCPS), as OCPS annually updates and adopts School Concurrency Service Areas, which shall be used to evaluate capacity of schools available to accommodate students that may be generated by development.

Policy 2.1 Concurrency Service Areas are depicted in Maps 1 through 3, incorporated herein by reference.

Policy 2.2 Concurrency Service Areas (CSAs) shall be reviewed annually in conjunction with the Orange County Public Schools adoption of a updated Five-Year and Ten-Year District Capital Outlay Plan (DCOP). CSA boundaries may be adjusted to ensure that the utilization of school capacity is maximized to the greatest extent possible, taking into account transportation costs, court approved desegregation plans, and other factors.

Objective 3 The City and Orange County Public Schools shall develop and maintain, throughout the planning period, a joint process for the implementation of school concurrency as provided for in the adopted Interlocal Agreement.

Policy 3.1 The City shall not approve a developer-initiated Comprehensive Plan amendment or rezoning that would increase residential density on property that is not otherwise vested until such time as Orange County Public Schools has determined whether sufficient capacity will exist at the time of the proposed change, or a capacity enhancement agreement is executed that provides for the needed capacity to accommodate the proposed development.

Policy 3.2 The City will determine if a development is vested or exempt from school concurrency. Unless the development is determined to be vested or exempt from concurrency, the City shall not approve a residential development plan, plat, or its functional equivalent, until a concurrency determination has been conducted by Orange County Public Schools and a Concurrency Certificate has been issued for the development consistent with the provisions of the adopted Interlocal Agreement.

Policy 3.3 For DRIs that include residential development that meets or exceeds the residential threshhold for DRIs, the City shall include Orange County Public Schools planning staff on the review team for the DRI, and shall ensure that DRI Development Orders, and DRI Development Order amendments that increase the total number of residential dwelling units, address the issue of school capacity. Where existing school capacity is exceeded, mitigation for school impacts shall be included in any mitigation agreements, Development Orders and agreements.

GOAL 2: MAINTAIN A HIGH QUALITY EDUCATIONAL SYSTEM FOR THE CURRENT AND FUTURE RESIDENTS OF APOPKA THROUGH COORDINATED EFFORTS WITH ORANGE COUNTY PUBLIC SCHOOLS, AS PROVIDED IN THE ADOPTED INTERLOCAL AGREEMENT.

Objective 4 The City shall coordinate and cooperate with Orange County Public Schools throughout the planning period to review and maintain procedures established in the adopted Interlocal Agreement.

Policy 4.1 The locations of existing school facilities and ancillary plants are depicted in Maps 7 through 10.

Policy 4.2 Pursuant to the adopted interlocal agreement, the City shall participate in the Technical Planning Committee comprised of representatives from the City, other Orange County Municipalities, Orange County Public Schools (OCPS) and the Regional Planning Council to discuss issues of mutual concern. Pursuant to the interlocal agreement, OCPS shall be responsible for making meeting arrangements, providing notification and maintaining a written summary of meeting actions.

Policy 4.3 The City shall attend the Orange County Public Schools Technical Planning Committee meetings and participate in discussions regarding coordination of land use and school facilities. The City will contribute to the specific areas addressed by the Committee including:

a) Short and long-range planning, population and student projections, and future development trends;

b) Co-location and joint-use opportunities, and ancillary infrastructure improvements needed to support the school facilities and ensure safe student access to schools;

c) Planning for needed supporting infrastructure for schools such as utilities, roads, sidewalks, etc.;

d) The need for new schools to meet the adopted Level of Service within the adopted Concurrency Service Areas and the coordination of annual revisions to the Ten Year District Capital Outlay Plan; and

e) Updates of the City's Capital Improvements Element for inclusion in the City's Comprehensive Plan.

Policy 4.4 The City shall provide an update of approved developments, phases of development and estimated build-out by phase to the Orange County Public Schools Planning Department on an annual basis.

Policy 4.5 The City shall review Orange County Public Schools (OCPS) generated future enrollment and growth projections on an annual basis and provide input to the OCPS Planning Department.

Objective 5 The City shall, throughout the planning period, coordinate with Orange County Public Schools the siting of new public schools to ensure public school facilities: are appropriately located to address the needs of future residential development; are coordinated with necessary services and infrastructure development; provide for safe learning environments; and are consistent with the City's adopted Future Land Use Map and with the other provisions of the Comprehensive Plan.

Policy 5.1 The proposed locations for future schools are depicted in Maps 4 through 6, incorporated herein by reference.

Policy 5.2 Applications for Future Land Use Map amendments, rezonings, conditional use/special exceptions and site plans associated with schools shall be given priority status. Orange County Public Schools shall not be required to pay application fees or impact fees for the development of public school facilities, consistent with State laws.

Policy 5.3 The City shall protect existing schools from the intrusion of incompatible land uses through the development review process.

Policy 5.4 In an effort to enhance local communities and neighborhoods, the City will participate with Orange County Public Schools in the school siting, design and development process so that the school serves as a focal point for the community and is compatible with the Future Land Use Map and with land uses surrounding proposed school sites.

Policy 5.5 Where feasible, Orange County Public Schools and the City shall work jointly to co-locate public facilities such as parks, libraries, and community centers with public schools. Where such co-location occurs, both entities may establish an ongoing management relationship via written agreement that permits the school's use of the public facilities and the public's use of school facilities for community meetings and sports activities.

Policy 5.6 In accordance with Section 1006.23, Florida Statutes, and as funding permits, the City shall provide construction of sidewalks along roadways and trails connecting neighborhoods that are within two miles of schools to the school facility. Orange County Public Schools shall be responsible for the construction of sidewalks and trails on school property and shall provide connections to existing and future sidewalks and trails identified by the City.

Policy 5.7 Turn lanes and signalization shall be provided at school entrances and at other locations near schools where warranted, to provide safe access to students and the public. Responsibility for construction of school-related signalization and road construction at school entrances shall be the responsibility of Orange County Public Schools.

Policy 5.8 Orange County Public Schools shall coordinate with the City in the construction of new public school facilities and in rehabilitation of existing public school facilities to serve as emergency shelters as required by Section 1013.372, Florida Statutes.

MAP 1

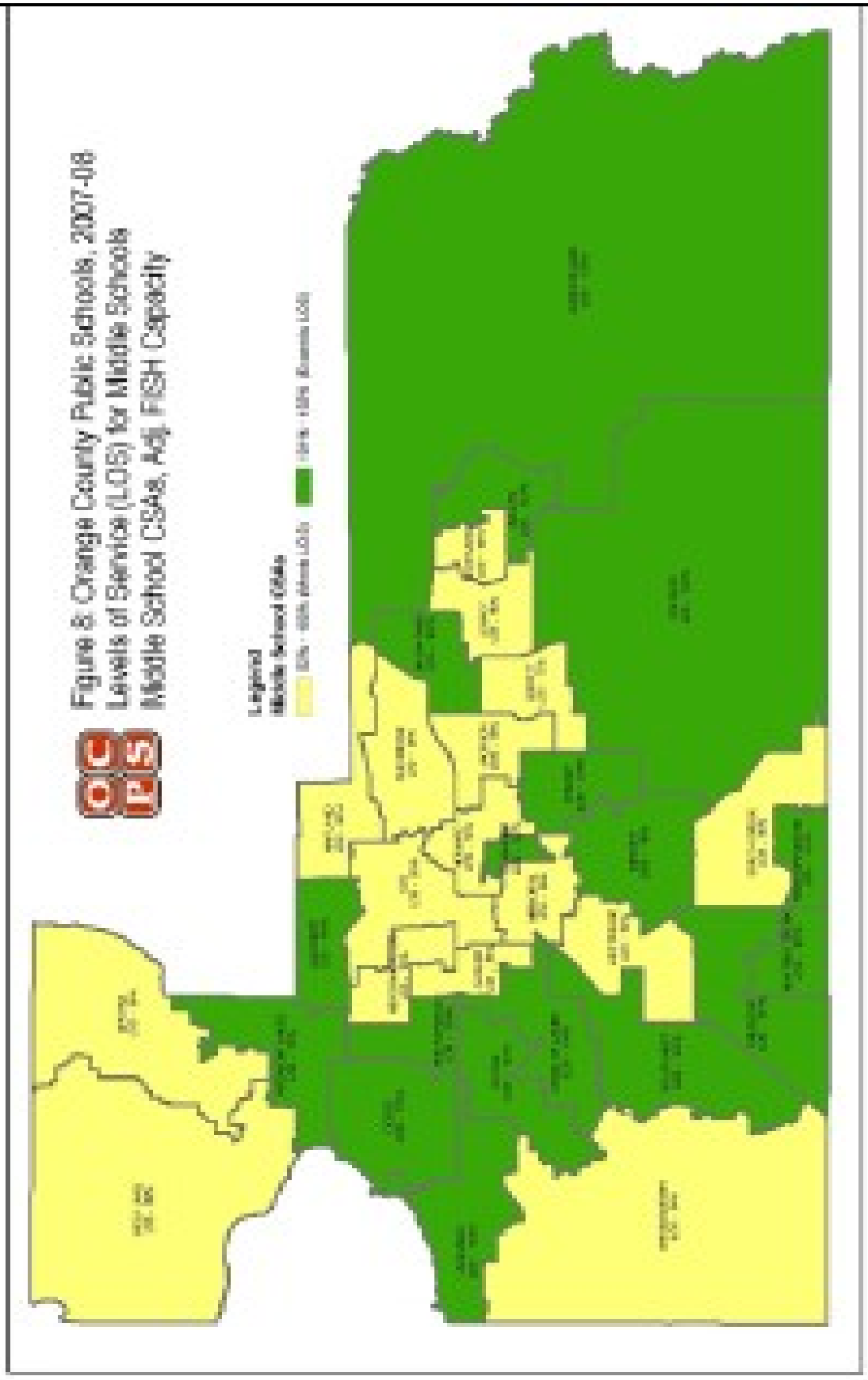


Figure 6: Orange County Public Schools, 2007-08
Levels of Service (LOS) for Middle Schools
Middle School CSAs, Adj. FISH Capacity
Legend
Middle School CSAs

MAP 2

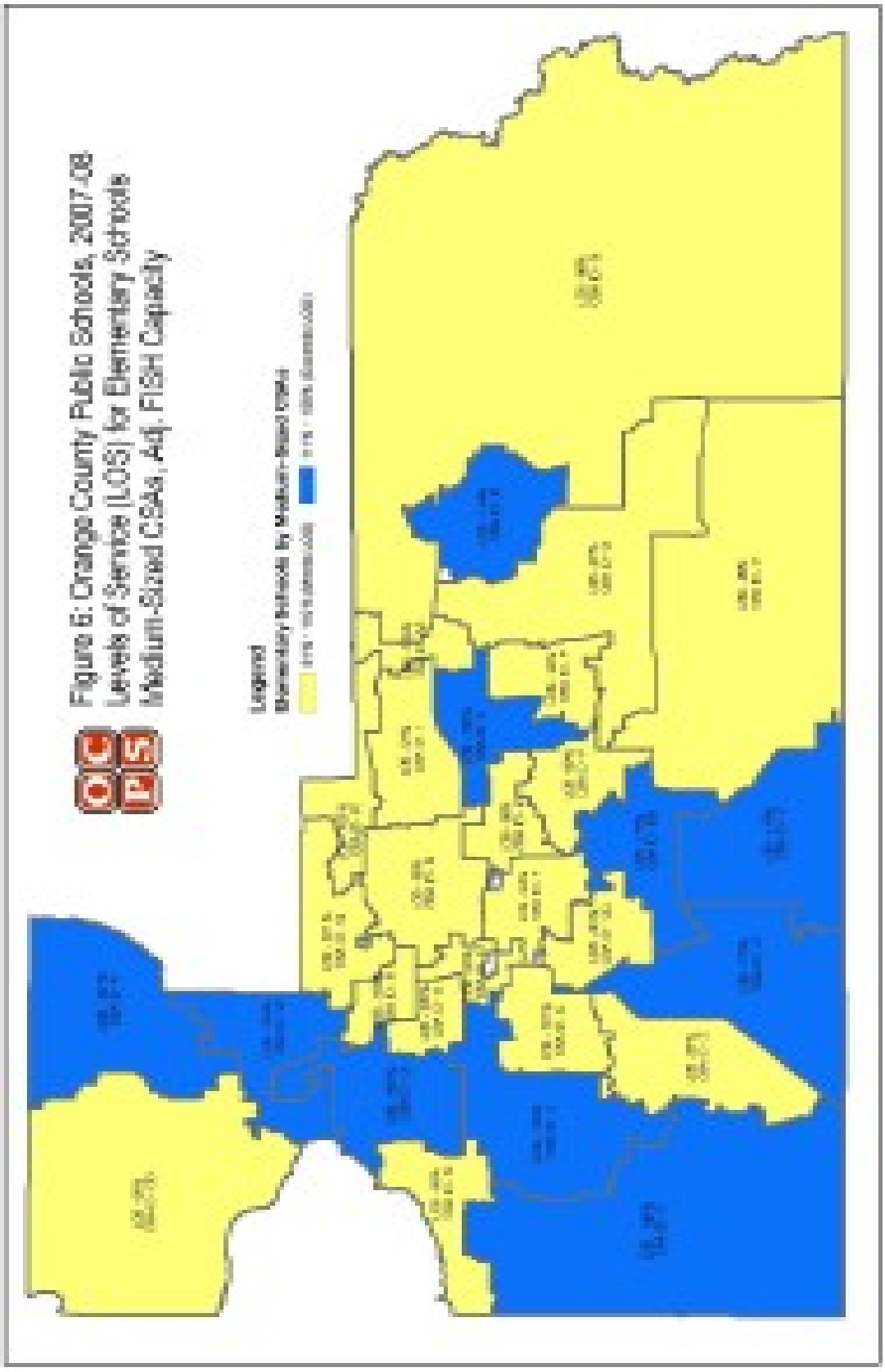


Figure 6: Orange County Public Schools, 2007-08
Levels of Service (LOS) for Elementary Schools
Medium-Sized CSAs, Adj. FISH Capacity
Legend

MAP 3

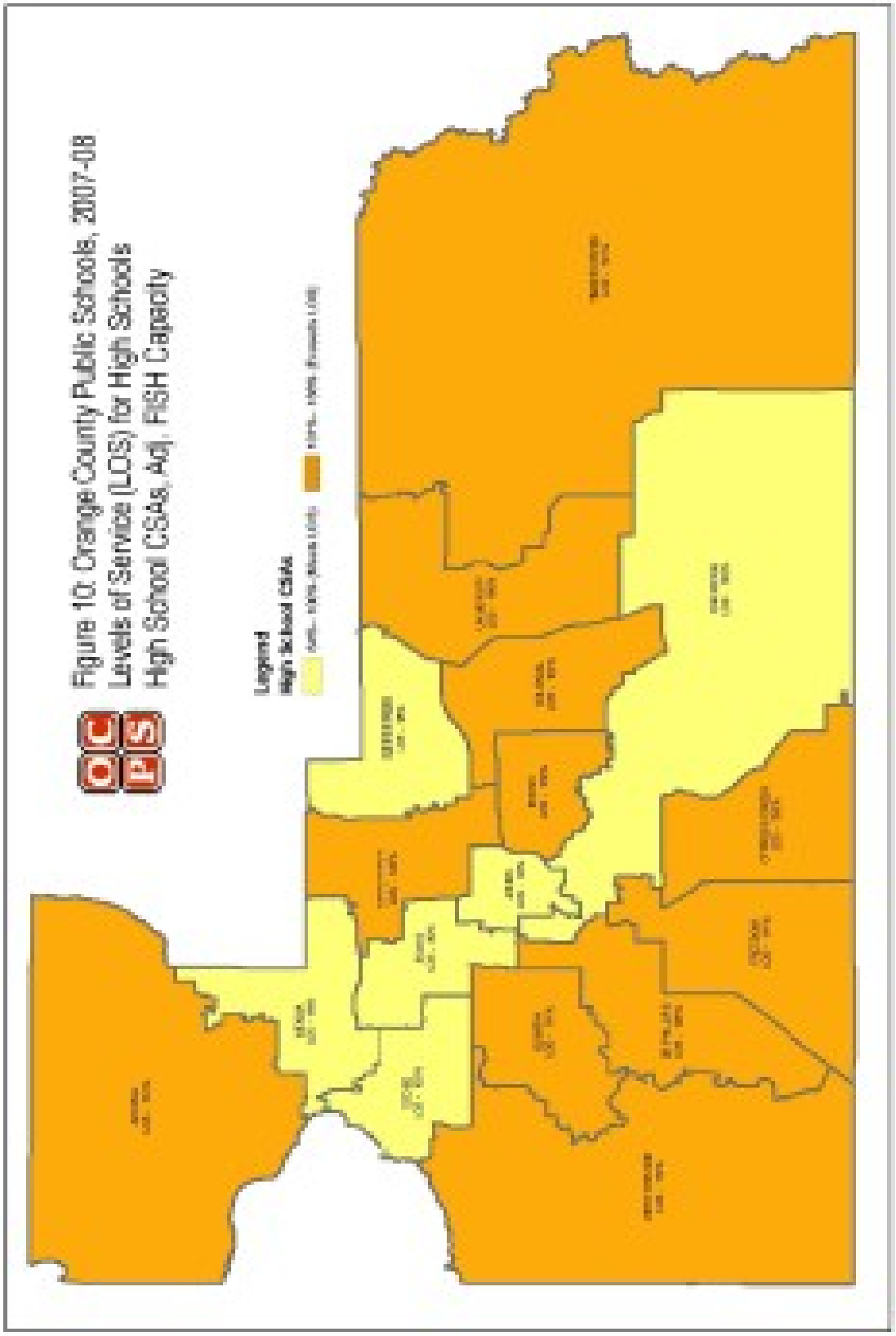
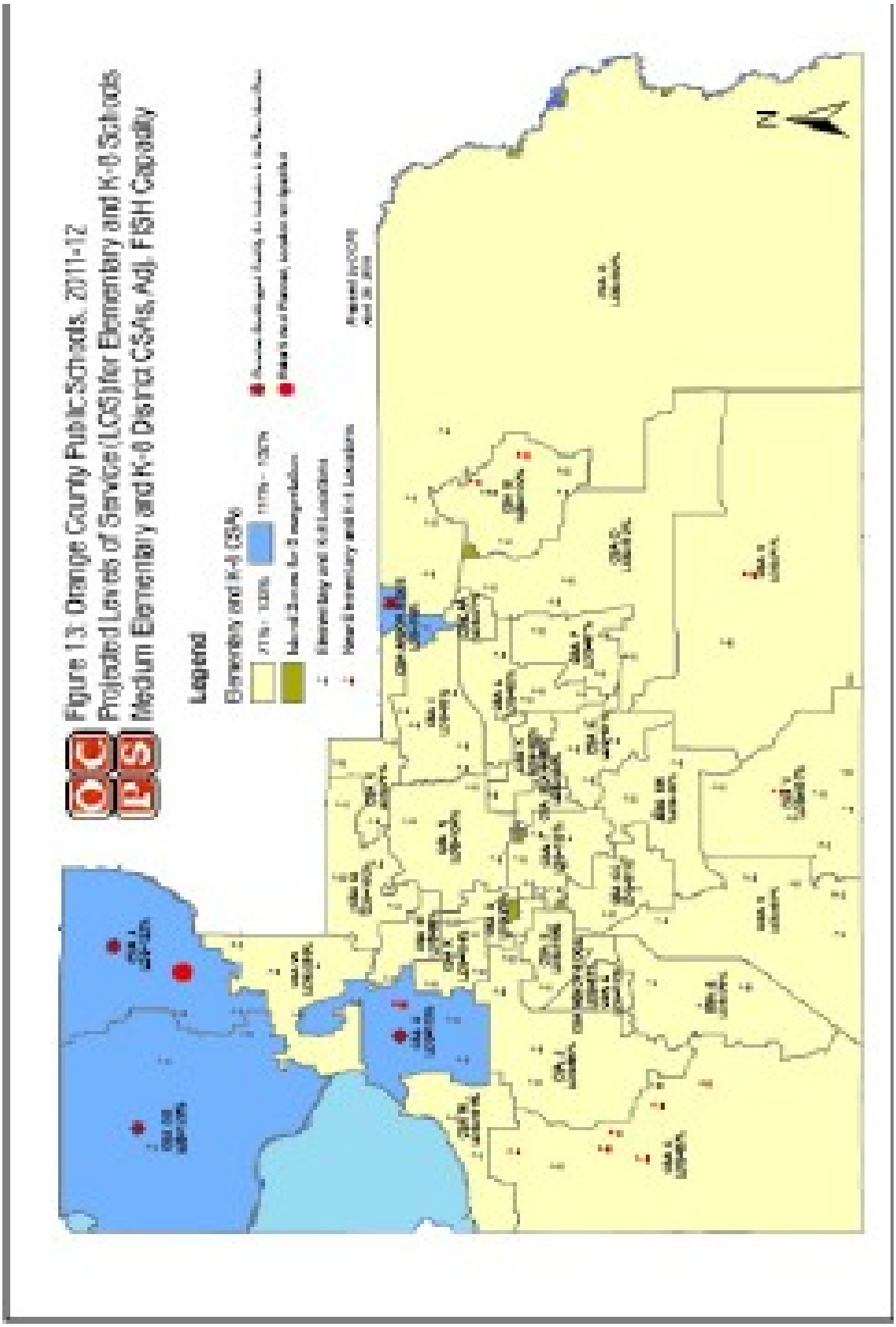


Figure 10: Orange County Public Schools, 2007-08
Levels of Service (LOS) for High Schools
High School CSAs, Adj. FISH Capacity
Legend
High School CSAs

MAP 4


OC
PS
Figure 13: Orange County Public Schools, 2011-12
Projected Levels of Service (LOS) for Elementary and K-8 Schools
Medium Elementary and K-8 District CSFHs Adj. FISH Capacity
Legend
Elementary and K-8 (SFH)
N

MAP 5

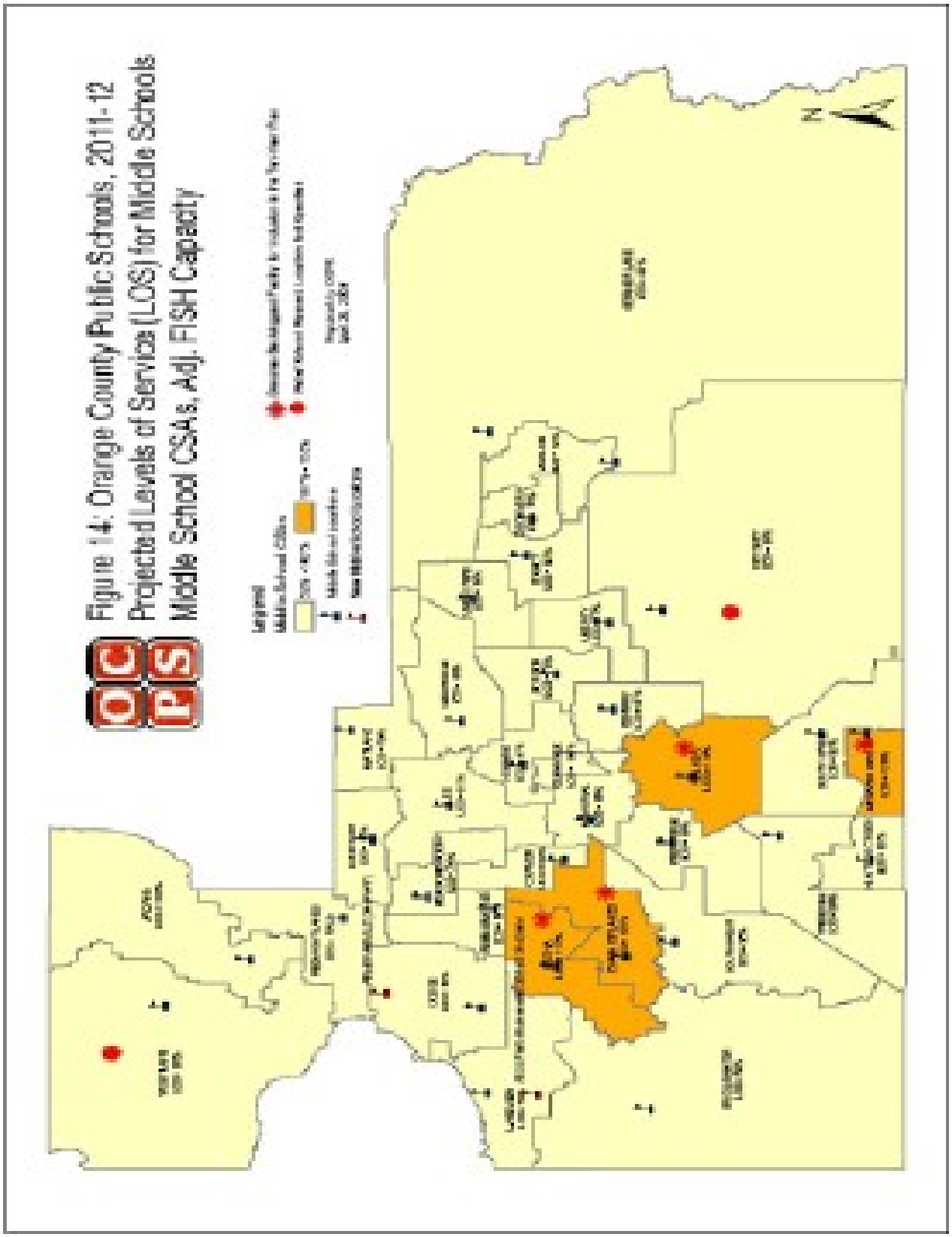


Figure 14: Orange County Public Schools, 2011-12
Projected Levels of Service (LOS) for Middle Schools
Middle School CSA's, Adj. FISH Capacity
OCPS

MAP 6

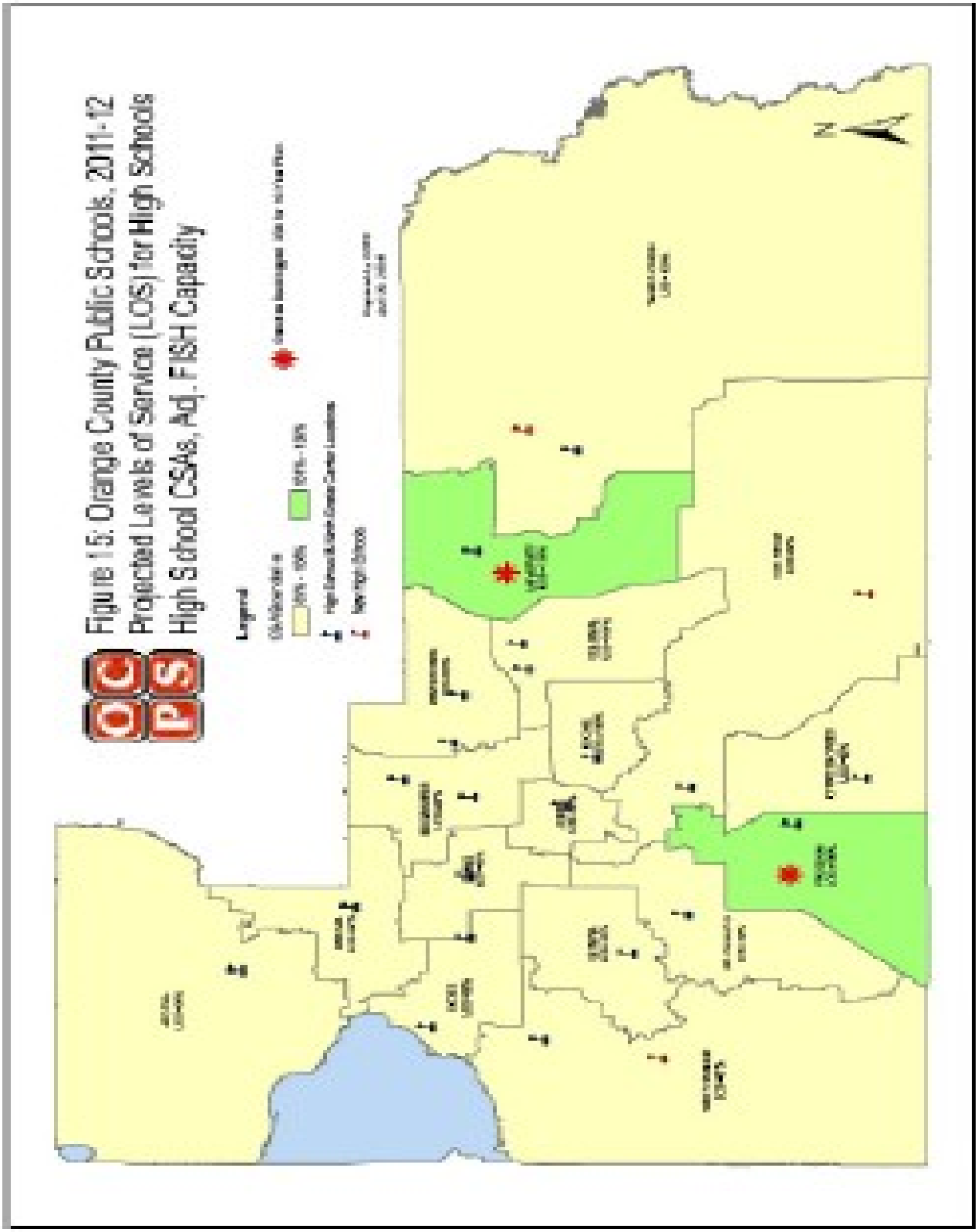


Figure 15: Orange County Public Schools, 2011-12
Projected Levels of Service (LOS) for High Schools
High School CSAs, Adj. FISH Capacity
Legend

MAP 7

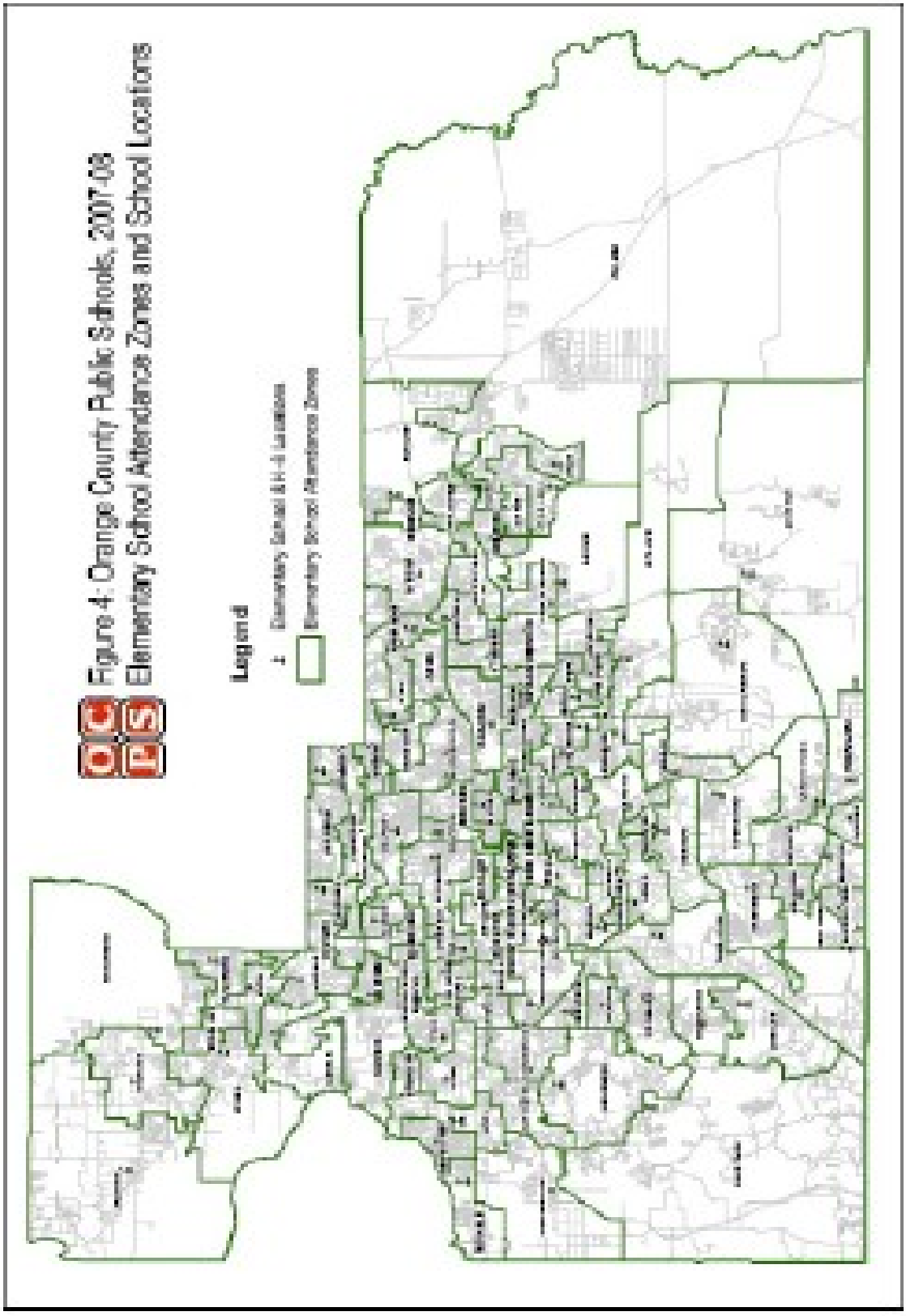


Figure 4: Orange County Public Schools, 2007-08
Elementary School Attendance Zones and School Locations
Legend
Elementary School Attendance Zones

MAP 8

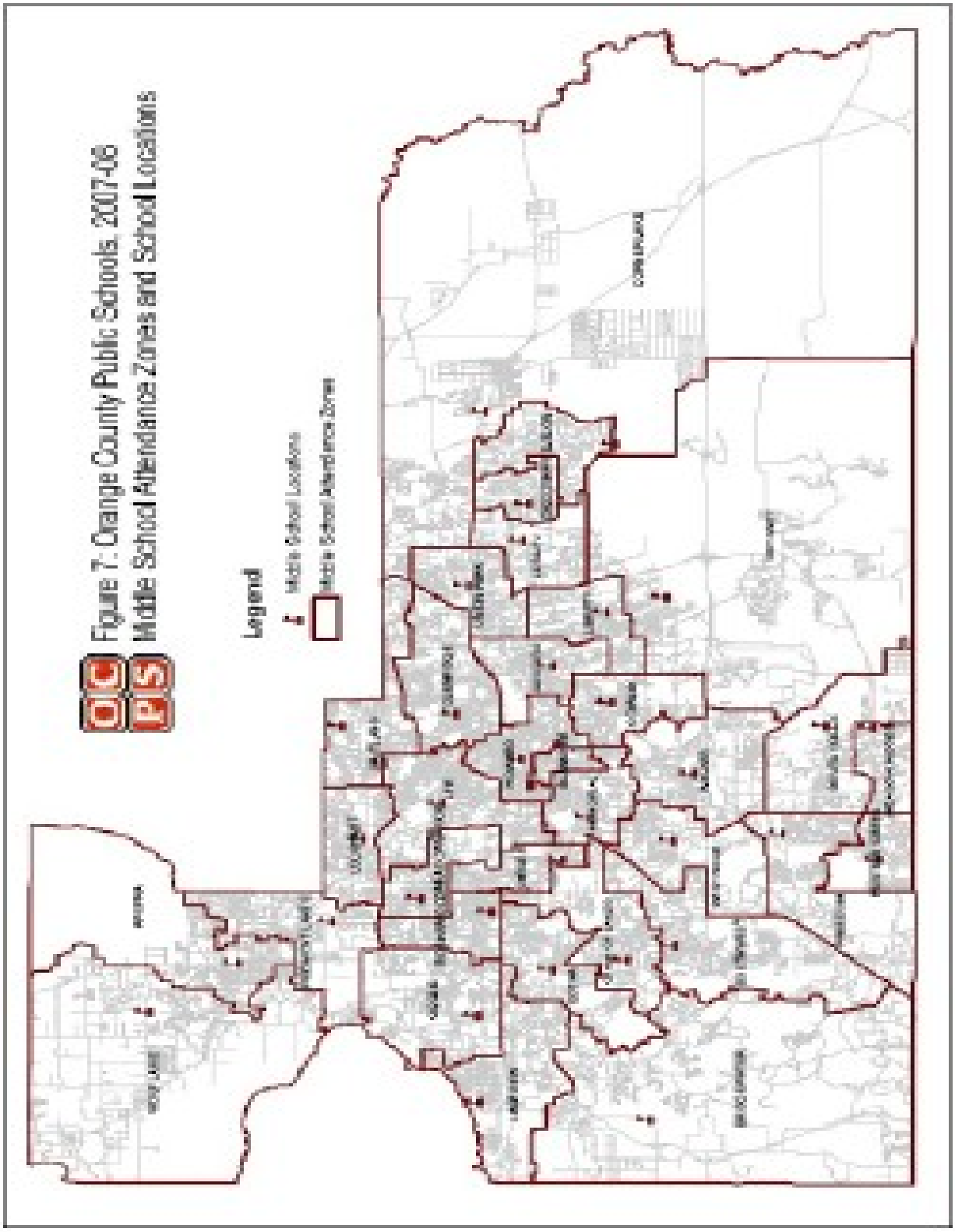


Figure 7. Orange County Public Schools. 2007-08
Middle School Attendance Zones and School Locations
Legend
Middle School Locations
Middle School Attendance Zones

MAP 9

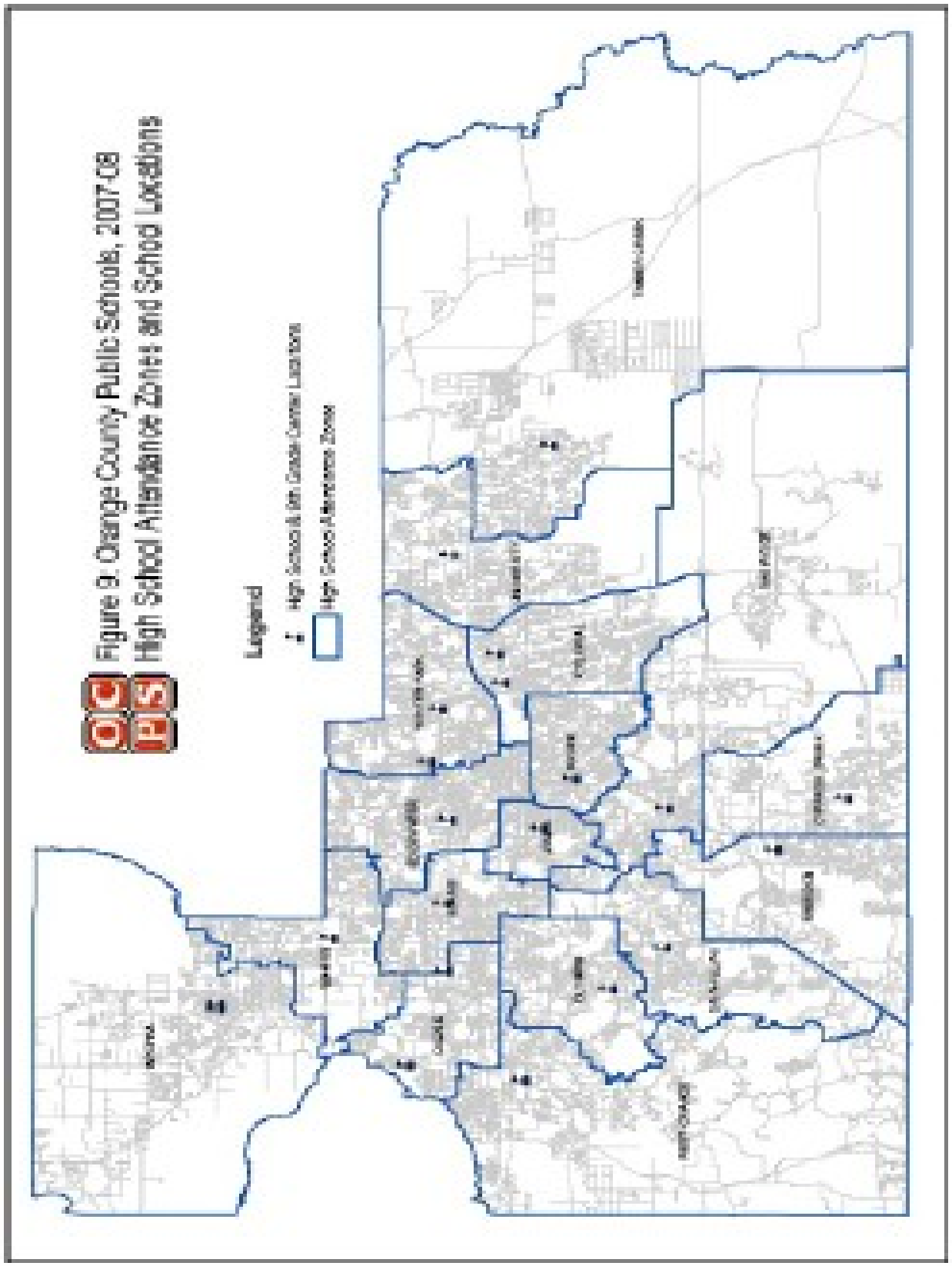
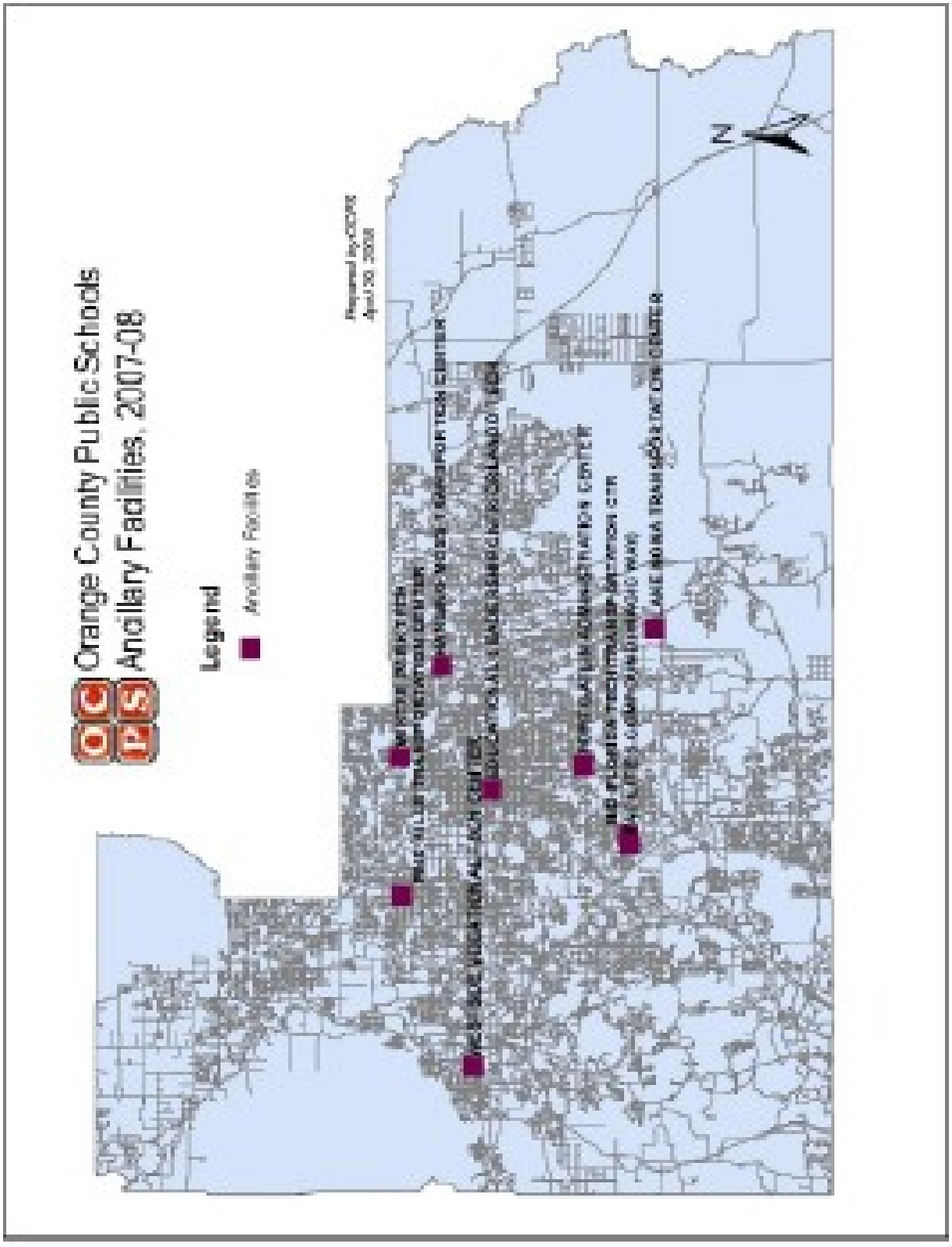


Figure 9: Orange County Public Schools, 2007-08
High School Attendance Zones and School Locations
OCPS
HS
Legend
High School Attendance Zones
High School Locations

MAP 10


Orange County Public Schools
Ancillary Facilities, 2007-08
Legend
Ancillary Facilities
N

Apopka City Council Discusses Comprehensive Plan Rewrite, Mixed-Use Development, and Affordable Housing

Meeting Metadata

The Apopka City Council recently held a meeting to discuss updates to the city's comprehensive plan and land use policies, focusing on mixed-use development, the preservation of rural areas, and the challenges of affordable housing.

Meeting Overview:

0:00 The meeting began with a workshop involving the Planning Commission and the City Council to gather input on the comprehensive plan rewrite. This crucial document, mandated by Florida Statute 163.31771, sets the policy foundation for local planning and land use decisions. Michelle Morrison from the East Central Florida Regional Planning Council elaborated on the history and legal requirements for comprehensive plans in Florida, emphasizing the importance of resilience and sustainability in the plan. The rewrite initiative, which began in late 2021, aims to modernize regulations and align them with current statutes and community needs. Projections estimate Apopka's population will reach approximately 83,000 by 2040, necessitating updates to the plan to accommodate future development and infrastructure needs.

22:35 A significant portion of the meeting was dedicated to discussing a shift toward mixed-use development and increased residential and industrial land usage. This shift aims to reduce reliance on automobiles by enhancing walkability through mixed-use areas, which could include residential and commercial spaces in closer proximity. Approximately 625 policies were reviewed, focusing on new policies regarding Community Redevelopment Areas (CRA), brownfields, and annexation. The housing element of the plan projects a need for about 27,000 housing units by 2040 to accommodate population growth, with current stock

around 16,000 units. Emphasis was placed on providing diverse housing options, particularly for marginalized populations, as approximately 25% of Apopka's residents are renters.

The conservation element aims to protect natural resources while ensuring water quality and minimizing threats to wetlands. Policies include maintaining upland buffers, preserving native vegetation in floodplains, and habitat preservation for designated species. The capital improvement element outlines mechanisms to finance necessary infrastructure, proposing new policies related to water-related facilities and regional transportation improvements. The infrastructure element consolidates various public service sub-elements to enhance efficiency and minimize costs, addressing levels of service and the timing of facility master plans.

Concerns were raised regarding the inclusion of stormwater facilities in the designation of open space. The discussion acknowledged the importance of ensuring that open space is genuinely accessible and usable by residents. Another point of contention was the sequence of updates to the comprehensive plan and the land development code, with some questioning why the land development code had been updated in 2019 prior to the comprehensive plan revision. It was asserted that the comprehensive plan serves as a policy document guiding the land development code.

▶ 45:59 Connectivity and the preservation of rural areas were also discussed, with specific policies in place to limit density in rural regions. An example was provided regarding a four-lot development request for two units per acre, which was denied to maintain the rural character. The comprehensive plan is designed to address suburban sprawl by capping density and requiring planned unit developments (PUDs) to include a mix of residential and non-residential uses along with public benefits. The provision of parks and recreation facilities was highlighted, with suggestions for improvement including analyzing park scores and walking distances to parks. The consensus was that pocket parks in new developments often cater to limited uses and do not serve the broader community effectively.

Public notification for new developments was another topic of discussion, with concerns about the adequacy of notifying only residents within 300 feet of a proposed development. The need for developers to create communities that promote walkability and connectivity to essential amenities was emphasized. The

integration of cycling infrastructure within the city's development plans was also discussed, with concerns about the safety of cyclists on roads without designated bike lanes.

▶ 1:02:27 The authority granted to the community development director to approve uses not listed in the Kelly Park interchange prompted concerns about bypassing the city council. The suggestion was made to strike this policy to ensure clarity in the use approval process.

Affordable housing was a point of debate, with developers indicating that the timeline for establishing affordable housing might extend to another 30 years. The disconnect between current housing costs and income levels was highlighted, noting that a six-figure salary is often necessary to secure a home in Florida. Rising rental costs were also a concern, with one example of a three-bedroom apartment costing $2,400 per month. The state-adopted "live local" initiative defines affordable housing as accessible to those earning 120% of the area median income, but many argued this effectively equates to market rate. The concept of "missing middle housing," which includes housing types like duplexes and triplexes, was noted as a potential solution.

The potential for the city to utilize surplus land for affordable housing initiatives was discussed, with a policy aiming to assess city properties suitable for higher residential densities and mixed-use development. Rising rents' impact on small businesses was also a concern.

Meeting Video Transcript

Note: This meeting summary was generated by AI, which can occasionally misspell names, misattribute actions, and state inaccuracies. This summary is intended to be a starting point and you should review the meeting record linked above before acting on anything you read. If we got something wrong, let us know. We're working every day to improve our process in pursuit of universal local government transparency.

Government Officials

Meeting Type:
City Council

Meeting Date:
09/10/2024

Duration:
79 Minutes

Notability Score:
Routine

Receive debriefs about local meetings in your inbox weekly:

Enter your email...

Enter your ZIP...

State:
Florida

County:
Orange County

Kimley»Horn

MEMORANDUM

To: Bobby Howell, City of Apopka

From: Kimley-Horn and Associates, Inc.

Date: 12/2/2024

Subject: Comprehensive Plan Peer Review

This memo provides the recommendations resulting from the review of Apopka's Comprehensive Plan. The draft Comprehensive Plan was evaluated for clarity and coherence, alignment with community goals, legal and regulatory compliance, and effectiveness and impact. Recommendations were guided by the goals established by staff and the needs highlighted in the Data and Analysis provided for each element.

Within each element, a new "Strategies/Action Items" section should be added to distinguish between policies to guide decision-making and actions that the City intends to take. Any action items that have been completed and are no longer relevant should be removed. This reorganization will help strengthen and clarify the document and ensure that City staff does not lose track of their specific goals.

General Comments

- Clarity:
  - Add a table of contents at the beginning of each element.
  - Spell out abbreviations the first time they are used in an element.
  - Revise any instances of "The City is encouraged to..," "It is recommended that the City…", or similar language. The comprehensive plan is the City's document. This should be simplified to "The City will/shall" or "The City will consider."
- Organization:
  - Organize policies in each section to mirror the organization of issues in the wording of the objectives or reorder objectives to match policy order.
  - Organize the objectives within each element/sub-element and the policies within each objective from more general and/or highest priority to more specific/lower priority.
  - Consider adding an implementation Objective to some Elements
  - Create a Strategies section at the end of each element, sub-element or objective for ease of tracking one-time or regularly recurring action items. Move policies or portions of policies to this section as appropriate and rename as "strategies" rather than policies.

DRAFT

- Quality control:
    - Inconsistency between numbers that are spelled out versus numerical.
    - Ensure consistent formatting – some policies are in bold, larger, and colored text without clear reason.
    - Manually spellcheck titles, as automated spellcheck will not address words in "All Caps."
    - Thorough check for grammar including missing or extra words and lack of pluralization.
- Consider eliminating use of "Conservation Area" to mean wetlands, consistent with Orange County's recent updates. Conservation Areas if used should refer either to upland habitat conservation areas or to both wetland and upland conservation areas.

DRAFT

Capital Improvements Element

Goal 1

- Establish a policy that allows an order of priority set by the City Administrator or City Council.
- Add a new policy to identify projects eligible for joint funding with other jurisdictions within the Capital Improvements Program (CIP) during the CIP amendment process.

Policy 1.1.3

- Split this into two separate policies: one focused on the adoption of the Capital Improvements Program, the other to establish the committee which prepares and review the CIP annually.

Policy 1.1.4 (8)

- Reword to include “Promotes the sustainability goals of the City.”

Policy 1.1.5

- Move to Strategies/Action Items section.

Policy 1.1.7

- Move to Strategies/Action Items section.

Policy 1.1.8

- Revise number of police officers and fire fighters to updated averages, per the Florida Department of Law Enforcement.

Policy 1.2.5

- Add a new Policy 1.2.5 to assess and apply for Federal, State, County or private funding where possible to pay for capital or operating programs.

Objective 1.3

- Add an Action Item to the end of this element related to this Objective including timeframe in which the development permit concurrency management system should be reviewed and assessed by the City.

Policy 1.3.1

- Update “Mobility Element” to “Transportation Element” and add Policy references.

DRAFT

Policy 1.4.4

- Rewrite to reference Policy 4.8.1 in the Stormwater Sub-Element rather than repeating the same policy.

New Section: Strategies/Action Items

- Policy 1.1.5
- Policy 1.1.7
- Objection 1.3 – create one based on timeframe of city review of concurrency system

DRAFT

Conservation Element

Objective 1.1

- Add a new policy under this objective that requires the LDC to include standards to protect aquifer recharge areas and minimize potential contamination of water supplies, in accordance with SJRWMD.
- Include a cross reference to the Infrastructure, Aquifer Recharge Sub-Element.

Policy 1.1.6

- Add detail regarding strategies to conserve potable groundwater sources such as:
    - Use non-potable water irrigation where available.
    - Utilization of water saving plumbing fixtures compliant with the State Water Conservation Act (F.S. 553.14) in all new construction or renovations when available in the local marketplace.
    - Preservation of native and drought resistant vegetation for landscaping.

Objective 1.2

- Add a policy under this objective that the City may require the dedication of conservation easements to protect the value and function of a wetland system.
- Add a policy that no new development shall be permitted.
    - Keep in mind that a strict policy to prohibit development in wetlands can reduce roadway connectivity and hinder infill development resulting in more sprawling and fragmented development patterns.
- Add a policy related to coordination with Orange County concerning required provisions of the Wekiva River Protection Act with meetings as needed.
    - For the portions of Wekiva Study Area and Wekiva Springshed located in the JPA with Orange County, compliance with open space and density requirements of the JPA. Vision 2050 draft, page 224 & 369.
- Add a policy to address the Orange County and City of Apopka Interlocal Agreement for review of changes to the future land use for properties within the Interchange Land Use Plan.

Policy 1.2.2

- Strengthen language and add that City reserves the right to require the protection of wetlands on site and may deny a proposal to destroy or alter wetlands. Emphasize that the City prefers solutions that preserve or restore the natural structure and connectivity of wetlands over development alternatives that result in the loss or degradation of wetland systems.
    - Wetland network quality should be balanced against human network quality. Priority should be on conserving large and connected wetland systems that have the greatest ecological value.

DRAFT

Policy 1.2.13

- Include policy here related to the continued joint efforts for the Wekiva Interchange Land Use Plan Overlay (WILUPO) of which 40% lies within the City of Apopka, 60% in Orange County.
- Add a policy to address the Orange County and City of Apopka Interlocal Agreement for review of changes to future land use for properties within the Interchange Land Use Plan.
    - See Vision 2050 draft, page 216.

Policy 1.2.14

- Add policy related to coordination with Orange County concerning required provisions of the Wekiva River Protection Act with meetings as needed.
    - See Vision 2050 draft, page 220.
- For the portions of Wekiva Study Area and Wekiva Springshed located in the JPA with Orange County, compliance with open space and density requirements of the JPA.
    - See Vision 2050 draft, page 224 & 369.

Policy 1.2.15

- Update to include all sensitive upland habitats included in the D&A: Hardwood Forested Uplands, Mixed Hardwood Coniferous, and Brushland habitats are missing.

Policy 1.2.16

- New policy to address potential Transfer of Development Rights (TDR) processes to allow for blended densities and intensities for the purposes of providing an increase in public open spaces and conservation lands and to include these in the Land Development Code.

Objective 1.3

- Reword this objective to require site-specific analysis and protection measures for designated conservation areas, including but not limited to vegetation, wildlife, and rare or endangered ecosystems. Move the existing policy language written in this policy to the end of Policy 1.3.2

Policy 1.3.4

- Add clarity to explain the “one-to-one ratio.” Is it per caliper inch?

Objective 1.4

- Orange County’s Vision 2050 discusses Lake Apopka Basin and the Surface Water Improvement and Management (SWIM) Program and the Lake Apopka Planning Initiative and the Lake Apopka Restoration Council. These should be placed into the Conservation Element at a minimum and possibly the Intergovernmental Coordination Element as well.
    - See Vision 2050, page 201.
- Add a cross reference to a new policy in the Intergovernmental Coordination Element as well.

DRAFT

Policy 1.5.1

- Add Florida-Friendly Landscaping™ in addition to native species. This is a new industry standard for landscaping requirements.
    - Ensure the Trademark is included.

Policy 1.5.2

- Reword so that "…within the Land Development Code" is at the end of the sentence.

Policy 1.5.3

- Add clarity and details about how the City will encourage green building features, or refer to the LDC section where specific standards are implemented.

Objective 1.6

- Reword to include natural soils, which are currently missing from this element. Add a policy that the City shall utilize Best Management Practices as established by SJRWMD, FDEP, FDOT, and any other relevant organizations to inform the City's regulations related to soil erosion.

Policy 1.6.2

- Reword: "Shall" does not need to be used twice.
- Add details about what factors are considered when determining whether peat mining is beneficial.

Policy 1.6.3

- Extra period at the end of the sentence. Only a single period is required when the last word in a sentence ends with a period.

Objective 1.7

- Add policy related to the "Settlement Interlocal Agreement" with Orange County regarding density, restriction of uses, etc. of residential in the Wekiva River Protection Overlay Area.
    - See Vision 2050 draft, page 209+.

Policy 1.7.2

- Add clarity about how "rural in density and character" is defined.

Policy 1.7.4

- Refer to the LDC for density standards related to transfer of development rights. And make TDR plural in the written policy language.

Policy 1.7.6

- Replace "should" with "shall."

DRAFT

Policy 1.8.1

- Move to Strategies/Action Items section.

Policy 1.8.3

- Further define the requirements of the habitat analysis or refer to the LDC.
- Add reference to Policy 1.2.15 for relevant sensitive natural habitats.

Policy 1.8.4

- Highlight other ways the LDC should address stormwater percolating down to groundwater:
    - Open space requirements
    - Requiring post-development recharge to be similar to pre-development recharge levels
    - Promoting land use activities and development densities which are compatible to high recharge potential
- When referencing Florida-Friendly Landscaping™, make sure to include the trademark.

Policy 1.8.6

- Move to Strategies/Action Items section.

Policy 1.8.7

- Move to Strategies/Action Items section.
- Add clarity: where will this information be made available? Will there be requirement in the LDC or is it purely educational?

New Section: Strategies/Action Items

- Policy 1.8.1
- Policy 1.8.6
- Policy 1.8.7

DRAFT

Economic Element

Goal 1

- If the City has a long-range economic development plan, it should be referenced here.

Policy 1.1.1

- Add details about how the City plans to support the location of higher education provider within the City. Will this be done through economic incentives or land use practices? Are any vacant lands zoned for higher education uses? Will the City support rezonings or changes in FLU designation for applications for a new higher education facility?
- Providers should be plural.

Policy 1.1.2

- Ensure vocational/trade educational facilities are defined in the LDC for ease of implementation.
- Add language regarding support for rezonings or changes to the FLU for applications for vocational/trade educational facilities.

Policy 1.1.3

- Permitting mixed-use development in commercial and office FLU designations will support the goal of creating shared business spaces.
- Change the word “groups” to “facilities”.

Objective 1.2

- Mixed-use Future Land Use designations that support vertical and horizontal mixed-use development should be added in order to support this goal.
- Neighborhoods should be plural.
- Response to City Staff edit: Instead of “in the right location and place,” identify the types of locations where mixed use may be appropriate or “in appropriate locations as designated by the future land use map.”

Policy 1.2.1

- Add more details about what qualifies as the “right location” for mixed-use districts, such as proximity to transit centers or major thoroughfares.

Policy 1.2.3

- Add references to the Housing and Future Land Use Elements.

Policy 1.3.2

- Identify which street(s) to establish a Main Street program for.

DRAFT

Policy 1.3.3

- Clarify the exact federal brownfields program the City is participating in.
- Add a cross reference to FLUE Policy 1.2.2.

Policy 1.3.4

- Add details about how the City intends to allow small-scale manufacturing, such as by incorporating light manufacturing or craft industrial uses in the LDC.

Policy 1.4.1

- Identify specific anchor institutions or industries and clarify whether partnerships have been formed.

Policy 1.5.2

- Reconsider this policy, as it discourages mixed-use development and infill housing development, which is critical to support the goals for attainability as the City continues to grow.
    - Instead of "Discourage the conversion of properties with nonresidential entitlements to residential uses." Consider a more narrow policy such as "Discourage the conversion of properties with nonresidential entitlements to single-family residential zoning. If residential is incorporated, encourage development programs that include a mixed of uses and require the application of a mixed-use rather than single-use zoning category."

Policy 1.5.3

- Add a cross reference to the Capital Improvement Element.

Objective 1.6

- Delete "based" or use "nature-based activities/businesses".

Policy 1.6.1

- Consider an exception for development that supports the City's ecotourism strategy.

Policy 1.6.2

- Expand upon the efforts and strategies to boost local ecotourism and consider mentioning the Kelly Park Interchange and Lake Apopka as recreation areas to build economic value.

Policy 1.7.2

- If these industries have been identified, list them here. If they are already listed elsewhere, add a reference as to where to find them.

Policy 1.7.3

- List any relevant organizations.

Policy 1.7.4

- Provide examples of necessary infrastructure to guide discussions with local stakeholders.

Policy 1.7.5

- Provide examples of how the City will educate the business community about Apopka's land use and development regulations.

DRAFT

Future Land Use Element

Goal 1

- Consider adding a policy about urban / recreational open space. Open Space isn't addressed except in Wekiva, PD, and rural zones.
- Is there any logic to the order of the objectives? Are the most important or broadly applicable supposed to be first?

Policy 1.1.2

- Confusing as written, reword for clarity.
- Consider adding "for example" or "including" to make this more accessible to the public.

Policy 1.1.4

- Reword: "The City will encourage…"
- The second half of the policy beginning with "deficient capacities for public facilities" could unintentionally discourage infill.

Policy 1.1.5

- Consider being more explicit about serving more users per mile.

Policy 1.1.10

- When feasible, the organization of policies within the document should parallel the way they are stated in the objective. In this case, this policy should be first.
- Add multi-family to this policy after commercial. There should be policies that encourage connectivity between residential developments and between residential and nonresidential developments.

Policy 1.1.11

- This policy is difficult to comprehend. Unsure of the intent.

Objective 1.2

- Add language to specifically mention infill redevelopment.
- "Designated by the Apopka City Council" seems like an odd word choice as the whole Comprehensive Plan must be approved by Council. Consider changing the language to " in locations designated by the Comprehensive Plan."

Policy 1.2.1

- Move to Strategies/Action Items section.

Policy 1.2.2

- Move to Strategies/Action Items section.

DRAFT

- Add reference to the Intergovernmental Coordination Element.

Policy 1.2.4

- Change "development" to "development of vacant or underutilized properties."

Policy 1.2.6

- Inconsistency with referencing the Community Redevelopment Plan between this policy and Policy 1.2.3 – The City of Apopka Community Redevelopment Plan, or the City's Redevelopment Plan?
- The word choice "preserve" implies that preservation strategies exist. Include those strategies here.

Policy 1.2.7

- Clarify how the City will promote development and redevelopment within the Mixed-Use Downtown Districts.
    - Will the City provide incentives through density/intensity bonuses?
    - Impact fee credits?
    - Ability to stack density/intensity in MU districts?
    - Streamlined application processes?

Objective 1.3

- Create a table of the Future Land Use classifications with the densities/intensities.
- Create a separate policy for Planned Unit Developments, clarifying that it is a zoning district and not a FLU category and can be applied to any FLU category.
- With projections for a 50% increase in population over the next twenty years, opportunities for housing are critical. Expanding opportunities for higher densities and mixed uses will help achieve this goal. Consider opportunities to provide alternative approaches to density through Missing Middle Housing, which provides more density while maintaining neighborhood character.

Policy 1.3.1

- The language "All special exceptions shall be accompanied by a site plan" belongs in the LDC and not the Comprehensive Plan.
- For all FLU Classifications: explain the purpose of each classification and the intended character of the areas where it is mapped. For example – is high density intended to be in proximity to employment centers to provide accessibility to jobs and services? Provide this level of detail for each FLU classification.
- For all residential FLU classifications: Provide examples of housing typologies that each classification is intended to accommodate – single family, townhouses, duplexes, multiplexes, apartments, etc. Make sure that this language inclusive rather than limiting e.g. "including" or "such as."
- Add HDR 25, which is currently mapped but not included in the FLUE.
- Add "and" after the semicolon in #7.

DRAFT

- Following the final sentence, add the underlined text "...Land Development Code, and should accommodate special uses, innovative designs, or benefits to the City not possible under an existing zoning district."

Policy 1.3.1.a

- Delete "or less."

Policy 1.3.1.c

- With projections for a 50% increase in population over the next twenty years, opportunities for housing are critical. Expanding opportunities for higher densities and mixed uses will help achieve this goal.
- Consider opportunities reduce the number of low density suburban residential districts, especially on undeveloped land, and provide alternative approaches to density through Missing Middle Housing, which provides more density while maintaining neighborhood character.

Policy 1.3.1.i Commercial

- Consider permitting residential uses to allow for horizontal and vertical mixed-use in smaller scales throughout the City and not just concentrated into Mixed-Use districts.
- Add a cross reference to Economic Policy 1.1.3 to encourage shared spaces such as live/work units.
- All uses within the same district should have the same intensity allowance, unless bonuses are available.
    - To restrict the size of a specific use, such as Nursing Homes, or Assisted Living Facilities, do so through the Land Development Code.
    - Remove the requirement for elderly living facilities to be standalone developments. The elderly benefit from basic necessities in walking distance.

Policy 1.3.1.j Office

- Permit medium density residential to incorporate small scale mixed-use development.

Policy 1.3.1.n.

- Clarify if this designation only applies to wetlands or upland conservation areas as well.
    - Orange County is moving away from referring to wetlands as "conservation areas" and going with clearer language.

Policy 1.3.1.o

- Consider adding a statement that institutional uses are permitted in other FLU categories, or may be deemed compatible in other designations.

DRAFT

Policy 1.3.1.p

- The underlying land uses have densities as low at 3.5 units per acre which is not compatible with downtown developments. Commercial Land Use has no residential density. See comment below on remapping.

Policy 1.3.1.q Mixed-Use

- Remap the downtown area which is currently zoned as Mixed-Use so that the Future Land Use is also Mixed-Use. At a minimum, the CRA should be assigned the Mixed-Use FLU.
    - Consider a separate, more dense mixed-use category for the downtown to incentivize redevelopment.
- Consider buffer and/or step back requirements where mixed use abuts single-family homes in the LDC. These can be suggested in the comprehensive plan by a policy specifying that the LDC include transition standards to achieve compatibility where mixed-used zones abut existing residential neighborhoods.
- Reword sentence about Transit-Oriented Design to pedestrian-oriented design, which includes TOD elements. This should be required rather than encouraged.
    - Consider cross-referencing Objective 1.13.
- Consider increasing the FAR to better support development, or offering bonuses, especially within the downtown core.
- Clarify that density/intensity can be "stacked" on a single development site to provide an incentive for mixing uses. I.e. the entire site acreage can be used to calculate both density and intensity.
- Analyze the maximum densities proposed to understand if the maximum densities match the built form anticipated in the DMUD zoning district.
- Consider adding standards that require a mix of uses within each phase of development.
- This policy lists "four special purpose areas". The LDC lists six with three of them being mixed-use. Revise for consistency/accuracy.
- In the first sentence of the final paragraph, change "will establish" to "establishes."

Policy 1.3.4

- Ensure there is a clear boundary where this restriction applies. Potentially add a map to the exhibits.

Policy 1.3.6

- Move vested rights determination to the LDC.

Objective 1.4

- This objective lacks details regarding the protection of water resources such as wetlands, floodplains, and stormwater management.

Policy 1.4.1

- Expand this policy or create an additional policy to address vegetative resources, tree canopy, and urban forestry to combat the urban heat island effect, support local species, and contribute to stormwater management.
- Policy should expand to include mention tree mitigation, preservation of heritage trees, and include mention of Florida-Friendly Landscaping™ in addition to native.
- Cross reference Conservation Element Policies 1.3.4 and 1.3.5

Policy 1.4.2

- Add cross reference to Conservation Element Objective 1.1.

Policy 1.4.3

- Add cross reference to Conservation Element Objective 1.3.

Policy 1.4.4

- Add reference to Conservation Element Objectives 1.1 and 1.4.

Policy 1.4.6

- Add details about how this will be done, and reference Conservation Objectives 1.1 and 1.5, and the new (recommended) policy related to soils.

Policy 1.4.7

- Consider the addition of conservation easements in accordance with Section 704.06, Florida Statutes, to limit future encroachment or development of environmentally sensitive areas.

Policy 1.4.8

- List any specific rare natural communities or areas that require additional protection due to endangered species that are relevant to the City or cite a specific source that catalogs these communities.

Policy 1.6.2

- Move to Strategies/Action Items section.

Objective 1.8

- While PDs allow more flexibility under the current code, the creation of more flexible standards to support mixed-uses, and requirements regarding streets, sidewalks, open space, and connectivity can achieve this goal without requiring the PD process.
- Add a new objective to protect existing neighborhoods, encourage sustainable and walkable development in targeted areas and maximize economic development.

DRAFT

Objective 1.9

- Group Wekiva related policies together. Consider a Wekiva Goal for better organization.

Policy 1.9.1

- Add reference to Conservation Objective 1.7.

Objective 1.10

- Add a policy related to locating schools within close proximity to and with multi-modal connections to residences and residential areas.

Policy 1.11.5

- This policy should come before Policy 1.11.3.

Objective 1.13

- Move this Objective earlier int he document, before geographically limited policies about the Wekiva Area.
- Consider adding a policy related to Missing Middle Housing Development to support a greater range of housing choices and income ranges. This could apply to low and medium density residential with townhomes, duplexes, cottage courts, live-work, and multiplexes.

Policy 1.13.1

- Include elements that contribute to complete streets: wide sidewalks, street trees, traffic calming, bike lanes, etc.
    - Consider other factors such as shallow setbacks and frontage occupation in more urban areas.

Policy 1.13.2

- Limit block sizes to increase connectivity and access for people driving, walking, or bicycling, including bicycle and pedestrian ways where street connections are not feasible.
- Emphasize the importance of discouraging high speed/high volume traffic.

Policy 1.13.3

- Add details about how the City will promote infill development.

New Section: Strategies/Action Items

- Policy 1.2.1
- Policy 1.2.2
- Policy 1.6.2

DRAFT

Goal 1

- Add policy to encourage green building practices, which could also be associated with density bonuses.
- Add a policy to support neighborhood serving retail in appropriate locations.
- Add policies about existing neighborhood protections such as:
    - The City will protect residential neighborhoods from the adverse effects of noise, air, and water pollution by enforcing land development regulations that meet or exceed local, state, and federal environmental quality standards.
    - To minimize noise-related disturbances, the City will restrict high-noise activities from incompatible areas or require enhanced noise mitigation strategies where appropriate, ensuring a high quality of life for residents throughout the planning period.
- Add a new objective addressing attainable housing for households of a variety of incomes.
    - Attainable housing is providing a full range of housing options at all price points. Affordable usually refers to housing that is subsidized or affordable to households making less than 80% of median income. Housing is considered affordable or attainable if housing cost is not more than 30% of income. Workforce housing typically refers to housing affordable to households at 80% - 120% of median income. Attainability is inclusive of affordable housing, workforce housing, and market-rate housing. Be aware of these terminologies throughout the element.
- Add a policy with language such as “to meet the growth projections for the year 2040 the City shall accommodate, through adjusting residential densities and non-residential intensities of Future Land Use designations and expanding land use designations, where most appropriate.”

Objective 1.1

- Add details about the significance of the total amount of units the City is committed to providing land for and ensure that numbers are up to date. Alternatively, remove the specific numbers and rewrite the policy to be a more general commitment to providing housing to meet projected growth.
- Add a general commitment to extending the life of existing housing stock to stabilize neighborhoods.

Policy 1.1.2

- Define terms such as “Complete Streets” and “Transit-Oriented Development.”
- Remove the “or” between Complete Streets and Transit-Oriented.

Policy 1.1.3

- Define “naturally occurring affordable housing.”
- Add “and retain” after “Create.”

- The draft from City staff removed "missing middle housing." The consultant recommends retaining and defining this term.
    - Adopt ADU regulations in the LDC and expand medium density zoning districts to allow multiplexes or 3–8-unit products on infill lots.
    - Allow missing middle housing on residential lots in the CRA.

Objective 1.2

- The D&A projects a 61% increase in renter households that are cost burdened. Strengthen language to emphasize that attainable housing is needed throughout this objective.

Policy 1.2.1

- Remove the specific number of units, but maintain the goal to provide new units for households earning less than 120% AMI.

Policy 1.2.3

- The draft from staff removed specific programs – add Orange County Housing and Community Development Division back in.

Policy 1.2.4

- Change to "Coordinate with housing developers and nonprofits to support residential development that leverages increase in housing affordability."
- Recommend removing "strive to" throughout the document.

Policy 1.2.6

- Strike language about Live Local Act and replace with bonuses for providing affordable housing with increasing bonuses for lower income household using HUD threshold/definitions.

Policy 1.2.7

- Ensure that each Future Land Use designation permits a zone with minimum lots sizes sufficient to achieve the maximum permitted density within that designation.

Objective 1.3

- Remove "useful life of" and instead say "The City's existing housing stock shall be conserved through…"

Policy 1.3.1

- Add reference to consistency with the LDC.

Policy 1.3.2

- Remove or revised as below:

- The City will identify dilapidated or substandard dwelling units that are not suitable for continued occupancy. The City will utilize Code Enforcement to require the buildings and sites to be brought up to the standard or the structure will be recommended for demolition.

Policy 1.3.4

- Change "blighting influences" to "blight."

Policy 1.3.6

- Consider listing target neighborhoods to focus revitalization efforts. This might include neighborhoods within the census tracts that were listed as the most vulnerable in the Sustainability and Resilience D&A, or other neighborhoods that have been identified through other efforts.
- At a minimum, add "substandard" in front of local housing

Policy 1.3.7

- List the steps to the process as bullet points to make it easier to follow.

Policy 1.3.9

- Response to staff comment: Include the Florida DEP Brownfield program as a guiding source for all brownfield needs in the City.
  - Review of the state brownfield areas map suggests the presence of several brownfield areas in and around downtown. https://geodata.dep.state.fl.us/datasets/FDEP::brownfield-areas/about

Policy 1.3.10

- Reword to "units with increased risks" instead of "units that increase risks…"
- Add a policy after this to address the use of the Florida Existing Building Code to promote reasonable and affordable renovations to housing.

Objective 1.4

- Staff recommended removing any historic preservation related policy. These policies should remain, as historic places add to the vitality and resilience of neighborhoods and should be encouraged through the Comprehensive Plan.
- Add a policy about maintaining an inventory of historic housing.
- Add a policy to ensure that new developments reinforce and maintain the identity and quality of the City including its historical and cultural identity.

Policy 1.4.4

- If there are geographically significant cultural corridors or neighborhoods, adopt a historic district that protects the residential in good quality and allows for the modification of

historic homes in disrepair. This allows more flexibility than then National Register of Historic Places, and keeps the regulation and review within the City.

Objective 1.5

- Remove "Strive to" throughout the document.
- According to the D&A, about 10% of all housing units are without internet access. Include a policy to focus on efforts to ensure all units have internet access.

Policy 1.5.1

- Include specific grants which are relevant to neighborhood development.
- Combine with Policy 1.5.2.

Policy 1.5.3

- Move to Strategies/Action Items section.

Policy 1.5.4

- Define community residential facilities and/or provide examples as some readers may not be familiar with this terminology.

Policy 1.5.5

- Be specific about the types of input the community can have e.g. design, transitions, etc, or that this input should happen at the LDC or rezoning stage.

Policy 1.5.6

- Change "abreast" to "informed."

Policy 1.5.7

- Change "lost housing units" to "and providing relocation assistance."

Policy 1.5.8

- Move to Strategies/Action Items section.

Objective 1.6

- Add a policy related to the creation of attainable housing by increasing the supply and diversity of housing options to support a range of income levels and preferences and make it earlier in the Housing Element.
- Add a policy related to supporting missing middle housing here.

Policy 1.6.2

- Response to staff removal: recommend keeping this policy. Remove overlap with other policies if retained. Consider eliminating bullets 2 and 5.

Policy 1.6.3

- ADUs should be permitted in all residential districts on lots which meet the minimum area requirements. Units under 500 square feet should not count towards density.
- Second half of policy should be moved to Strategies/ Action Items section.

Policy 1.6.4

- If policies and programs have been identified, list them here.

Policy 1.6.5

- Define resilience to what?

Policy 1.6.6

- Revise to clarify if the Housing Vulnerability Assessment has been conducted. If not, then it should be strongly encouraged and moved to the Strategies/Action Items section.

Policy 1.6.8

- Include the Orange County's Affordable Housing Trust Fund in this policy.

Policy 1.6.9

- "Analyze how the increase in…" instead of "strive to better understand how increases…"

New Section: Strategies/Action Items

- Policy 1.1.3
- Policy 1.5.3
- Policy 1.5.8

Infrastructure Element

Title

- Infrastructure is misspelled

Policy 1.1.2

- Add a bullet point which includes maximize their resiliency to storms and other environmental challenges.

Policy 1.1.3

- Add details about the types of incentives the City will pursue. Options might include streetscape improvements or density/intensity bonuses for publicly accessible parks and open spaces.
- Begin the sentence with "The Land Development Code (LDC) shall include incentives for…"

Policy 1.1.4

- Add the underlined portion. "The extension of public facilities and utilities into areas of the City which are underserved or without service shall be guided by the City's Capital Improvements Element, to ensure adequate capacity and land is available for public infrastructure to support new development and redevelopment…"

Policy 1.1.5

- Delete "To stay" and capitalize "consistent".

Policy 1.1.6

- Move the second half of the policy to Strategies/Action Items section.

Policy 1.1.7

- Move to Strategies/Action Items section.

Policy 2.1.2

- Consider alternative sources which the City should pursue to provide potable water instead of committing to one method as best practices may change.

New Section: Strategies/Action Items

- Policy 1.1.6
- Policy 1.1.7

DRAFT

Potable Water Sub-Element

Policy 2.1.2

- Consider other water sources and water efficiency programs; could be a separate policy.

Policy 2.1.6

- This seems overly detailed for a Comprehensive Plan. If it is kept, it should be relocated to the Strategies/Action Items section.

Policy 2.1.8

- Remove the comma after "The City"
- Add details about where the public can find details regarding wellhead protection zones, such as FDEP's Wellhead Protection Program.

Policy 2.1.9

- Move to Strategies/Action Items Section

Policy 2.1.10

- This seems overly detailed for a Comprehensive Plan. If it is kept, it should be relocated to the Strategies/Action Items section.

Policy 2.1.11

- This seems overly detailed for a Comprehensive Plan.

Policy 2.2.1

- Confirm whether 135 gallons per capita per day is still the most updated number. Some levels of service are listed in the comprehensive plan explicitly; some defer the comprehensive plan. Consider resolving this inconsistency.

Policy 2.2.2

- Some levels of service are listed in the comprehensive plan explicitly; some defer the comprehensive plan. Consider resolving this inconsistency. If appropriate refer to the Potable Water System Master Plan instead of listing a specific number.

Policy 2.3.5

- Consider switching to an Engineering Standards Manual or relocate this to the Strategies/Action Items section.

Policy 2.4.2

- Mention water conservation certifications such as LEED and Florida Green Building Coalition.

DRAFT

Policy 2.4.3

- Consistency of reference to City of Apopka. Elsewhere it just says “the City”.

Policy 2.4.5

- Add details about how often the City will perform these outreach activities.
- Move to Strategies/Action Items Section.

Policy 2.4.6

- Move to Strategies/Action Items section.

Policy 2.4.7

- Ensure that this system, website, and app are still applicable/relevant.

Policy 2.5.1

- Spell out to define acronym (ISO).

Objective 2.6

- This whole objective is an action item that should be implementing policies throughout this Goal.

Policy 2.6.1

- Move to Strategies/Action Items section.

Policy 2.6.3

- Capitalize “Water” in Water Supply Facilities Work Plan.

Policy 2.6.4

- This seems to duplicate water conservation policies elsewhere in these sections. Consider rethinking objectives to reduce duplication.

New Section: Strategies/Action Items

- Policy 2.1.6
- Policy 2.1.9
- Policy 2.1.10
- Policy 2.3.5
- Policy 2.4.5
- Policy 2.6.1

DRAFT

Sanitary Sewer Sub-Element

Policy 3.1.1

- Revise for clarity: "…and maintenance to sustain…"

Policy 3.1.5

- Move to Strategies/Action Items section.

Policy 3.1.7

- Move to Strategies/Action Items section.

Policy 3.1.8

- Consider keeping language about the methodology more general in case there are new best practices.

Policy 3.1.9

- Revise to say, "a minimum of every five years."
- Move to Strategies/Action Items section.

Policy 3.1.10

- Add that the Master plan shall inform the Capital Improvements Element to prioritize and coordinate the expansion and upgrade of facilities to meet the future needs of the City also to be updated every 5-years concurrent with the master plan.

Objective 3.3

- Revise to "The City shall prioritize cost-effective and beneficial use of reclaimed water…"

Policy 3.3.3

- The last sentence regarding the connection charge for reclaimed seems overly detailed for a Comprehensive Plan. Could mention a fee and defer to the City's fee schedule.

Policy 3.4.1

- Make improvements plural: "The City shall monitor development and will determine improvements…"

Policy 3.4.5

- Move to Strategies/Action Items section.

Policy 3.4.6

- Put this policy in a new objective about discouraging sprawl and protecting water quality.

DRAFT

Policy 3.4.7

- Put this policy in a new objective about discouraging sprawl and protecting water quality.

Policy 3.4.8

- Update to reflect 381.0065(2)(a), Florida Statutes, requiring connection to sewer within BMAPs where available. On lots 1 acre or less, if sewer is not available, only enhanced nutrient-reducing onsite sewage treatment and disposal systems are permitted. Most or all of Apopka is within the Wekiwa Spring and Rock Springs BMAP.

New Section: Strategies/Action Items

- Policy 3.1.5
- Policy 3.1.7
- Policy 3.1.9
- Policy 3.4.2

Stormwater Management Sub-Element

Objective 4.1

- Add a policy to address Low-Impact Development (LID) measures such as bioswales, green roofs, and porous pavement which is mentioned but not expanded upon in the LDC.

Policy 4.1.1

- Simplify language by replacing "All new and redevelopment, private and public," with "All development."

Policy 4.1.2

- 24 hour is no longer needed as terminology for a 100-year floodplain event.

Policy 4.1.3

- Clarify where this is referring to the placement of facilities or the capacity.
- 24 hour is no longer needed as terminology for a 25-year floodplain event

Policy 4.1.4

- Clarify where this is referring to the placement of facilities or the capacity.

Objective 4.4

- Check grammar
- Consider removing language related to construction timelines since many of the policies below do not directly relate to construction efforts.

DRAFT

Policy 4.4.1

- Clarify at what point in this development process this takes place. Replace "developer" with "applicant" or "owner."
- Check for consistency of terminology throughout re: owner/applicant/developer.

Policy 4.4.2

- Check grammar

Policy 4.4.3

- This policy does not seem to have clear connection to the objective related to construction timelines.

Policy 4.4.4

- Specify how often these guidelines will be reviewed and move it to Strategies/Action Items.
- Is this during construction? If so, specify here or update the whole objective to reflect during construction.

Objective 4.5

- Add policy to coordinate with the Recreation and Open Space Element.

Policy 4.5.1

- Provide detail about where to find Best Management Practices, which should be in either the LDC or an Engineering Standards Manual.

Policy 4.6.1

- This policy is not directly related to the Objective above and should be moved to the Strategies/Action Items section. Objective 4.6 can become a policy under Objective 4.7.

Policy 4.7.1

- There should be a separate sentence or policy that states the requirements for the applicant, and requirements for the City.

Policy 4.7.2

- Strike "the most recent edition of," to just say "in accordance with the Land Development Code." It is implied that the LDC will be the most recent edition and this language is not used elsewhere in the document.

Policy 4.7.3

- Add details about why the construction of drainage wells is not permitted, such as preventing groundwater contamination.

DRAFT

Policy 4.7.4

- Move to Strategies/Action Items section.

Policy 4.7.5

- Add details about how often the City shall evaluate improvements to its maintenance programs, even if it is just on an as needed basis. If a specific timeframe is proffered, move to Strategies/Action Items Section.

Objective 4.8

- Based on the policies within this objective, it appears a funding source has already been created. Change the language to indicate that the City shall continue to fund necessary capital improvements.
- Change drainage "problems" to "issues."
- Consider creating an implementation objective to include this and other issues.

Policy 4.8.2

- The last sentence regarding the City seeking alternative funding sources and joint partnerships should be a separate policy.

Policy 4.10.1

- There is not enough detail to justify this policy having its own objective. Consider including this in the implementation objective mentioned in Objective 4.8 comments above.

New Section: Strategies/Action Items

- Policy 4.4.1
- Policy 4.6.1
- Policy 4.7.4

Natural Groundwater Aquifer Recharge Sub-Element

Goal 5

- Remove the word "that" in "quality of that potable water…"
- Add a policy mentioning the aquifer recharge program of CONSERV II being expanded by Orange County through Public Access Reuse (PAR) to the City of Ocoee and the City of Apopka in addition to the RIBs and lake augmentation in the Orange County Utilities (OCU) Northwest Service Area.
    - Vision 2050 draft, page 284.

Policy 5.1.1

- Spell out Florida Administrative Code - F.A.C.

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Policy 5.1.2

- Confirm if there is a map exhibit for aquifer recharge areas and the groundwater basin, and add a reference here.
- Move to Strategies/Action items Section.

Policy 5.1.3

- Makes uses plural: "The City shall direct incompatible land uses..."

Policy 5.1.4

- Discuss the preservation of existing natural drainage patterns and local groundwater recharge conditions to the greatest extent.
- Is this specific to high recharge areas? "Maximizing open space" everywhere may not be an appropriate or achievable policy.

Policy 5.2.2

- Add details about the ongoing effort with SJRWMD and how it is detecting pollution.

Policy 5.2.3

- Ensure consistency with 381.0065(2)(a), Florida Statutes.

Objective 5.4

- Move these policies to Objective 5.1 as they relate to the enforcement of the LDC.
- Update the language in Objective 5.1 to include ground water recharge areas from Objective 5.4 in addition to the aquifer mentioned in 5.1.
- Consider addition of LID/GSI BMPs.

New Section: Strategies/Action Items

- Policy 5.1.2

Solid Waste Sub-Element

Goal 6

- Include both residential and commercial collection services.

Objective 6.1

- Add a policy that discusses the funding mechanisms for solid waste.
- Add a policy that mandates participation of all residents and businesses in the waste collection system or private providers while ensuring the establishment and maintenance of a fair and equitable rate structure.
- Add a policy regarding education around citizens reducing waste.

- Add a Strategy/ Action Item to examine the rates annually and adjust as needed to cover cost of the operations.

New Section: Strategies/Action Items

- Suggestion to add an action item from Objective 6.1

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Intergovernmental Coordination Element

Objective 1.1

- Consider coordinating with the Federal Aviation Administration for a new policy.

Policy 1.3.1

- There is a lingering underlined space in the second line of this policy. Remove it.

Policy 1.3.5

- The word “includes” is underlined. Is there supposed to be a link? If not, remove it.

Policy 1.3.6

- Include a mention of coordination with Orange County regarding the Wekiva River Protection Overlay, Interlocal Agreement, JPA, and Wekiva Interchange Land Use Plan Overlay (WILUPO).

Policy 1.3.11

- Add a cross reference to the Infrastructure Element.

Objective 1.4

- Add a policy focused on coordination with Orange County to support recreational facilities such as West Orange Trail and other regional parks which Apopka benefits from, as discussed in the D&A for this element.

Policy 1.4.2

- Confirm that this list is up to date.

Policy 1.4.3

- Add a cross reference to the Infrastructure Element.

Policy 1.4.6

- Add policy that the City will coordinate with Orange County and other transit providers to provide reliable public transportation services in Apopka.
- Consider creating a new objective focused on partnerships to improve transportation systems with an emphasis on opportunities to expand public transportation and micromobility.

Policy 1.4.8

- Add a cross reference to the Conservation Element.

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Policy 1.4.10

- Move to Strategies/Action Items section.

Policy 1.5.2

- Move to Strategies/Action Items section.

New Section: Strategies/Action Items

- Policy 1.4.10
- Policy 1.5.2

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Recreation and Open Space Element

Objective 1.1

- Add a policy to help prioritize the locations of new parks in areas with limited park access by utilizing ParkScore's 10-minute walk concept: https://www.tpl.org/parkscore
- Add one or more policies on trees which can shade impervious surfaces reducing heat island impacts.
- Consider a policy about streets as public space.
- Strengthen the definition of Open Space and add a policy establishing requirements. Options include:
    - A: A higher open space requirement, with a broad definition so that areas like buffers and wet stormwater count towards open space.
    - B: A lower open space requirement with a more specified definition to ensure usable open space. Buffers are still required, but don't count towards the open space requirement. Stormwater may count towards requirement if amenitized, usually with a cap on the percentage of total required open space that can be stormwater.
    - Consultant recommend approach B. Approach A is often incompatible with smaller infill and redevelopment sites and generate insufficient recreational open space.
- Level of service should be a policy rather than an objective or should be part of a separate implementation objective.
    - Consider an objective for natural conservation, an objective for recreation and an objective for implementation.

Policy 1.1.1

- Consider basing level of service on distance from residence to park space.
    - E.g. 80% of residents are within a 10 minute walk of a park. Or all residential areas greater than X units per acres are within…

Policy 1.1.2

- Add clarity about how the City will determine whether an evaluation is needed.
- Consider every 5 years or make it a one-time strategy.
- Move to Strategies/Action Items Section.

Policy 1.1.3

- It would better to have natural conservation policies under a separate objective from recreation oriented policies.

Policy 1.1.6

- Move to Strategies/Action Items section.

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Policy 1.1.8

- Delete "will still" and rewrite as "Residential developments around public lakes are required to provide…"

Policy 1.1.9

- Reword. Sounds like a strategy. Is this about park-to-park connections, park to trail connections, or about general bike/ped access to parks?

Objective 1.2

- Remove "Strive to," and replace with "The City shall…" to make the language more direct.
- Add a policy related to trail development to emphasize their value to the City and establish efforts to seek opportunities - consider public/private partnerships, rails to trails, regional partnerships to connect to SUN Trail, etc.

Policy 1.2.1

- Move to Strategies/Action Items section.

Policy 1.2.2

- Move to Strategies/Action Items section.
- Reword to say "Through the City's annual budget, develop a schedule…"

Policy 1.2.3

- Move to Strategies/Action Items section.

Policy 1.2.5

- To support the goal of creating parking amenities that promote community and support social gathering, add a policy which allows a certain portion of open space to be hardscaped in urban areas. This enables squares, plazas, and other usable open spaces for communities.
- Include a policy for the inclusion of shade in these hardscaped open spaces through the use of structural elements or trees.

Policy 1.2.6

- Through the Parks Master Plan, encourage a variety of park types and sizes with a range of active and passive recreation opportunities.
- Coordinate the Parks Master Plan with the Trails Master Plan.

Policy 1.3.1

- Move to Strategies/Action Items section.

Policy 1.3.2

- Move to Strategies/Action Items section.

- Delete “Consider and” and start the sentence with “Maintain.”

Policy 1.3.3

- Clarify the intent of this section to indicate how landscaping practices contribute to the equitable provision of green and open spaces.

Policy 1.3.5

- Add that the requirements may be amended as necessary to meet level of service standards. Planned development, mixed use developments, and residential developments should ensure adequate vehicular, pedestrian, and bicycle access to on-site and adjacent park sites, and connect to adjacent trails and greenways where applicable.

Policy 1.4.1

- Move to Strategies/Action Items section.

Policy 1.4.2

- Move to Strategies/Action Items section.

New Section: Strategies/Action Items

- Policy 1.1.6
- Policy 1.2.1
- Policy 1.2.2
- Policy 1.2.3
- Policy 1.3.1
- Policy 1.3.2
- Policy 1.4.1
- Policy 1.4.2

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Policy 1.1.1

- Consider breaking this into a few policies.

Policy 1.1.2

- Reword to say that the City will conduct research on funding opportunities on an as-needed basis, rather than only encouraging the City to do so.

Policy 1.1.4

- Is this intended to be only for the Wekiva Study Area? Or especially within the WSA?

Policy 1.1.5

- Add details about how smart growth will be encouraged to give the policy more substance, whether through incentives, increasing densities and intensities in targeted areas to decrease urban sprawl, increasing multimodal connectivity, or other mechanisms to support walkable and sustainable communities.
- Consider changing "smart" to "compact" or "compact and connected."

Objective 1.2

- Note that Policy 1.1.5 relates to smart growth and should be located under this objective.

Policy 1.2.1

- Move to Strategies/Action Items section.

Policy 1.2.2

- The City will analyze.... instead of is encouraged to analyze.

Policy 1.2.4

- Allow parking reductions in appropriate areas near transit or targeted areas for walkable communities, amend parking requirements to industry standards, consider permitting compact parking spaces, encourage EV charging stations and incorporate these standards into the LDC.
- Add a policy related to shared parking for mixed-use developments to reduce impervious surfaces which contribute to the urban heat island effect.

Policy 1.2.6

- Consider specific Action Items that could correspond with this Policy. The language in parenthesis referencing mobility week with FDOT should be moved to Action Items.
- First sentence could be swapped in whole or in part for Policy 1.1.5.
- Second sentence should be its own policy related to public health, safety and resiliency.

Policy 1.2.7

- Consider opportunities for different incentives or bonuses for each level of efficiency rating, which should be added to the LDC.
- This policy is not related to carbon and should be moved to Objective 1.1

Policy 1.3.1

- Move to Strategies/Action Items section.
- If these partnerships are established, reword to "The City will continue…"

Policy 1.3.2

- Rather than saying that the City is encouraged to develop necessary partnerships, reword to "The City shall seek opportunities to develop necessary partnerships…"

Policy 1.4.1

- Move to Strategies/Action Items section.

Policy 1.4.2

- Delete "work to" so the policy says "The City shall promote…"

Policy 1.4.4

- Consider using more clear language e.g. "include and celebrate people from a broad spectrum of socio-economic backgrounds, geographic areas, and diverse viewpoints within…"
- Say "including" instead of "to include."

Policy 1.4.6

- These uses should be included in the LDC as "Public Benefit Uses" and permitted in more zones.
- This policy should be relocated to Recreation and Open Space Element.
- Grammar correction to include "the use of community gardens."

Policy 1.5.2

- Reword the beginning of the sentence to give the policy more substance and commit the City to taking action, rather than just recommending that the City take action.

Policy 1.5.3

- For city-owned properties and structures?
- Is there a desire for the City to commit to green energy goals for City owned properties for 2040? If so, make the commitment here.

Policy 1.5.4

- If there are any existing partnerships, list them here.

New Section: Strategies/Action Items

- Policy 1.2.1
- Policy 1.3.1
- Policy 1.4.1

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Submission Date Time	Submitted By
2024-11-30T02:51:02.786Z	
2024-11-27T02:14:49.261Z	
2024-11-21T21:10:23.254Z	
2024-11-16T22:14:35.711Z	
2024-11-16T20:14:13.055Z	
2024-11-16T15:19:10.967Z	
2024-11-16T13:16:34.374Z	
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2024-11-14T20:52:00.781Z	
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2024-10-22T15:36:20.787Z	
2024-10-15T21:42:07.487Z	
2024-10-15T20:31:36.573Z	

What_feedback_would_you_like_to_provide_about_the_Comprehensive_Plan_This_could_include_items_or
This report was excellent and the data points extremely useful in crafting policy. I feel a few things might have been forgotten and should be included: 1) The school citing is quite vague and should include the potential for private and charter schools. 2) There should be mention of the need for a quicker permitting process for infill or missing middle development. 2 I believe the desire to reduce or eliminate parking minimums in the CRA should be included. 3) I believe a second CRA is with so much of Apopka blighted, particularly in the Martin Street area. 4) Sanitary sewer – I believe language should be included about the important of support for Septic to Sewer conversions and use of advanced treatment systems to reduce the number of traditional septic systems in
I cannot download the document. Can you send Christine.Moore@ocfl.net
Where the comprehensive plan is a great high level view, the actual implementation needs to move beyond the areas what has historically been viewed as Apopka. Currently all the attention is for improvement either in the perceive downtown area, or the northwest section of the city. Other than residential construction, what plans are in place for the southwest portion of the city. The only public facility is Camp Wewa, which is either dedicated to historical use, or is not capable of providing public activities. Where are the public parks? The city owns a considerable amount of property in the area. Why is all the expansion taking place at the Northwest Recreational Complex? If you have a child engaged in sport activity, it take less time to drive to a facility in Ocoee
STOP, STOP, STOP all this insane development.
Infrastructure keeping up with growth
I would like to see the Comprehensive Plan include a plan the will not allow a development to change the original land use plan especially regarding open recreational spaces. An example being Errol Estates, and Rock Springs Ridge. And the lands should belong to the residents as they purchase the homes, and can never dominated by a few majority land owners such as an investors buying up homes for rental purposes. They would
I am not in favor of electric vehicles, but since Apopka has a very small geographic foot print, all City
My primary concern is the continued expansion of single family housing developments (for ownership, not rentals), primarily due to zoning restrictions. Housing market demand is far outpacing supply in Orlando's surrounding communities. Some residents will need a greater variety of housing options in order to purchase their first property. Condos and townhouses could provide a different option for individuals and families who may be limited by budget, or simply don't want the maintenance of a single family home. It's a multi-faceted issue, but we can't encourage developers to create housing at different price points when zoning is so restrictive and reflective of a past era where the community was less populated. Residents should have robust owning and rental options.
- Limit the corporate entities that are allowed to open up businesses in the Mixed-Use Downtown District and similar areas, instead save for local businesses. Similar to the City of Mount Dora's zoning for their downtown area. - Can the City look into the cost associated with purchasing back and running the Electric Utilities back from Duke energy? Winter Park bought out their electric utility lines after the 2004 hurricanes and have been managing it themselves with great success. Their commitment to undergrounding power and other improvements
- Limit the corporate entities that are allowed to open up businesses in the Mixed-Use Downtown District and similar areas, instead save for local businesses. Similar to the City of Mount Dora's zoning for their downtown area. - Can the City look into the cost associated with purchasing back and running the Electric Utilities from Duke Energy? Winter Park bought out their electric utility lines after the 2004 hurricanes and have been managing it themselves with great success. Their commitment to undergrounding power and other improvements

I would like to see more focus on creating a more unified hometown look. Everything seems to look like a hodgepodge of whatever was there. Example, many towns/cities require commercial businesses to look like the required design. If a major business wants to be in a great location, they need to create a similar look. Those businesses do not get to build their company cutter look/design. Maybe there has been updating painting and a few facelifts, but still, everything looks like poorly designed. While I'm sure new construction is expensive, keeping small-house looking buildings (old Chamber) this does nothing to improve the main drag. There are way to many open lots waiting for what ? The city has a very short timeline to get a quality design and start immediately making improvements. One Wyld Oaks is up, most if not all of what is currently old downtown, will shift. Wyld Oaks has a clean slate and will develop what people are looking for in new, current design. Statues are poorly placed. Maybe in the beginning it was fine where they were place, but now, you wonder, what is that
The existing residents should be the cities priority especially for infrastructure projects and developments. Currently many neighborhoods that have been built for ten plus years or longer are now flooding and this is unfortunately the result of not planning for storm water run off. The ending result is devastating for residents who live there. The city of Apopka has approved the use of private owned retention ponds for new build drainage without asking or informing the said owners of the retention ponds. Many neighborhoods now are
The overall plan is based on the fact that city is allowing uncontrolled grow to an area where the infrastructure can not possibly support that growth. In the attempt to allow such growth the residence are going to be taxed to
Please put safety gate around playground to keep Speacial needs children from running into the street. Thank
Would like to see resturants/dining and free parking downtown with access to retail stores
I have been a resident of Apopka for 11 years. I live, work, shop and spend leisure time in the City. As an active resident, I also watch development, local government, and growth regularly. I want to say THANK YOU to the commissioners for all the hard work and diligence to consistently do what's right for the city. I take pride in the city I live in, and want to see it continue to become a culturally rich, diverse, small business friendly, beautiful city that residents are proud of, visitors want to stay, and other cities envy. With all of that being said, my comments below are meant to be constructive and productive, not criticism. I appreciate the offer to submit feedback and thank you for reading. First and foremost, once this becomes an approved and adopted document, it should be referenced often and followed, not just put on a shelf like so many other similar plans. The content is wonderful and filled with smart, logical goals and guidelines to build a city we can all be proud of. It is a very well organized and well written document. I would like to acknowledge the enormous amount of effort that goes into a document like this. I know it takes hours and hours of research, and has a lengthy review process before it gets to this point. It seems that many of the references point to 2021 resources. So much growth and expansion has happened in Apopka since 2021, it would be more useful if the report could reflect more up to date data as the "current", existing condition. Unfortunately, this would probably mean that the report would take another year, therefore putting it behind again. Perhaps you can work on an amendment?
Strategic plan for City of Apopka; More Green Space; City Downtown center
Need homeless shelter

In addition to labeling the types, purposes and scope of building types in 1.3.1, add the percentage of land space allotted for each classification. Also, more criteria and details of allowable exceptions must be done and itemized. The current language is vague. Specify how preservation of vital resources and environmental protections are addressed within each of the sections and subsections. The attempt at a catch all in a section at the end is not sufficient or appropriate. The maps are not helpful. A large, comprehensive map with exact areas and designations is required to illustrate the purposes and proposed development types, sizes, and impact on traffic. There also needs to be within each section on development a detailed description on how supportive services (sewage, traffic, water, etc....) and infrastructure needs and requirements are completed PRIOR
Establish Updated Design Ordinances: Introduce ordinances that outline specific design standards for the downtown area. This could include requirements for façade treatments, architectural styles, and consistent signage that preserve Apopka's historical character while supporting new development. These standards could help ensure that new projects align with the traditional aesthetics and identity of downtown. Enhance Streetscape Beautification Ordinances: Adopt ordinances that mandate the inclusion of landscaped medians, sidewalk greenery, and tree canopy preservation in downtown commercial zones. Enhancing the streetscape will make downtown more inviting and help improve pedestrian safety and comfort, aligning with the plan's focus on walkability and public gathering
How does this plan compare to the previous comprehensive plan? Of the Policies in the prior plan, what
My wish is that whatever the plan is, it consider the impact on our current condition. How will city resources be impacted. How will our roads and utilities be effected,? Schools Are impact fees really aligned with the impact?
The city is doing over building. Your infrastructure is not ready. The roads are not wide enough for all this influx of new houses and apartments. You have over expanded the city limits for fire departments and police departments. The traffic is horrendous in the city. And I have lived here for almost 40 years. You have no hometown feel whatsoever. You need to stop building all the car washes. If our water supply is as bad as it is,

Do_you_own_property_in_Apopka	Zip_Code
Yes	32712
No	
Yes	32703
Yes	32712
Yes	32712
Yes	32712
Yes	32712
Yes	32712
Yes	32712
Yes	32712

Yes	32703
Yes	32703
Yes	32712
Yes	32712
Yes	32712
Yes	32712
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Yes	32712

Yes	32712
Yes	32712
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Yes	32712
Yes	32712