TABLE I
WELL SETBACK DISTANCES
October 7, 2010

Part A Drinking Water Supply Wells Serving Public Water Systems or Bottled Water Plant Wells		
RULE	**INSTALLATION**	**SETBACK in feet (footnote)**
Reuse of Reclaimed Water and Land Application 62-610.421(3)	Slow Rate Land Application Restricted Public Access	500 (a)
62-610.521(2)	Rapid Rate Land Application	500 (b)
62-610.621(2)	Overland Flow Systems	500
62-610.621(4)	Transmission Facilities Conveying Reclaimed Water to Restricted Public Access Slow Rate Land Application Systems, Rapid Rate Land Application System, or Overland Flow Systems	100
62-610.471(1)	Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
62-610.471(3)	Transmission Facilities Conveying Reclaimed Water to Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
Domestic Wastewater Residuals 62-640.700(4)(b)	Domestic Wastewater Residuals Land Application Areas	500
Phosphogypsum Management 62-673.340(2)(d)	Phosphogypsum Stack Systems	500 (c)
Storage Tank Systems 62-761.500(1)(a) and 62-762.501(1)(a)	Aboveground or Underground Storage Tanks	100
Solid Waste Management Facilities 62-701.300(2)(b)	Solid Waste Disposal Facilities	500
62-701.300(12)(a)	Yard Trash Disposal, Storage, or Processing	200
62-701.300(13)	Storage or Treatment of Solid Waste in Tanks	100
Permitting and Construction of Public Water Systems 62-555.312(1)	Onsite Sewage Treatment and Disposal Systems	200 (d), 100 (e)
Public Water Systems 62-555.312(3)	Sanitary Hazard as defined in Chapter 62-550, F.A.C., for drinking water supply wells serving public water systems	100 (f), 50 (g)
Feedlot and Dairy Wastewater Treatment and Management Requirements 62-670.500(6)(a)	Dairy Farm Waste - Unlined Storage and Treatment, or High Intensity Areas	300
62-670.500(6)(b)	Dairy Farm Waste - Land Application	200

BUDGET IMPACT:
None.

LEGAL NOTE:
Advertised as required by statute for the March 2 meeting of the Planning & Zoning Board and the March 6 first reading by City Council.

STAFF RECOMMENDATION:
Staff recommends approval of Ordinance 2023-09 amending the three elements of the Comprehensive Plan to add additional protections and for consistency with DEP regulations pertaining to wellhead protection areas.

ATTACHMENTS:
Attachment 1 Ordinance 2023-09 with Exhibits A, B, and C
Attachment 2 Florida Department of Economic Opportunity Letter
Attachment 3 Legal Advertisement

Attachment 1

ORDINANCE 2023-09

AN ORDINANCE OF THE CITY OF GROVELAND, FLORIDA, AMENDING THE CITY OF GROVELAND'S COMPREHENSIVE PLAN TO INCLUDE WITHIN THE CITY'S FUTURE LAND USE ELEMENT, PUBLIC FACILITIES ELEMENT, AND CONSERVATION ELEMENT, ADDITIONAL PROTECTIONS TO THE CURRENT AND FUTURE WATER SUPPLY BY FURTHER PROHIBITING USES WITHIN VARIOUS DISTANCES FROM A POTABLE WATER WELL, ALSO REFERRED TO AS A WELLFIELD PROTECTION ZONE WHICH ELEMENTS APPLY CITY WIDE, INCLUDING IN THE GREEN SWAMP, AN AREA OF CRITICAL STATE CONCERN DESIGNATED PURSUANT TO S. 380.05, FLORIDA STATUTES; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CITY OF GROVELAND COMPREHENSIVE PLAN; AND PROVIDING FOR APPROVAL AND AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Groveland desires to amend its comprehensive plan to amend the wellfield protection zones.

WHEREAS, the adopted wellfield protection zones set forth in this amendment are consistent with Florida law.

WHEREAS, the Planning and Zoning Board sitting as the local planning agency of the City of Groveland held a public hearing on this ordinance which was advertised in accordance with law, and the Planning and Zoning Board made a recommendation to City Council.

WHEREAS, the City Council of the City of Groveland public hearing for transmittal has been advertised as required by law with the public hearing occurring at least 7 days after the day that the first advertisement was published.

WHEREAS, the City Council of the City of Groveland second public hearing for adoption of this ordinance is being held at least 5 days after the date of the second advertisement.

WHEREAS, the City of Groveland desires to amend the Comprehensive Plan for the City of Groveland as set forth below.

NOW THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF GROVELAND, FLORIDA AS FOLLOWS:

Section 1. Adoption of the future land use element of the comprehensive plan. The future land use element of the comprehensive plan set forth in Exhibit "A" of this ordinance is hereby approved and adopted by the City Council, which shall be applicable to property located within the City of Groveland municipal boundaries as well as properties located in the Green Swamp, An Area of Critical State Concern.

Section 2. Adoption of the public facilities element of the comprehensive plan. The public facilities element of the comprehensive plan set forth in Exhibit "B" of this ordinance is hereby approved and adopted by the City Council, which shall be applicable to property located within the City of Groveland municipal boundaries as well as properties located in the Green Swamp, An Area of Critical State Concern.

Section 3. Adoption of the conservation element of the comprehensive plan. The conservation element of the comprehensive plan set forth in Exhibit "C" of this ordinance is hereby approved and adopted by the City Council, which shall be applicable to property located within the City of Groveland municipal boundaries as well as properties located in the Green Swamp, An Area of Critical State Concern.

Section 4. Severability. If any section or phrase of this ordinance is held to be unconstitutional, void or otherwise invalid, the validity of the remaining portions of this ordinance shall not be affected thereby.

Section 5. Conflicts. In the event of a conflict or conflicts between this ordinance and other ordinances, this ordinance shall control and supersede.

Section 6. Inclusion. It is the intention of the City Council of the City of Groveland that this comprehensive plan amendment shall become and be made a part of the comprehensive plan for the City. Goals, objectives, and policies of the Comprehensive Plan may be renumbered or reorganized for editorial and codification purposes and such renumbering or reorganization shall not constitute nor be considered a substantive change to the comprehensive plan amendment as adopted.

Section 7. Effective Date. The effective date of this plan amendment shall be pursuant to the state land planning agency's notice of intent. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before it has become effective. If timely challenged, this amendment does not become effective until the state land planning agency or the Administration Commission enters a final order determining the adopted amendment to be in compliance. No portion of the plan amendment that is applicable to the Green Swamp, An Area of Critical State Concern shall be effective until a final order is issued finding the amendment to be in compliance as defined in 163.3184(1)(b), Florida Statutes.

PASSED AND ORDAINED this ___ day of _____, 2023 at a regular meeting of the City Council of the City of Groveland.

_____

Evelyn Wilson, Mayor
City of Groveland, Florida

Attest:

_____
Virginia Wright, City Clerk

Groveland
FLORIDA
City with Natural Charm

Approved as to form and legality:

_____
Anita Geraci-Carver, City Attorney

First Reading _____
Second Reading _____

Council Member _____ moved the passage and adoption of the above and foregoing Ordinance. Motion was seconded by Council Member _____ and upon roll call on the motion the vote was as follows:

	YEA	NAY
Barbara Gaines		
Mike Radzik		
Richard Skyzinski		
Dina Sweatt		
Evelyn Wilson		

Exhibit "A"

Future Land Use Element of the City of Groveland Comprehensive Plan
(see attached)

FUTURE LAND USE ELEMENT

Groveland
FLORIDA

CITY OF GROVELAND

LAKE COUNTY, FLORIDA

ADOPTED ON APRIL 1, 2019
ORDINANCE 2018-10-34

FUTURE LAND USE ELEMENT
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CHAPTER 1
FUTURE LAND USE ELEMENT

***It is important to note that the old data and analysis from the *2010 Comprehensive Plan* is being superseded by new data and analysis presented below; however, the current Goals, Objectives, and Policies have been included in this *Element.* This *Element* was updated accordingly to reflect the new planning period.

A. INTRODUCTION

1. Purpose

The purpose of the *Future Land Use Element* is the designation of future land use patterns as reflected in the goals, objectives and policies of the local government comprehensive plan elements.

The *Future Land Use Element* sets forth the physical plan for the future development of the City. The *Future Land Use Element* describes the appropriate location for the future land uses and promulgates the policies regulating the location and development of all land uses. The *Future Land Use Element* sets forth not only the density and intensity of land uses, but also considers other factors affecting land use development, such as timing, cost, and current development trends.

While each *Element* within the *Comprehensive Plan* is important, the *Future Land Use Element* is arguably the most important as it must be consistent with all other *Comprehensive Plan Elements* and articulate the *Goals, Objectives and Policies* of these other *Elements* in the form of specific land use policies.

The *Existing Land Use Map* included as part of this *Element*, describes the location and distribution of land uses in Groveland in 2018. The *Future Land Use Map* (also included in this *Element*) is the focus of the *Comprehensive Plan*. It indicates the proposed location and distribution of land uses in the year 2040. All policies contained within this *Plan* must be consistent with the *Comprehensive Plan* and the *Future Land Use Map*. All land development regulations in effect subsequent to the adoption of this *Plan* must be consistent with the *Plan* and its *Future Land Use Map*.

This *Plan Element* was formulated to be consistent with those criteria as well as relevant sections of Chapter 163, Part II, F.S., the State *Comprehensive Plan*, and the *Comprehensive East Central Florida Regional Policy Plan*.

B. POPULATION ESTIMATES AND FORECASTS

In order to plan for growth, it is first necessary to project the number of persons that will reside in the City. The effectiveness of a local government's comprehensive plan depends principally on the accuracy of population projections for both resident and seasonal populations. These

predictions for the future are the basis of planning for future land use, housing, recreation and open space, and public services and infrastructure needs.

Groveland's population has grown over the years. In 1990, the City had a population of 2,300. By 2000, the population of Groveland increased to 2,360. In 2010, the City's population increased to 8,729. Population projections prepared by the Shimberg Center for Affordable Housing indicate that Groveland will have 35,477 residents by the year 2040 (see Table 1).

TABLE 1: POPULATION PROJECTION BY AGE, 2010 - 2040

Age Group	2010	2016	2020	2025	2030	2035	2040
0-14 years old	2,226	3,539	4,685	8,129	9,795	11,364	12,760
15-24 years old	1,096	1,839	2,374	4,207	5,047	5,762	6,620
25-34 years old	1,197	1,704	2,133	4,098	4,835	4,607	6,369
35-44 years old	1,428	2,159	2,870	4,631	5,395	6,621	7,347
45-54 years old	1,053	1,787	2,352	3,868	4,757	5,155	5,678
55-64 years old	851	1,263	1,607	3,091	3,766	4,233	4,915
65-74 years old	578	944	1,228	2,163	2,568	3,131	3,610
75+ years old	300	371	430	842	1,050	1,233	1,419
Total	**8,729**	**13,606**	**17,679**	**31,029**	**37,214**	**42,105**	**48,717**

Source: Shimberg Center for Affordable Housing, University of Florida – August 9, 2018; ECFRPC Custom Methodology for Years 2025, 2030, 2035, 2040.

C. EXISTING CONDITIONS

1. Existing Land Use

The City's *Existing Land Use Map* was produced using Geographic Information Systems (GIS) data from the Lake County Property Appraiser. The amount of acreage located within the City's current boundaries is presented in Table 2 by the existing land use categories.

TABLE 2: ACREAGE WITHIN EXISTING LAND USE CATEGORIES, 2018

Existing Land Use	Acreage	% of Total
Agriculture & Conservation	9,957.11	64.1%
Residential (includes all residential uses)	3,940.83	25.4%
Single-family Residential	*3,044.42*	*19.6%*
Multi-family Residential	*44.03*	*0.3%*
Vacant Residential	*852.38*	*5.5%*
Commercial	362.69	23.5%
Vacant Commercial	*170.01*	*1.1%*
Mixed Use	25.70	1.7%
Public Use (Utilities, Roads, Infrastructure)	49.55	3.2%
Institutional (Church, Cemetery, Municipal, Orphanage, Schools)	645.74	41.8%
Vacant Institutional	*6.98*	*0.5%*
Industrial	561.25	36.4
Vacant Industrial	*264.13*	*17.1%*
Land Use Code Not Listed	0.43	0.03%
Total	**15,543.3**	**100.0%**

Source: Lake County Property Appraiser 2018; Department of Revenue Annual Real Estate Tax Roll File 2018

Agriculture – This category on the *Existing Land Use Map* denotes all land used for agricultural purposes, including cropland and pasture; orchards; groves; vineyards; nurseries; ornamental horticultural areas; and other agricultural uses as determined by the City Council. Single family residential use is permitted in this category. The maximum intensity and density for agricultural uses in the City is presented in Table 3.

Residential - This category on the *Existing Land Use Map* denotes all land used for residential purposes, including single family, multi-family, accessory apartments, rectories, and mobile home structures, but specifically excludes recreational vehicles, travel trailers, or similar vehicles. The permitted density for residential lands in Groveland is featured in Table 3.

Commercial - This category on the *Existing Land Use Map* denotes all land used for retail and wholesale trade, offices, restaurants, hotels and motels, and professional services. The majority of the commercial uses in the City are found along State Road 50. Commercial land use is permitted in the Commercial/Office, Mixed Use, Central Business District, Green Swamp Commercial, and North Workplace Development land uses and in the Green Swamp Single Family Low Density and Rural uses as special exception. The maximum intensity for commercial uses in the City is presented in Table 3.

Industrial – This category on the *Existing Land Use Map* denotes all land used for warehousing, assembly and distribution of goods, light processing, heavy equipment,

large durable goods, or other land uses requiring heavy truck traffic. The intensity of industrial uses permitted in the City is featured in Table 3.

Institutional - This category on the *Existing Land Use Map* denotes all land used for institutional facilities such as day care facilities, cemeteries, schools, government buildings, churches, or residential care facilities. The City permits an intensity of 0.50 impervious surface coverage for institutional uses under the Public/Institutional land uses (see Table 3).

Public Use - This category on the *Existing Land Use Map* denotes all land used for public service activities, water plants, electric sub-stations and telephone facilities. The City permits an intensity of 0.50 impervious surface coverage for public uses under the Public/Institutional land use (see Table 3).

Recreation - This category on the *Existing Land Use Map* denotes all land primarily used for outdoor recreational activities such as picnicking, jogging, cycling, outdoor courts, golf courses, and playing fields. These lands include both private and public recreational facilities. The City permits an impervious surface coverage of 0.50 on recreational land uses (see Table 3).

Conservation - This category on the *Existing Land Use Map* denotes all wetlands, some uplands, public managed lands, floodplains, flood prone areas, and other areas in which valuable natural resources are found. No buildings are allowed on conservation lands in Groveland with the exception of boardwalks, docks, observation decks, or similar facilities allowed by the City and all regulatory agencies.

TABLE 3: PERMITTED MAXIMUM DENSITY/INTENSITY WITHIN LAND USE CATEGORIES

Future Land Use	Maximum Density/Intensity
Single Family Low Density (SFLD)	Up to 2.0 dwelling units per acre. The maximum building height is 35 feet.
Single Family Medium Density (SFMD)	Up to 4.0 dwelling units per acre. The maximum building height is 35 feet.
Medium Density Residential (MDR)	Up to 6.0 dwelling units per acre. The maximum building height is 35 feet.
High Density Residential (HDR)	Up to 10.0 dwelling units per acre.
Green Swamp Single Family Low Density (GSSFLD)	Up to 4.0 units per acre. The maximum impervious surface coverage is 0.40. The maximum building height is 35 feet.
Green Swamp Single Family Rural (GSSFR)	Up to 2.0 dwelling units per acre. The maximum impervious surface coverage is 0.40. The maximum building height is 35 feet.
Mixed Use (MU)	Up to 4.0 dwelling units per acre. Non-residential uses - the maximum impervious surface coverage is 0.60 and the maximum floor area ratio is 0.25. May live and/or work in these areas.
Master Planned Community (MPC)	Up to 5.0 dwelling units per acre. Non-residential uses – the maximum floor area ratio is 1.00.
North Workplace Development (NWD)	Up to 7.0 dwelling units per acre. Non-residential development – the maximum impervious surface *coverage* is 0.65 and the maximum floor area ratio is 0.7. May live and/or work in these areas. The land use will allow for flexibility in design while requiring a strong mix of employment generators. Commercial retail/restaurant, professional services, and entertainment-related uses shall comprise a minimum of 25% of the property. In order to encourage sustainability, a minimum of 15% of the property shall be dedicated to research and development, manufacturing, distribution, or corporate offices and a minimum of 10% for medium to high density residential uses (up to 7 units per acre). This land use will also require a minimum of 5% of the land be devoted to public recreation, a minimum of 5% to governmental or civic uses, and a minimum of 20% open space.
Central Business District (CBD)	The maximum impervious surface coverage is 0.80 and the maximum floor area ratio is 1.0. The maximum density for apartments, condominiums, or townhomes is up to 10.0 dwelling units per acre. The minimum building height is 35 feet and the maximum building height is 50 feet.

Future Land Use	Maximum Density/Intensity
Office/Commercial (COMM)	The maximum impervious surface coverage is 0.75 and the maximum floor area ratio is 0.5. The maximum building height is 35 feet.
Green Swamp Commercial (GSC)	The maximum impervious surface coverage is 0.40 and the maximum floor area ratio is 0.5.
Industrial (IND)	The maximum impervious surface coverage is 0.70 and the maximum floor area ratio is 0.7. The maximum building height is 50 feet.
Public/Institutional (P/I)	The maximum impervious surface coverage is 0.70.
Recreation and Open Space (REC)	The maximum impervious surface coverage is 0.5. The maximum building height is 35 feet.
Agriculture (AG)	The maximum impervious surface coverage is 0.1. One dwelling unit per 5 acres is permitted for agricultural uses.
Conservation (CON)	The maximum impervious surface coverage is 0.05.

Notes: Open Space: Open space is figured on the Gross Land Area. Up to 50% of the open space requirement may be met with wetlands, except in the Green Swamp Area of Critical State Concern where 100% of the open space requirement may be met with wetlands. Open space may include landscaped buffers and stormwater facilities if they are designed to be a park-like setting with pedestrian amenities and free form ponds. Open space may be passive or active. Open space may include public recreational components of developments. The majority of the open space shall be permeable; however, up to 10% may be impervious (plazas, recreational facilities, etc.). Wet ponds are not counted as part of that 10%.

Densities would be determined by the Net Land Area. The Net Land Area is figured by taking the Gross Land Area (total property) less any lakes, wetlands or water bodies.

Single Family Low Density (SFLD) – The Single Family Low Density category shall be primarily limited to single-family detached homes. This designation serves primarily to place less intensive residential development adjacent to environmentally sensitive areas and natural resources and to allow residential preference for all income groups and to promote a diversity of housing types within the City. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary schools are permitted in this category.

Single Family Medium Density (SFMD) – The Single Family Medium Density category shall be primarily limited to single-family detached homes. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary and middle schools are permitted in this category.

Medium Density Residential (MDR) - The Medium Density Residential category shall be primarily limited to single-family detached homes, townhomes, or similar type of uses. Elementary and middle schools are also permitted in this category. Residential uses in this category shall be permitted in those areas so designated in accordance with the

applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code.

High Density Residential (HDR) – The High Density Residential category shall be primarily limited to single family villas, townhomes, or multi-family uses. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary, middle and high schools are also permitted in this category.

Green Swamp Single Family Low Density (GSSFLD) – The GSSFLD category shall be limited to single-family detached units, attached single-family units, or townhomes. The cluster development standards of this category are intended to promote innovative residential design, encourage diversity of housing, preserve valuable open space areas, protect significant natural features and sensitive environmental areas, and allow more efficient utilization of land and facilities.

Green Swamp Single Family Rural (GSSFR) – The GSSFR category shall be limited to single-family detached units. The cluster development standards of this category are intended to promote innovative residential design, encourage diversity of housing, preserve valuable open space areas, protect significant natural features and sensitive environmental areas, and allow more efficient utilization of land and facilities.

Mixed Use (MU) – Primarily intended to create sustainability, including the provisions of reducing the dependability on the automobile, protecting more open land, and providing quality of life by allowing people to live, work, socialize, and recreate in close proximity. Elementary, middle, and high schools are also permitted in this category.

Land subject to this designation will have a Planned Unit Development zoning which will include a master plan of the overall design of the mixed use development, together with performance standards and design guidelines. The permitted uses include:

- Residential;
- Retail sales and service;
- Office/Commercial;
- Educational;
- Restaurants;
- Community facilities
- Recreation;
- Conservation;
- Public/Institutional;
- Medical facilities;
- Hotels/motels and tourist facilities; or

- Any other use as identified by the City.

In addition, the following shall apply:

1. All future development shall be required to connect to the City central water and sewer system;
2. Residential uses shall occupy a minimum of 50% and a maximum of 80% of the developable area;
3. Commercial, including retail, office uses and community facilities (excluding schools) a minimum of 5% and a maximum of 25% of the developable area;
4. Open space uses shall occupy a minimum of 20% of the site;
5. Maximum impervious surface is limited to 60%;
6. A maximum of 0.25 floor area ratio (FAR) may be considered for non-residential uses; and
7. Up to 4 dwelling units per gross acre may be considered.

Master Planned Community (MPC) – The Master Planned Community category is envisioned to create a sustainable, self-sufficient, mixed use community including a mix of housing types to accommodate multiple stages of life, as well as non-residential uses, such as office, retail, industrial, medical, institutional, educational, and civic uses located in a pedestrian oriented village center. Land subject to this designation will have a Planned Unit Development zoning, which will include a conceptual master plan of the mixed use development.

North Workplace Development (NWD) – Primarily intended to encourage a mix of uses in an area close to the Christopher C. Ford Commerce Park and the Florida Turnpike Interchange. It is also intended to provide flexibility in the siting and design of new developments, and to provide for a mixture of medium and high density residential, commercial office, and community uses to support the primary employers in the development.

The North Workplace Development category shall be available in the Groveland North Overlay Area for land located along or in the vicinity of US Highway 27 or State Road 19. This designation is intended to encourage a mix of uses in an area close to the Christopher C. Ford Commerce Park and the Florida Turnpike Interchange. The mixed use designation is intended to provide flexibility in the siting and design of new developments, and to provide for a mixture of medium and high density residential, commercial, office, manufacturing, and community uses. Land subject to this designation will have a Planned Unit Development zoning which will include a master plan of the overall design of the mixed use development, together with performance standards and design guidelines. The master plan shall provide for a pattern of development which encourages corporate workplace environments, reduces the need to travel by car, encourages opportunities for cycling and walking, and which connects the

new development to existing and planned development outside the site's boundaries. Development in this category shall be limited to the following four use categories:

A. Residential
Townhomes/Villas
Apartments/Condominiums

B. Commercial/Office
Retail sales and service
Office
Restaurants
Hotels/motels
Medical facilities
Cultural and entertainment

C. Government, Civic and Institutional

D. Low-Intensity Industrial
Research and development
Corporate headquarters
Light manufacturing
Distribution

Performance Standards
Minimum of 2 of the 4 use categories listed above.
Maximum Impervious Surface Ratio (ISR): 65%
Maximum Floor Area Ratio (FAR) for non-residential uses: 0.7
Residential Density: Maximum 7 units per acre.
Public Squares/Recreation: Min 5%
Open Space: Min 20%

The balance of uses within a site will be determined based on the following criteria:

1. All developments shall contain an element of useable public space to allow for social interaction;
2. Commercial uses shall comprise a minimum of 25% of the area and shall be oriented to US 27 and SR 19. Retail uses shall be located to encourage pedestrian activity;
3. Residential dwellings shall be permitted above commercial, office or civic uses and also allowed as separate buildings; and
4. Residential development shall be integrated with other permitted uses, with adequate on-site facilities provided for residents

including landscape and open space area, and amenity, parking and service facilities.

The land use will allow for flexibility in design while requiring a strong mix of employment generators. Commercial retail/restaurant, professional services, and entertainment-related uses shall comprise a minimum of 25% of the property. In order to encourage sustainability, a minimum of 15% of the property shall be dedicated to research and development, manufacturing, distribution, or corporate offices and a minimum of 10% for medium to high density residential uses (up to 7 units per acre). This land use will also require a minimum of 5% of the land be devoted to public recreation, a minimum of 5% to governmental or civic uses, and a minimum of 20% open space.

Central Business District (CBD) - Primarily intended for residential and commercial development in the historical downtown area. The historical downtown area is an economic, cultural, social, historic and architectural anchor of the City. To sustain these qualities, new development and redevelopment within the Central Business District shall be reflective of the architectural styles and fabric of the area. Consistency and compatibility with the existing built environment shall be considered in the review and issuance of development permits within the Central Business District. To preserve the quaint character of downtown Groveland, size limitations will also be placed on individual businesses. Redevelopment will focus on orienting buildings and roadways to a pedestrian scale. Residential development is permitted at higher densities in this area than other parts of the City, in order to foster compact, pedestrian oriented growth that will support downtown businesses. New commercial buildings are expected to accommodate pedestrians by providing storefronts near sidewalks and by offering shade and shelter along major streets.

Office/Commercial (COMM) - The Office/Commercial land use category is intended to provide appropriate locations for neighborhood and community businesses providing services and retail sales for the City and the nearby communities. Permitted uses within the Office/Commercial category shall be limited to the following uses; unless a special exception is granted to applicant by the City Council.

- **General Commercial.** These areas shall include those businesses that provide retail goods and services, which serve the routine and daily needs of residents, including banks and professional services, grocery and convenience stores, retail shops, and restaurants. Public and private elementary and middle schools are also allowed. Low intensity cultural and entertainment and medical facilities are also allowed in this category.
- **Limited Commercial.** These areas shall include low intensity office, service and retail businesses that are compatible when located in close proximity to neighborhoods. These uses are intended primarily to serve the needs of the closely surrounding neighborhood.

- **Professional Office.** These areas shall be limited to small neighborhood scale businesses and professional offices that are compatible with, and have no measurable or noticeable adverse impacts, upon surrounding residential uses. Such uses include offices for doctors and dentists, accountants, architects, attorneys, engineers, land surveyors, real estate brokers, financial planners, insurance and real estate agents and the like.

Green Swamp Commercial (GSC) – The Green Swamp Commercial land use category is intended to apply to lands located along State Road 50 and State Road 33 in the Green Swamp. The maximum intensity standard for this land use category is 40% impervious surface and a 0.5 FAR. Development shall comply with the Guiding Principles for Development in the Green Swamp Area of Critical State Concern.

Industrial (IND) – The Industrial category shall be limited to manufacturing and production, storage, warehousing and distribution uses as further controlled by the Land Development Regulations. Industrial uses may have outdoor storage and business related activity, but such uses shall not include processes that create negative effects to surrounding properties due to noise, heat, fumes, debris, chemicals or hazardous materials. Educational facilities are not permitted in this category. Support commercial uses are also allowed as ancillary uses.

Public/Institutional (P/I) - These areas include uses such as government facilities and essential utilities, including police, fire and City Hall buildings and water and wastewater facilities. This category also includes schools, religious facilities, day care facilities (child and adult), cemeteries, or similar uses as identified by the City Council. Religious facilities or day care facilities (child and adult) may be allowed in residential areas as a conditional use.

Recreation and Open Space (REC) – These areas generally include public parks or private parks that are open and available to the public. Note: Some park and open space lands may be more appropriately designated as Conservation, such as lands with wetlands or other environmentally sensitive areas. Permitted uses shall include active and passive recreation activities including bikeways and pedestrian trails, or other similar facilities as identified by the City Council. The associated facilities which support the above uses (i.e. restrooms, clubhouse) are also permitted. Additional land shall be acquired only if necessary to meet adopted level of service. At any time land for recreation purposes becomes available to the City, the *Comprehensive Plan* shall be revised to establish the subject site under a designated land use policy.

Agriculture (AG) – Agriculture lands shall be primarily limited to agricultural uses including: cropland and pasture; orchards; groves; vineyards; nurseries; ornamental horticultural areas; and other agricultural uses as determined by the City Council. This category is intended to support the viability of the local agricultural economy and the

production of the local food supply. Acceptable agricultural practices within this designation shall be restricted to the following activities:

1. Agricultural uses consisting of citrus groves, pasture land, forestry, and vegetable and feed crops. No commercial feed lots, confined or exterior, shall be permitted within the City;
2. Single-family housing up to one dwelling unit per five acres;
3. Recreation (active or passive uses); and
4. Public facilities and utilities.

Conservation (CON) - Conservation lands are generally composed of open land, water, marsh and wetlands and environmentally sensitive areas. Conservation lands may be either publicly or privately owned. It is intended that the natural and open character of these areas be retained and that adverse impacts, which may result from development, shall be prohibited or minimized. Adverse impacts shall be presumed to result from activities, which contaminate or degrade wetlands and environmentally sensitive areas, or natural functions and systems associated with such areas. Permitted uses within the Conservation category shall be limited to the following and shall be further controlled by the Land Development Regulations.

- Activities intended for the conservation, re-establishment and re-nourishment, or protection of natural resources.
- Recreation uses and facilities that are customarily described as passive in nature including, but not limited to, fishing, hiking and biking, canoeing, kayaking, and the use of other similar small, quiet low-speed watercraft.
- Very low intensity outdoor or water-dependent recreational related uses (excluding commercial marinas) that are determined not to be in conflict with the intent of the Conservation category, subject to applicable Federal, State and local policies and permitting requirements.

2. Availability of Public Facilities and Services

The following data and analysis describe the availability of services and facilities to support development.

a. Sanitary Sewer

Groveland has adopted a sanitary sewer level of service standard of 250 gallons per day per equivalent residential unit (ERU). The City understands that future development and redevelopment will require the provision of wastewater services. Accordingly, Groveland has established a Chapter 180 Utility Service Area to provide wastewater treatment to future developments in the City. Groveland's sanitary sewer system is maintained and operated by the City. The City will contract with neighboring local governments to provide wholesale wastewater

treatment to designated areas. The City's sanitary sewer system is currently meeting the adopted level of service standard. A detailed analysis of the City's sanitary sewer system is featured in the *Public Facilities Element* of this *Comprehensive Plan.*

No septic tanks, including those approved by the Florida Department of Environmental Protection, are permitted in Groveland unless the site is outside the City limits and located more than 500 feet from a sewer line, and the City agrees not to extend the line to the property.

b. Potable Water

The City currently owns, operates and maintains a central potable water treatment and distribution system. The City's potable water system provides water for both residential and non-residential purposes, including fire-fighting demands. The City's water system consists of five water plants and associated water transmission and distribution pipes. The City's five water treatment plants (WTP) are grouped into two separate systems. The south system is comprised of Pomelo WTP 1 and Sampey WTP 2 and the recently completed WTP 5. The north system is comprised of Sunshine WTP 3 and Palisades WTP 4. The City's potable water system is currently meeting the potable water adopted level of service standards and there is an adequate amount of capacity to support future growth. A detailed analysis of the City's potable water system is featured in the *Public Facilities Element* of this *Comprehensive Plan.*

c. Stormwater Drainage

Stormwater drainage within the City is currently accommodated by both natural and man-made drainage features. Stormwater drainage level of service standards for quantity and quality must meet or exceed the requirements of the St. Johns River Water Management District. All new development and redevelopment is required to obtain a St. Johns permit if it meets the minimum thresholds.

Projects located within the Green Swamp Area of Critical State Concern and within the most effective recharge areas must retain three (3) inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most effective recharge areas are those with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Level of service standards established in the *Comprehensive Plan* will continue to remain consistent with State Statutes pertaining to the performance of the drainage system. The City ensures the provision of adequate stormwater drainage systems through the development review process. Construction level design plans and stormwater calculations are submitted for review and approval by the City's consulting engineer as well as the St. Johns River Water Management District. No development is approved or is allowed to begin construction until all such permits are received by the City.

d. Solid Waste

Solid waste disposal is achieved through franchise agreements with one solid waste hauler. The Lake County Solid Waste Management Phase I facility, which accepted Class I and III waste, has been closed in accordance with an order from the Florida Department of Environmental Protection. The 80-acre landfill was operated since the 1970s without a bottom liner, which is now required for landfills accepting Class I wastes.

Phase II is made up of 3 cells in the northern part of the landfill: IIA, IIB, and IIC. Phase IIA has been designed to accommodate the ash residues from the resource recovery facility. Both IIB and IIC handle Class I waste. IIB is partially closed on the northeast side. Most of Lake County's Class I waste goes to the Resource Recovery Facility in Okahumpka. There is a separate disposal area for construction and demolition debris on the northwest side of the property.

The City will continue to dispose refuse at the County's incinerator facility. The County will deposit waste ash in an ash monofill south of the incinerator near the Sumter County Line.

e. Transportation

State Road 50, State Road 19, State Road 33, County Road 565, County Road 565A, County Road 478, and U.S. Highway 27 are the main routes in Groveland. The majority of the streets in Groveland are paved. There is also access to Florida's Turnpike in Groveland.

The City's adopted level of service is D for minor arterials, collector roadways, and local roads; E for principal arterials; and C for the roads classified as Florida Intrastate Highway System. State Road 19 from Lake Catherine Road to SR 50 is the only road in Groveland with a LOS deficiency. The balance of the roads in the City have additional capacity to support growth. The City requires all development to provide adequate analysis of its impact on the roads in the City to

determine if the adopted LOS will be maintained. The capacities or deficiencies for the City's road network is featured in the *Transportation Element.*

No bus or rail service is provided to the City. Groveland is working with the LYNX Central Florida Transportation Authority, City of Clermont, the Lake- Sumter Metropolitan Planning Organization, and Lake County to establish a public transit system in Groveland.

Overall, there are about 30 miles combined of potential bicycle/pedestrian pathways in the City. A detailed inventory of the bicycle/pedestrian pathways is featured in the *Recreation and Open Space Element* as well as the *Transportation Element.*

f. Recreation and Open Space

There are over 40 acres of parkland in Groveland. Currently, the Lake David Park (3.79 acres) is the largest park in the City and the smallest park is the South Street Park at 0.4 acres. The City has adopted a level of service standard of 6.0 acres of park land for every 1,000 residents and 3.0 acres of park facilities for every 1,000 residents. Currently, there is a deficit of park land and park facilities in Groveland.

There is 9.49 acres designated as Recreation lands on the City's *Future Land Use Map*, almost all of this land is considered to be open spaces. The majority of these open spaces are adjacent to Lake David and within the Lake David Park.

A portion of the City is within the Green Swamp, which is designated by the State as an Area of Critical State Concern. Encompassing 870 square miles, the Green Swamp is the State's second-largest wetlands system after the Everglades and covers portions of Polk, Lake, Sumter, Pasco, and Hernando counties. This unique and fragile ecosystem is a mosaic of pine flatwoods, hardwood forests, cypress swamps, prairies and sandhills. The Green Swamp is highly valued for its ecological diversity, supporting an estimated 330 species of wildlife. Designated as an "Important Bird Area" by the National Audubon Society, the swamp is home to more than 30 threatened or endangered species of animals, including the Florida scrub jay, wood stork, and black bear. Even Florida panthers have been sighted in this premier wildlife corridor of the State.

The City has established the following recreation and open space standards for development within the Green Swamp:

- All development must be clustered on the least environmentally sensitive areas;
- 60 percent of the site must be retained for open space;

- All recreational uses, other than passive recreation uses, shall be limited to low impact, low intensity public or private recreation uses that do not require impervious surface coverage of more than 10 percent of the lot;
- Golf courses shall be approved on a case by case basis pursuant to specified approval criteria which are set out in the Land Development Regulations; and
- There is a 50-foot-wide upland buffer from the wetland line in which no structure may be placed.

Recreational lands within the City are depicted on the *Existing Land Use Map* and *Future Land Use Map*.

g. Public School Facilities

As a requirement of Senate Bill 360 (SB 360) passed in 2005, an analysis of public school facilities is to be included in the *Comprehensive Plan*. A detailed inventory and analysis of the public-school facilities is presented in the *Public School Facilities Element* of this *Plan*.

3. Land Available for Development

According to the Florida Department of Revenue, there are about 1,294 acres of vacant commercial, residential, institutional and industrial land in the City. Of the 9,957 acres of undeveloped vacant land within the City, approximately 4,636 acres are not designated as conservation lands. Thus, approximately 5,930 acres (1,294 plus 4,636) of developed (but vacant) and undeveloped land can be capitalized on for redevelopment or new development. These figures were determined through an analysis of the Florida Department of Revenue's land use codes from the City's parcel file. All agricultural and other open lands are classified as vacant utilizing this methodology.

4. Soils and Topography

Soils are an important aspect in land development. The physical and chemical properties of soils restrict the intensity of development through limitations on road construction, septic tank operation, and building placement.

There are a variety of soil types in Groveland (see the City's *Soils Map*). The general descriptions of the soils in the City are found below in Table 4.

There is little topographic relief within the City (120 feet). The upper limit is approximately 200 feet above sea level located north of Cherry Lake Road, east of S. Obrien Road, and south of West Libby Road. Around this area, there is a difference of about 105 feet in elevation (see the City's *Contour Map*). See the *Conservation Element* for a further discussion of soils and soil limitations.

TABLE 4: SOILS

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Total Acres
Anclote and Myakka Soils	Yes	Very Poorly Drained	High	Moderate	10.45
Apopka Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	1,173.82
Apopka Sand, 5 to 12 Percent Slopes	No	Well Drained	Moderate	High	920.11
Arents	No	Somewhat Poorly Drained	Unranked	Unranked	291.41
Astatula Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	13.17
Borrow Pits	Partially Hydric	Unranked	Unranked	Unranked	43.66
Brighton Muck, Depressional	Yes	Very Poorly Drained	High	High	67.56
Candler Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	3,099.43
Candler Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	1,910.30
Candler Sand, 12 to 40 Percent Slopes	No	Excessively Drained	Low	High	9.82
Ellzey Sand	Partially Hydric	Poorly Drained	High	High	77.35
Immokalee Sand	Partially Hydric	Poorly Drained	High	High	51.24
Kendrick Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	162.40
Kendrick Sand, 5 to 8 Percent Slopes	No	Well Drained	Moderate	High	75.80
Kendrick Sand, Thin Surface	No	Well Drained	Moderate	High	69.54
Lake Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	73.31
Lake Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	2.94
Lochloosa Sand	No	Somewhat Poorly Drained	High	High	130.36
Myakka Sand	Partially Hydric	Poorly Drained	High	High	375.31
Ocoee Mucky Peat	Yes	Very Poorly Drained	High	High	1,544.04

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Total Acres
Oklawaha Muck	Yes	Very Poorly Drained	High	Low	555.04
Ona Fine Sand	Partially Hydric	Poorly Drained	High	High	47.62
Orlando Fine Sand, 0 to 5 Percent Slopes	No	Well Drained	Low	High	11.08
Orsino sand	No	Moderately Well Drained	Low	Moderate	13.15
Paola Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	39.47
Placid and Myakka Sands, Depressional	Yes	Very Poorly Drained	High	High	1,618.59
Placid Sand, Depressional	Yes	Very Poorly Drained	High	High	152.83
Pomello Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	13.20
Pompano Sand	Partially Hydric	Poorly Drained	High	Moderate	42.45
Seffner Sand	Partially Hydric	Somewhat Poorly Drained	Low	Moderate	40.87
Sparr Sand, 0 to 5 Percent Slopes	No	Somewhat Poorly Drained	Moderate	High	207.70
Swamp	Yes	Very Poorly Drained	Unranked	Unranked	189.96
Tavares Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	887.19
Water	Unranked	Unranked	Unranked	Unranked	2,001.84
Wauchula Sand	Partially Hydric	Poorly Drained	High	High	336.14

Notes: Drainage Class - Identifies the natural drainage conditions of the soil and refers to the frequency and duration of wet periods.
Concrete Corrosion - Susceptibility of concrete to corrosion when in contact with the soil.
Steel Corrosion - Susceptibility of uncoated steel to corrosion when in contact with the soil.

Source: U.S. Department of Agriculture, Natural Resources Conservation Service's Lake County Soils Geographic Information Systems database; City of Groveland Boundary, 2018

5. Natural Resource Management

In this section, natural resource protection which is applicable to Groveland is discussed. According to the SJRWMD and the Army Corps of Engineers, there are no dredge spoil disposal sites within the City.

a. Areas of Critical State Concern

Portions of the City are within the Green Swamp, which is a 560,000-acre region that lies in portions of Lake, Polk, Sumter, Pasco, and Hernando counties. It is the headwater for the Hillsborough, Withlacoochee, Ocklawaha, and Peace rivers, which provide most of the area's water supply, and has a diverse ecological environment containing numerous plant species and 330 animal species, of which 30 are either threatened or endangered. In 1974, the Florida Legislature designated 187,000 acres of the Green Swamp as an Area of Critical State Concern. Lake County contains 106,000 acres of the Green Swamp.

The City has adopted the Green Swamp Single Family Low Density, Green Swamp Single Family Rural, and Green Swamp Commercial land uses to address development within the Green Swamp. Additionally, the City has established the following standards for development within the Green Swamp:

- All development must be clustered on the least environmentally sensitive areas;
- The maximum impervious surface coverage shall be 40 percent;
- All recreational uses, other than passive recreation uses, shall be limited to low impact, low intensity public or private recreation uses that do not require impervious surface coverage of more than 10 percent of the lot;
- Golf courses shall be approved on a case by case basis pursuant to specified approval criteria which are set out in the Land Development Regulations; and
- There is a 50-foot wide upland buffer from the wetland line in which no structure may be placed.

A detailed overview of the Green Swamp is featured in the *Conservation Element* of the Comprehensive Plan.

b. Surface Waters

The Palatlakaha River flows through Groveland. Additionally, there are over 2,000 acres of lakes or ponds in Groveland that can be used for recreational activities such as boating, swimming, and other water related activities. The named lakes in the City include:

- Cherry Lake (407 acres)
- Lake Lucy (349 acres)
- Sumner Lake (339 acres)
- Lake Hiawatha (154 acres)
- Schoolhouse Lake (130 acres)
- Lake David (46 acres)
- Lake Douglas (33 acres)
- Wilson Lake (32 acres)
- Long Lake (27 acres)
- Deacon Lake (26 acres)

- Lake Palatlakaha (106 acres)
- Dukes Lake (102 acres)
- Lake Catherine (68 acres)
- Lake Spencer (56 acres)
- Palatlakaha River (51 acres)
- Lake Desire (48 acres)
- Cook Lake (20 acres)
- Lake Christa (14 acres)
- Wolf Lake (12 acres)
- Lake Audrey (9 acres)
- Lake Diane (2 acres)

The majority of these lakes are maintained by the County. Several of the lakes in the City are part of the Clermont Chain of Lakes, which is classified as "A Florida Outstanding Water". Outstanding Florida Waters are waters designated by the State that are worthy of special protection because of their natural attributes. This special designation is applied to certain waters, and is intended to protect and maintain existing acceptable quality standards. The City has adopted measures to ensure the conservation and protection of these lakes.

c. Floodplains

Floodplains are valuable resources which provide a rich diversity of vegetation and wildlife. These areas are sources for groundwater recharge that filters through soils during high water levels. The 100-year floodplains are also subject to inundation during a 100-year storm, causing potential loss of life and property, disruption of services, and economic loss. These areas cannot tolerate continued development which, in effect, retards their ability to absorb water and restrict the flow of water from adjacent higher elevation areas.

The County's Geographic Information Systems (GIS) database shows that there are 100-year floodplains in the City (see the City's *Floodplains Map*). The FEMA flood zone designations in Groveland are as follows:

- Zone A – Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones; and
- Zone AE - The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.

Development within floodplains will continue to be closely scrutinized to ensure compliance with established regulations.

d. Wetlands

Wetlands by definition are transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is

covered with shallow waters. Wetland functions are interconnected with the hydrology of the area. This connection determines the presence, extent, movement, and quality of water in the wetland. It is estimated that wetlands account for about 5,522 acres in the City (see the City's *Wetlands Map*).

e. Natural Groundwater Aquifer Recharge Areas

The Floridan aquifer is the principal source of drinking water for Lake County. Currently almost all of the ground water pumped in Lake County comes from the Upper Floridan but the potential for utilizing the lower Floridan aquifer is just beginning to be explored in Lake County.

Aquifer recharge is the process whereby rainfall percolates downward through the soil to reach the underlying aquifers. Recharge to the Floridan aquifer occurs in areas of the County where the elevation of the water table of the surficial aquifer is higher than the elevation of the potentiometric surface of the Floridan aquifer. In these areas, water moves from the surficial aquifer in a downward direction through the upper confining unit to the Floridan aquifer. The surficial aquifer system in the County is recharged by rainfall. Recharge is augmented locally by artificial recharge - wastewater or reuse water land application, rapid-infiltration basins, and septic systems.

Groveland is located in a recharge area with a recharge rate of 1 to 10 inches per year and discharge rate of less than 1 inch per year.

f. Cone of Influence

Generally, the term cone of influence can be defined as the land area surrounding a well on which a present or future land use has the potential to negatively impact an aquifer as a result of the induced recharge from that well's cone of depression. The purpose of delineating a cone of influence is to protect the current and future water supply.

The City has adopted a wellfield protection zone within a radius of one hundred ~~and fifty~~(100), two hundred (200), five hundred (500), and one thousand (1,000) feet from potable water wells. The following land uses are prohibited within these zones:

- ~~No new development (other than facilities related to the City's water system) shall be permitted within 150 feet from a well;~~
- Within a ~~500~~100-foot radius, above ground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited;
- No new development (other than facilities related to the City's water system) shall be permitted within 150 feet from a well;
- ~~—~~

- Within a 200-foot radius, septic tanks, unlined reclaimed water storage ponds, and sanitary sewer facilities shall be prohibited;
- Within a 500-foot radius, manufacturing facilities shall be prohibited; and
- Within a 1,000-foot radius of a well, uses shall be prohibited that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, hazardous/toxic substances (ref. Groveland Code of Ordinances, Subpart B., Chapter 117, Sec. 117-183) and wastes, industrial chemicals, etc. In addition, industrial percolation ponds, mining activities and similar activities are prohibited; and
- Excavation of waterways or drainage facilities which intersect the water table shall not occur within 1,000 feet.

The wellhead protection areas for the City's potable water supply wells are shown on the *Existing* and *Future Land Use Maps*.

g. Air Quality

Air quality is another example of a natural resource that impacts the City's and surrounding area's quality of life. The Florida Department of Environmental Protection and the United States Environmental Protection Agency monitor air quality data in Lake County. Lake County does not have an established program dedicated to monitoring air quality. Overall, Lake County's air quality can be considered good.

6. Historic Resources

The Florida Division of Historical Resources maintains and regularly updates the *Florida Master Site File*. The *Florida Master Site File* is a paper file archive and computer database of recorded historical cultural resources in Florida. Categories of resources recorded at the Site File include archaeological sites, historical structures, historical cemeteries, historical bridges and historic districts. The *Site File* also holds copies of survey reports and other manuscripts relevant to Florida history and prehistory. As of August 2018, there were 98 historic structures, 1 historic bridge, 1 historic railroad, and
52 historic sites in the City that were added to the State's *Master Site File*. The downtown historic district is also listed in the file. The Edge House was listed in the National Register of Historic Places (see Table 5).

TABLE 5: HISTORIC SITES AND STRUCTURES

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
Edge House	1218 W. Broad Street/ Structure	1902	Queen Anne (Revival) ca. 1880-1910	10/5/2006
Wilson Island Bridge	Engineer - Cyrus Henry Wilson	1980	Frame; wood	Not NR Certified
Wilson Island House	N/A	1885	Frame Vernacular; L-shaped; Wood frame; Private residence	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
Wilson Island Pump House	N/A	1955	Other; Rectangular; Wood frame; Agricultural	Not NR Certified
Groveland Train Depot	305 W Broad Street/ Structure	1912	Craftsman; Square; Brick; Office	Not NR Certified
Piece of Junk House	15635 Battleground Lake Lane/ Structure	c1930	Frame Vernacular; Rectangular; Wood frame; Private residence	Not NR Certified
Groveland Sr. Women's Club Bldg.	458 S Lake Road/ Structure	1933	Craftsman; U-shaped; Balloon wood frame; Community center (e.g., recreation hall)	Not NR Certified
1941 Lucy Lee Road	1941 Lucy Lee Road/ Structure	1952	Masonry vernacular; Irregular; Concrete block; Private residence	Not NR Certified
Sumner Lake House	13000 Montevista Road/ Structure	1950	Ranch; Rectangular; Concrete block; Private residence	Not NR Certified
Sprayfield South	N/A	N/A	Prehistoric with pottery	Not NR Certified
Minniflora Heights	Land-terrestrial; Single artifact or isolated find	N/A	Prehistoric lacking pottery	Not NR Certified
Groveland WWTP	N/A	N/A	Prehistoric lacking pottery	Not NR Certified
Sprayfield North	N/A	N/A	Prehistoric lacking pottery	Not NR Certified
Little Everglades	Campsite (prehistoric); Land-terrestrial; Ceramic scatter; Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Prehistoric	Not NR Certified
Resurrection	Campsite (prehistoric); Land-terrestrial; Ceramic scatter; Lithic scatter/quarry (prehistoric: no ceramics)	N/A	St. Johns II, A.D. 800-1500	Not NR Certified
Hollow Hills	Land-terrestrial; Single artifact or isolated find	N/A	Prehistoric lacking pottery	Not NR Certified
O'Brien 2	Land-terrestrial; Other	N/A	Prehistoric	Not NR Certified
Schoolhouse Lake	Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
Schoolhouse Wetland	Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
Buried Dog Site	Artifact scatter-low density (< 2 per sq meter)	N/A	Twentieth century American, 1900-present; St. Johns II, A.D. 800-1500	Not NR Certified
Wilson Island Site	Building remains; Artifact scatter-low density (< 2 per sq meter)	N/A	Twentieth century American, 1900-present; St. Johns II, A.D. 800-1500	Not NR Certified
Grape Vine Site	Artifact scatter-low density (< 2 per sq meter)	N/A	Twentieth century American, 1900-present; Archaic, 8500 B.C.-1000 B.C.; St. Johns, 700 B.C.-A.D. 1500	Not NR Certified
Paw Paw Site	Artifact scatter-low density (< 2 per sq meter)	N/A	Twentieth century American, 1900-present; Prehistoric lacking pottery	Not NR Certified
Stuck Truck	Campsite (prehistoric); Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
Howling Coyote	Campsite (prehistoric); Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
Lake Douglas	Campsite (prehistoric); Artifact scatter-dense (> 2 per sq meter)	N/A	Archaic, 8500 B.C.-1000 B.C.; St. Johns, 700 B.C.-A.D. 1500	Not NR Certified
Marsh Hammock	Land-terrestrial	N/A	Prehistoric lacking pottery	Not NR Certified
Outside Edge Site	Land-terrestrial	N/A	Prehistoric with pottery	Not NR Certified
Southern Edge Site	Land-terrestrial	N/A	Prehistoric lacking pottery	Not NR Certified
Mowista Site	Land-terrestrial	N/A	Prehistoric lacking pottery	Not NR Certified
Marsh Pointe	Habitation (prehistoric); Land-terrestrial	N/A	St. Johns IIa	Not NR Certified
Juan Gets Bear Caught	Artifact scatter-low density (< 2 per sq meter)	N/A	Twentieth century American, 1900-present; Archaic, 8500 B.C.-1000 B.C.; Prehistoric with pottery	Not NR Certified
Spiders-a-Million	Campsite (prehistoric)	N/A	Prehistoric lacking pottery	Not NR Certified
Villa City	Land-terrestrial	N/A	Prehistoric	Not NR Certified
Lake Marshall North	Land-terrestrial	N/A	Prehistoric	Not NR Certified
West Grove	Land-terrestrial	N/A	Deptford, 700 B.C.-300 B.C.	Not NR Certified
Marshgrove	Land-terrestrial	N/A	Prehistoric	Not NR Certified
Lake Lucy Island	Land-terrestrial	N/A	Late Archaic	Not NR Certified
Northwest Villa	Land-terrestrial	N/A	Prehistoric	Not NR Certified
Lake Lucy West	Land-terrestrial	N/A	Prehistoric	Not NR Certified
Cherry Lake	Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Late Archaic; Middle Archaic	Not NR Certified
Sumner Lake SW	Campsite (prehistoric)	N/A	Late Archaic; Middle Archaic; St. Johns, 700 B.C.-A.D. 1500; Transitional, 1000 B.C.-700 B.C.	Not NR Certified
Sumner Lake N	Campsite (prehistoric)	N/A	Late Archaic; Middle Archaic; St. Johns, 700 B.C.-A.D. 1500; Transitional, 1000 B.C.-700 B.C.	Not NR Certified
Sumner Lake SE	Campsite (prehistoric)	N/A	Late Archaic	Not NR Certified
Sumner Lake S	Artifact scatter-low density (< 2 per sq meter)	N/A	N/A	Not NR Certified
Lisa Marie	Campsite (prehistoric)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
Colonel Parker	Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
Priscilla	Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
Gladys	Campsite (prehistoric); Lithic scatter/quarry (prehistoric: no ceramics)	N/A	Archaic, 8500 B.C.-1000 B.C.	Not NR Certified
SR 50	Campsite (prehistoric); Habitation (prehistoric); Land-terrestrial	N/A	Prehistoric	Not NR Certified
Seaboard Coast Line RR Grade	Railroad Line	N/A	N/A	Not NR Certified
Born Again Auto	1038 State Road 50/ Structure	1948	Frame Vernacular	Not NR Certified
141 Mt. Pleasant Road	141 Mt. Pleasant Road/ Structure	1946	Craftsman	Not NR Certified
1006 State Road 50	1006 State Road 50/ Structure	1943	Frame Vernacular	Not NR Certified
934 W Broad St	934 W Broad Street/ Structure	1924	Frame Vernacular	Not NR Certified
904 W Broad St	904 W Broad Street/ Structure	1930	Frame Vernacular	Not NR Certified
146 Weir Place	146 Weir Place/ Structure	1930	Frame Vernacular	Not NR Certified
147 Weir Place	147 Weir Place/ Structure	1924	Craftsman	Not NR Certified
810 W Broad St	810 W Broad Street/ Structure	1918	Craftsman	Not NR Certified
Stone's Auto and Tire Service	720 W Broad Street/ Structure	1947	Industrial Vernacular	Not NR Certified
142 Ivey Avenue	142 Ivey Avenue/ Structure	1925	Masonry Vernacular	Not NR Certified
698 W Broad St	698 W Broad Street/ Structure	1952	Masonry Vernacular	Not NR Certified
676 W Broad St	676 W Broad Street/ Structure	1951	Masonry Vernacular	Not NR Certified
Kiddie Land Academy	668 W Broad Street/ Structure	1950	Masonry Vernacular	Not NR Certified
Custom Cabinet Factory	642 W Broad Street/ Structure	1951	Masonry Vernacular	Not NR Certified
517 Howey Road	517 Howey Road/ Structure	1953	Masonry Vernacular	Not NR Certified
480 Howey Road	480 Howey Road/ Structure	1948	Masonry Vernacular	Not NR Certified
444 Howey Road	444 Howey Road/ Structure	1950	Masonry Vernacular	Not NR Certified
428 Howey Road	428 Howey Road/ Structure	1948	Frame Vernacular	Not NR Certified
410 Howey Road	410 Howey Road/ Structure	1945	Masonry Vernacular	Not NR Certified
261 W Greenwood Street	261 W Greenwood Street/ Structure	1956	Frame Vernacular	Not NR Certified
243 W Greenwood Street	243 W Greenwood Street/ Structure	1955	Frame Vernacular	Not NR Certified
233 W Greenwood Street	233 W Greenwood Street/ Structure	1955	Frame Vernacular	Not NR Certified
228 W Greenwood Street	228 W Greenwood Street/ Structure	1957	Masonry Vernacular	Not NR Certified
Billy's Meat Market	Structure	1961	Masonry Vernacular	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
125 E Patterson St	125 E Patterson Street/ Structure	1930	Frame Vernacular	Not NR Certified
201 Patterson St	201 Patterson Street/ Structure	1954	Frame Vernacular	Not NR Certified
259 Patterson St	259 Patterson Street/ Structure	1960	Masonry Vernacular	Not NR Certified
233 Rice Court	233 Rice Court/ Structure	1951	Frame Vernacular	Not NR Certified
Groveland Post Office	Structure	1963	International	Not NR Certified
Boost Mobile	Structure	1960	Masonry Vernacular	Not NR Certified
214 W Broad St	214 W Broad Street/ Structure	1956	Masonry Vernacular	Not NR Certified
302 W Orange St	302 W Orange Street/ Structure	1962	Masonry Vernacular	Not NR Certified
Veterinary Trauma Center	244 W Orange Street/ Structure	1953	Masonry Vernacular	Not NR Certified
Edge Building	Structure	1923	Masonry Vernacular	Not NR Certified
Family Dollar	108 W Broad Street/ Structure	1957	Masonry Vernacular	Not NR Certified
Diamondback Trading Company	128-132 W Broad Street/ Structure	1950	Masonry Vernacular	Not NR Certified
Hunter Building	Structure	1920	Masonry Vernacular	Not NR Certified
Telephone Exchange Building	115-117 N Lake Avenue/ Structure	1927	Mission	Not NR Certified
Century Link Building	133 W Orange Street/ Structure	1958	Masonry Vernacular	Not NR Certified
Link Printing	136 S Main Avenue/ Structure	1963	Masonry Vernacular	Not NR Certified
Great Florida Insurance	133 E Orange Avenue/ Structure	1950	Masonry Vernacular	Not NR Certified
Peoples State Bank	200 E Broad Street/ Structure	1920	Neo-classical revival	Not NR Certified
Supermercado Jalisco	110 E Broad Street/ Structure	1947	Masonry Vernacular	Not NR Certified
Paola's Bakery	140 E Broad Street/ Structure	1925	Masonry Vernacular	Not NR Certified
Property Financial Services	146 E Broad Street/ Structure	1953	Masonry Vernacular	Not NR Certified
Groveland Laundry and Drycleaning	158 E Broad Street/ Structure	1953	Masonry Vernacular	Not NR Certified
Hyde Medical Services	101 E Broad Street/ Structure	1920	Masonry Vernacular	Not NR Certified
Salon West	115-117 E Broad Street/ Structure	1920	Masonry Vernacular	Not NR Certified
Tortilleria Jalisco	119 E Broad Street/ Structure	1920	Masonry Vernacular	Not NR Certified
H & S Liquidators	135 E Broad Street/ Structure	1910	Masonry Vernacular	Not NR Certified
Red Lion Pub	139 E Broad Street/ Structure	1957	Masonry Vernacular	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
Groveland Pharmacy	145 E Broad Street/ Structure	1925	Masonry Vernacular	Not NR Certified
Newett Building	171 E Broad Street/ Structure	1922	Masonry Vernacular	Not NR Certified
Groveland Auto Repair	207 E Broad Street/ Structure	1950	Masonry Vernacular	Not NR Certified
139 E Orange St	139 E Orange Street/ Structure	1954	Masonry Vernacular	Not NR Certified
262 E Orange St	262 E Orange Street/ Structure	1955	Masonry Vernacular	Not NR Certified
120 Lennox Ave	120 Lennox Avenue/ Structure	1960	Masonry Vernacular	Not NR Certified
161 Cortese Circle	161 Cortese Circle/ Structure	1950	Masonry Vernacular	Not NR Certified
152 Cortese Circle	152 Cortese Circle/ Structure	1950	Masonry Vernacular	Not NR Certified
Fresh Arrangements	131 Cortese Circle/ Structure	1950	Masonry Vernacular	Not NR Certified
124 Cortese Circle	124 Cortese Circle/ Structure	1950	Masonry Vernacular	Not NR Certified
Kim E's Flowers	350 E Broad Street/ Structure	1955	Frame Vernacular	Not NR Certified
Groveland Discount Beverage	112 S State Rd 33/ Structure	1953	Masonry Vernacular	Not NR Certified
J Garrett Inc Tires and Wheels	132 S State Rd 33/ Structure	1955	Masonry Vernacular	Not NR Certified
First Missionary Baptist Church	200 E Wright Street/ Structure	1922	Masonry Vernacular	Not NR Certified
646 E Broad St	646 E Broad Street/ Structure	1959	Masonry Vernacular	Not NR Certified
628 Blue St	628 Blue Street/ Structure	1962	Masonry Vernacular	Not NR Certified
638 Blue St	638 Blue Street/ Structure	1946	Frame Vernacular	Not NR Certified
706 Blue St	706 Blue Street/ Structure	1943	Frame Vernacular	Not NR Certified
718 Blue St	718 Blue Street/ Structure	1943	Frame Vernacular	Not NR Certified
735-747 Blue St	735-747 Blue Street/ Structure	1940	Frame Vernacular	Not NR Certified
759 Blue St	759 Blue Street/ Structure	1930	Frame Vernacular	Not NR Certified
779 Blue St	779 Blue Street/ Structure	1930	Frame Vernacular	Not NR Certified
824-826 E Broad St	824-826 E Broad Street/ Structure	1956	Masonry Vernacular	Not NR Certified
834 E Broad St	834 E Broad Street/ Structure	1956	Masonry Vernacular	Not NR Certified
850-854 E Broad St	850-854 E Broad Street/ Structure	1956	Masonry Vernacular	Not NR Certified
845 Robinson St	845 Robinson Street/ Structure	1960	Masonry Vernacular	Not NR Certified
156 Baldwin Ave	156 Baldwin Avenue/ Structure	1963	Masonry Vernacular	Not NR Certified

Site Name	Address/Site Type	Year Built	Architectural Style/ Archaeological culture	Date NR Certified
117 2nd Ave	117 2nd Avenue/ Structure	1957	Masonry Vernacular	Not NR Certified
181 1st Ave	181 1st Avenue/ Structure	1950	Masonry Vernacular	Not NR Certified
171 1st Ave	171 1st Avenue/ Structure	1950	Masonry Vernacular	Not NR Certified
110 Beverly Drive	110 Beverly Drive/ Structure	1952	Masonry Vernacular	Not NR Certified
106 Beverly Drive	106 Beverly Drive/ Structure	1961	Masonry Vernacular	Not NR Certified
Indian Hills Produce	130 Sampy Road/ Structure	1962	Masonry Vernacular	Not NR Certified
Window Tinting and Signage	7108 State Road 50/ Structure	1958	Masonry Vernacular	Not NR Certified
Howard Fertilizer Company	7205 State Road 50/ Structure	1958	Industrial Vernacular	Not NR Certified
Edge Ancillary Building	Structure	1925	Masonry Vernacular	Not NR Certified
Downtown Groveland Historic District	Historic District	N/A	Historical District/ Multiple	Not NR Certified
Edge Standard Oil Station	Structure	1925	Masonry Vernacular	Not NR Certified
Lake Catherine Southwest	Artifact scatter	N/A	N/A	Not NR Certified
Sampey 1	Artifact scatter	N/A	N/A	Not NR Certified
208 N Main Ave	208 N Main Avenue/ Structure	1923	Frame Vernacular	Not NR Certified
Lake Douglas North	Artifact scatter	N/A	N/A	Not NR Certified
FL-578	Artifact scatter	N/A	N/A	Not NR Certified
Cherry Lake I	Artifact scatter	N/A	N/A	Not NR Certified
Cherry Lake II	Artifact scatter	N/A	N/A	Not NR Certified
7205 Lake Emma Rd	7205 Lake Emma Road/ Structure	1945	Frame Vernacular	Not NR Certified
Lucy Lake East	Artifact scatter	N/A	N/A	Not NR Certified
In the Pines	Artifact scatter	N/A	N/A	Not NR Certified
Lake Desire North	Artifact scatter	N/A	N/A	Not NR Certified
Lake Desire Southwest	Artifact scatter	N/A	N/A	Not NR Certified
Vineyard	Artifact scatter	N/A	N/A	Not NR Certified
Old Groveland Cemetery	Cemetery	1900	Cemetery; 50 graves	Not NR Certified

Source: Florida Department of Historical Resources, Florida Master Site File – August 2018.

D. ANALYSIS

1. Economic Vitality

The City of Groveland is poised for future commercial, office, and industrial development. Groveland's direct access to Florida's Turnpike as well as US Highway 27 and several state roads provides the transportation network necessary to attract major employers. The City also has prime land available and the established Christopher C. Ford Commerce Park in its planning area. Much focus has been put on building the necessary workplace districts to create a more sustainable community.

The City has established a Community Redevelopment Area (CRA) to guide redevelopment activities in order to build a vibrant and attractive downtown. Through the CRA Board's leadership and community input, the City is dedicated to bringing about both physical improvements for the area as well as economic development. By putting tax dollars directly back into the CRA, private investors will be encouraged to invest in the area as well. This public-private partnership will result in more places for Groveland's residents and guests to shop and eat and more prosperity for Groveland's business community.

Various cities and towns in Lake County provide additional employment and needed services within reasonable commuting areas of the City. As future development occurs in the Mixed Use and North Workplace Development areas, additional employment and service opportunities will be made available for the City's residents and others. This will provide for much improved sustainability for the City over the short-range (2020-2025) and long-range (2040) planning period of this *Plan*.

2. Nonconforming and Incompatible Uses

Land use conflicts arise when uses are introduced in dissimilar areas without proper buffering. The *Future Land Use Map* and the Groveland Land Development Regulations set forth the appropriate locations for land uses in the City in order to eliminate existing land use conflicts. The City's Land Development Regulations addresses incompatibilities through control of nonconforming uses.

3. Availability of Facilities and Services

This section provides an overview of the availability of public facilities and services in Groveland during the short-range (2020-2025) and long-range (2040) planning periods.

The City shall continue to require all new development within 500 feet of a City central sanitary sewer liner to connect to the system. The City's wastewater system has sufficient capacity to meet the population demands during the planning period. The City will

continue to analyze the appropriateness and feasibility of wastewater treatment for future growth.

Overall, the City's potable water system is designed to accommodate future growth. With the revisions to the Consumptive Use Permit allotments and the installation of storage tanks at WTP 2 and WTP 5, there should be sufficient water capacity and storage to support the population demand during the planning period. The City will continue to monitor and maintain the potable water services provided in the City's Utility Service Area during the planning period. The City shall continue to enforce the guidelines established in the City's Cone of Influence and Wellhead Protection Areas. The City's Wellhead Protection Areas are featured on the City's *Existing Land Use Map* and *Future Land Use Map*.

As referenced in the *Transportation Element*, the widening of State Road 19 from US Highway 27 to State Road 50 will address future deficiency and allow for improvements to the north-south traffic flow through Groveland. Also, the widening of State Road 50 from State Road 33 to Bloxham Avenue will significantly increase the east-west connection of the City to the neighboring communities. The realigning of State Road 50 is designed to reduce the amount of traffic through the downtown core and provide a more pedestrian and bicycle friendly downtown. Over the intermediate to long term these changes will significantly modify and improve the future Level-of-Service (LOS) capacity for SR 19 and SR 50 and help to achieve an acceptable LOS for future transportation concurrency.

The City will continue to work with FDOT and the Lake-Sumter MPO to extend the South Lake Trail from Clermont to Minneola. Since the proposed trail will run directly through the downtown core, the City anticipates that a trailhead will be established in the downtown area; which may increase the merchant activity for the downtown commercial businesses. The proposed bicycle pathways are presented on the City's *Future Transportation Map*.

A fixed public transportation route in Groveland will accommodate commuters, low income and elderly populations, and the transportation disadvantaged. This fixed route transit service will provide the City's residents and guests with a transit link to the major urban areas in Lake and Orange County. This route will also reduce the commuter traffic to other counties, especially Orange County. The City shall continue to coordinate with the Lake-Sumter MPO to address public transit issues.

The City's solid waste level of service standard for solid waste is 6 pounds per person per day. There is sufficient capacity in the County's landfill to support the population demand during the short-range (2020-2025) and long-range (2040) planning period.

The City shall continue to require development to provide for the 100 year, 24-hour rainfall event and provide retention for water quality consistent with new and innovative

techniques. The City shall also continue to require that all new development provide evidence to show that LOS ratings in stormwater conveyances serving the new development will not be degraded to a LOS lower than currently exists as a result of the new development's construction and stormwater runoff contribution.

The City does not have the sufficient land needed to support the demand for park space and bicycle/pedestrian pathways during the short-range (2020-2025) and long-range (2040) planning periods; however, the City does have park impact fees set aside to address this deficiency and is in the process of searching for appropriate land to purchase. Additionally, the City plans to build a multi-field baseball park on a 20-acre site that Groveland already owns. As developments are considered, the City will continue to ensure that park space and bicycle/pedestrian pathways will be required as part of those residential developments and that adopted level of service standards are met. The City shall continue to coordinate with the County on establishing measures to enhance the recreation and open space opportunities in and around Groveland. The City will also continue to solicit grants from public and private agencies, and collect park impact fees to fund future parks and facilities.

City staff will continue to assess the need to provide student capacity relief to the public elementary, middle and high schools in the Groveland area on an ongoing basis with Lake County Schools.

4. Groundwater Recharge

There are no known groundwater recharge problems in Groveland. The City shall continue to protect the quality of groundwater recharge through enforcing the City's Land Development Regulations and the guidelines established in this *Comprehensive Plan*. The quality of groundwater recharge shall also be protected by ensuring that all stormwater conveyances serving new development does not degrade the level of service lower than currently exists as a result of the new development's construction and stormwater runoff contribution.

5. Analysis of Existing Vacant Lands

As previously mentioned, there are 5,930 total acres of vacant land the City, of which 1,294 acres are developed but vacant and 4,636 acres are undeveloped vacant lands. About 25% (1,520 acres) of the vacant lands is in the Mixed Use Future Land Use category and 34% (2,032 acres) is designated for Residential uses. An additional 2,467 acres of vacant lands (Villa City) are currently designated with a Master Planned Community (MPC) Future Land Use category. The soils on these vacant lands are overall suitable for development. The elevation on these vacant lands range from 85 feet mean sea level (MSL) to 200 feet MSL. Other than the Conservation lands, which have been removed from the acreage figures above, there are no known major environmentally sensitive lands or significant natural resources located on these vacant lands that will

prevent any development. To determine these acreages, the City's parcel layer (with vacancy information from the Florida Department of Revenue) was overlayed on the City's Future Land Use layer.

6. Analysis of Land Needed to Accommodate Projected Population

Based on the analysis featured in Table 6, the City will need an additional 2,811 acres in order to support the 2035 population. It is important to note that the City has about 3,584 acres of vacant land that can be used for mixed use or residential uses. As such, the City has an adequate amount of vacant land that's needed to support the population demand during the short-range (2020-2025) and long-range (2040) planning period. As the vacant Mixed Use and Residential parcels develop, the City will ensure that additional recreational facilities are implemented during the development review process.

In addition to the analysis on the following page, and as part of the process of delineating future areas of population growth and conservation, the City shall focus on the following five development principles:

1. ***Cluster Residential Density While Preserving Green Spaces:*** Identify potential areas for "clustered residential density" within the Interlocal Service Boundary while simultaneously identifying regional and statewide conservation corridors for preservation. Prioritize infill development within existing "pockets" of the City that are not connected to statewide preservation corridors.

2. ***Increase the Number of Local Jobs:*** Increase the City's Jobs to Population Ratio (equated as the number of jobs in Groveland divided by Groveland's population) by providing a mixture of land uses. Within the analysis on the following page, the land use requirements have been increased by 20% for all commercial uses for years 2025 and beyond to account for this principle.

3. ***Increase Density in the Downtown Area:*** Increase density within the downtown area CRA utilizing residential, commercial, institutional and mixed-use development.

4. ***Diversify the City's Housing Stock:*** Diversify the number of housing types within the downtown CRA and all future density nodes in order to attract current and future residents to the urban core.

5. ***Utilize Transfer of Development Rights as a Tool for Achieving Density:*** Focus on the use of Transfer of Development Rights (TDR) in order to further develop the downtown CRA with infill development, or as part of

a process to transition development rights to property owners with large amounts of wetlands on their parcels as a means to achieve higher residential densities.

TABLE 6: LAND REQUIREMENTS FOR PROJECTED POPULATION NEEDS, 2020 - 2035

Future Land Use	Non-Vacant Existing Acreage (2018) **	Acreage on 2040 FLU Map	Acreage Needed to Support 2020 Population*	Remaining Available FLU Acreage 2020	Acreage Needed to Support 2025 Population	Remaining Available FLU Acreage 2025	Acreage Needed to Support 2030 Population	Remaining Available FLU Acreage 2030	Acreage Needed to Support 2035 Population	Remaining Available FLU Acreage 2035
AG – Agriculture	17.64	46.47	22.92	23.55	40.24	6.23	48.25	(-1.78)	54.56	(-8.09)
CBD – Central Business District	47.15	56.54	61.26	(-4.72)	129.05	(-72.51)	154.78	(-98.24)	175.02	(-118.48)
COMM – Office/Commercial	81.84	183.93	106.33	77.60	224.02	(-40.09)	268.63	(-84.70)	303.80	(-119.87)
CON – Conservation (minus wetlands)	0.00	5321.44	--	--	--	--	--	--	--	--
GSSFLD - Green Swamp Single Family Low Density	125.48	136.25	163.04	(-26.79)	286.21	(-149.96)	343.23	(-206.98)	388.17	(-251.92)
GSSFRD – Green Swamp Single Family Rural Density	6.32	237.83	8.21	229.62	14.41	223.42	17.29	220.54	19.55	218.28
GSC – Green Swamp Commercial	21.71	54.38	28.21	26.17	49.52	4.86	59.38	(-5.00)	67.16	(-12.78)
HDR – High Density Residential	76.96	94.60	99.99	(-5.39)	175.54	(-80.94)	210.51	(-115.91)	238.08	(-143.48)
IND – Industrial	206.18	1092.76	267.89	824.87	470.28	622.48	563.97	528.79	639.20	453.56
MU – Mixed Use	529.38	2049.54	687.82	1361.72	1207.48	842.06	1448.02	601.51	1637.64	411.90
MPC – Master Planned Community	TBD	TBD	--	--	--	--	--	--	--	--
NWD – North Workplace Development	0.00	115.09	0.00	115.09	0.00	115.09	0.00	115.09	0.00	115.09

Future Land Use	Non-Vacant Existing Acreage (2018) **	Acreage on 2040 FLU Map	Acreage Needed to Support 2020 Population*	Remaining Available FLU Acreage 2020	Acreage Needed to Support 2025 Population	Remaining Available FLU Acreage 2025	Acreage Needed to Support 2030 Population	Remaining Available FLU Acreage 2030	Acreage Needed to Support 2035 Population	Remaining Available FLU Acreage 2035
P/I – Public/Institutional	131.02	134.27	170.23	(-35.96)	298.85	(-164.58)	358.38	(-224.11)	405.31	(-271.04)
REC – Recreation and Open Space	9.19	9.49	11.94	(-2.45)	20.96	(-11.47)	25.14	(-15.65)	28.42	(-18.93)
SFLD – Single Family Low Density	169.32	239.98	220.00	19.98	386.21	(-146.23)	463.15	(-223.17)	523.80	(-283.82)
SFMD – Single Family Medium Density	841.86	1718.47	1093.83	624.64	1920.22	(-201.75)	2302.75	(-584.28)	2604.29	(-885.82)
Lake County Heavy Industrial	23.65	23.65	30.73	(-7.08)	53.95	(-30.30)	64.69	(-41.04)	73.16	(-49.51)
Lake County Regional Office	7.70	7.70	10.00	(-2.30)	17.56	(-9.86)	21.07	(-13.36)	28.82	(-16.13)
Lake County Rural	0.00	109.43	0.00	109.43	0.00	109.43	0.00	109.43	0.00	109.43
Lake County Suburban	12.78	713.69	16.61	697.08	29.15	684.54	34.95	678.74	39.54	674.15
Lake County Urban Expansion	6.88	8.07	8.94	(-0.87)	15.70	(-7.63)	18.82	(-10.75)	21.29	(-13.22)
Lake County Urban Medium Density	32.89	45.79	42.73	3.06	75.02	(-29.23)	89.96	(-44.17)	101.75	(-55.96)
TOTAL (Minus Conservation)	**2,348.0**	**7,077.9**	**3,050.7**	**4,027.3**	**5,414.4**	**1,663.6**	**6,492.99**	**584.94**	**7,344.5**	**(-266.61)**

Notes: *Based on the following formula – (2009 Acres of Occupied Residential Parcels ÷ 2009 Population) * Projected Population
**All vacant lands other than Conservation land uses (outside of wetlands) were excluded from the Existing Acreage in order to properly extrapolate future needs based on the existing population and usage. These lands were included in the total acreage from the *2025 Future Land Use Map* column.
***Commercial land uses (COMM and CBD) have been given a 20% demand increase in years 2025, 2030, 2035 and 2040
Source: Lake County Property Appraisal 2009 DOR Annual Real Estate Tax Roll File and B&H Consultants, Inc., April 2010

7. Analysis of Need for Redevelopment

As previously mentioned, the City has adopted a Community Redevelopment Area (CRA) to address the redevelopment needs. The City will continue to coordinate with the CRA Board in its efforts to rehabilitate distressed areas of the City, increase economic activity in the downtown area, and develop and maintain an attractive downtown core. Groveland will also continue to promote a live-work environment in the CRA as well as shopping and restaurants to serve the local area.

8. Analysis of Flood Prone Areas

The City shall continue to ensure that development within floodplains will be closely scrutinized to ensure compliance with established Land Development Regulations. The majority of vacant lots in Groveland are very suitable for building.

9. Urban Sprawl

The City does not and will continue not to promote the approval of development that will contribute to "urban sprawl." An analysis corresponding to measures that the City implements to discourage a proliferation of urban sprawl is featured in this section.

10. Energy Efficiency, Energy Conservation, and Greenhouse Gas Emission

The City has identified strategies for producing energy efficient land use patterns, increasing energy conservation, and reducing greenhouse gas emissions. This section provides an overview of the energy related strategies implemented by the City.

a. Producing Energy Efficient Land Use Patterns

The City has adopted the Mixed Use and North Workplace Development land uses as a tool to produce energy efficient land use patterns in Groveland. The City will ensure that developments within these mixed use areas are compact, walkable neighborhoods.

The City has also established a "build-out" area (the City's Utility Service Area) to determine the maximum extent of where urban development will be approved by the City Council. During the preparation of the *Future Land Use Map*, the City reviewed all land uses to ensure that the higher gross density and intensity standards were appropriately established in all areas planned for urban development within the "build-out" area.

The City's minimum density and intensity standards apply to all areas planned for urban development and redevelopment. These standards and the buffering requirements established in the Land Development Regulations ensure that the land uses in Groveland will remain compatible and consistent with the surrounding land uses.

b. Increasing Energy Conservation

The City is currently working a 5-day work week and requires employees to practice turning off lights in rooms that are not in use to increase energy conservation. Additionally, the City is in the process of establishing an *Energy Management Plan* to increase energy conservation (see Policy 1.19.3 of this *Element*). The *Energy Management Plan* will be used as a tool to minimize electric, fuel and water resources in City buildings, fleet vehicles and on public properties.

The City promotes "green" development in both private and municipally- supported building. Green development specifically relates to the environmental implications of development. Green building integrates the built environment with natural systems, using site orientation, local sources, sustainable material selection and window placement to reduce energy demand and greenhouse gas emissions. The City is in the process of amending the Land Development Regulations to establish green building practices and sustainability development guidelines.

The City requires energy-efficient and water saving measures to be implemented in all new construction and redevelopment projects.

A few biodiesel companies have located in Groveland and the City is trying to encourage more eco-friendly businesses. The City recently approved economic incentives for certain businesses.

c. Reducing Greenhouse Gas Emissions

The Mixed Use, Central Business District, and North Workplace Development land uses will serve as a tool to reduce vehicle miles traveled in Groveland, which will reduce the greenhouse gas emissions. Residents and guests of Groveland can easily access the historical downtown or Lake David area by walking or biking. The City is actively involved with the Lake-Sumter MPO in regards to expanding the pedestrian and bicycle facilities in Groveland. The City will continue to promote mixed use developments, bicycling, and walking as a tool to reduce the greenhouse gas emissions in the Groveland area.

The City is amending its Land Development Regulations to ensure that the removal of regulatory barriers and establishment of incentives to promote energy efficiency and conservation is implemented in Groveland.

E. FUTURE LAND USE GOALS, OBJECTIVES, AND POLICIES

GOAL 1: Ensure that the character and location of land uses in Groveland promote the conservation of resources, efficiency and concurrency in the provision of public facilities and services, maximization of economic benefits for existing and future citizens, compliance with adopted minimum levels of service standards, and concomitantly minimize detrimental impacts to health, safety, and welfare which may be jeopardized by environmental degradation, nuisances, and incompatible land uses.

OBJECTIVE 1.1: ***Identifying Land Use Patterns and Permitted Densities and Intensities.*** To identify the appropriate land use patterns, residential densities, and nonresidential intensities of land use permitted in Groveland.

Policy 1.1.1: ***Land Use Designations.*** The City shall establish, adopt and implement density and intensity standards for all future land uses, as applicable, and as indicated on the *Future Land Use Map* and the adopted City Zoning Map.

Density and intensity standards for land uses in Groveland are featured below

Land Use	Maximum Residential Density
Residential:	
Single Family Low Density (SFLD)	Up to 2.0 dwelling units per acre. Elementary schools are also permitted in this category. The maximum building height is 35 feet.
Single Family Medium Density (SFMD)	Up to 4.0 dwelling units per acre. Elementary and middle schools are permitted in this category. The maximum building height is 35 feet.
Medium Density Residential (MDR)	Up to 6.0 dwelling units per acre. Elementary and middle schools are also permitted in this category. The maximum building height is 35 feet.
High Density Residential (HDR)	Up to 10.0 dwelling units per acre. Elementary, middle, and high schools are also permitted in this category.
Green Swamp Single Family Low Density (GSSFLD)	Up to 4.0 units per acre. The maximum impervious surface coverage is 0.40. The maximum building height is 35 feet.

Green Swamp Single Family Rural (GSSFR)	Up to 2.0 dwelling units per acre. The maximum impervious surface coverage is 0.40. The maximum building height is 35 feet.
Land Use	**Maximum Land Intensity**
Mixed Use (MU)	Up to 4.0 dwelling units per acre. Non-residential uses - the maximum impervious surface coverage is 0.60 and the maximum floor area ratio is 0.25. May live and/or work in these areas.
Master Planned Community (MPC)	Up to 5.0 dwelling units per acre. Non-residential uses – the maximum floor area ratio is 1.00. Impervious surface coverage will be regulated at the PUD level in accordance with the provisions of Policy 1.1.16. School facilities are allowable uses on all PUD sites.
North Workplace Development (NWD)	Up to 7.0 dwelling units per acre. Non- residential development – the maximum impervious surface coverage is 0.65 and the maximum floor area ratio is 0.7. May live and/or work in these areas. The land use will allow for flexibility in design while requiring a strong mix of employment generators. Commercial retail/restaurant, professional services, and entertainment-related uses shall comprise a minimum of 25% of the property. In order to encourage sustainability, a minimum of 15% of the property shall be dedicated to research and development, manufacturing, distribution, or corporate offices and a minimum of 10% for medium to high density residential uses (up to 7 units per acre). This land use will also require a minimum of 5% of the land be devoted to public recreation, a minimum of 5% to governmental or civic uses, and a minimum of 20% open space.
Central Business District (CBD)	The maximum impervious surface coverage is 0.80 and the maximum floor area ratio is 1.0. The maximum density for apartments, condominiums, or townhomes is up to 10.0 dwelling units per acre. The minimum building height is 35 feet and the maximum building height is 50 feet.

Office/Commercial (COMM)	The maximum impervious surface coverage is 0.75 and the maximum floor area ratio is 0.5. The maximum building height is 35 feet.
Green Swamp Commercial (GSC)	The maximum impervious surface coverage is 0.40 and the maximum floor area ratio is 0.5.
Industrial (IND)	The maximum impervious surface coverage is 0.70 and the maximum floor area ratio is 0.70. The maximum building height is 50 feet.
Public/Institutional (P/I)	The maximum impervious surface coverage is 0.70.
Recreation and Open Space (REC)	The maximum impervious surface coverage is 0.5. The maximum building height is 35 feet.
Agriculture (AG)	The maximum impervious surface coverage is 0.1. One dwelling unit per 5 acres is permitted for agricultural uses.
Conservation (CON)	The maximum impervious surface coverage is 0.05.

Notes: Open Space: Open space is figured on the Gross Land Area. Up to 50 percent of the open space requirement may be met with wetlands, except in the Green Swamp Area of Critical State Concern where 100% of the open space requirement may be met with wetlands. Open space may include landscaped buffers and stormwater facilities if they are designed to be a park-like setting with pedestrian amenities and free form ponds. Open space may be passive or active. Open space may include public recreational components of developments. The majority of the open space shall be permeable; however, up to 10 percent may be impervious (plazas, recreational facilities, etc.). Wet ponds are not counted as part of that 10%.

Densities would be determined by Net Land Area. The Net Land Area is figured by taking the Gross Land Area (total property) less any lakes, wetlands or water bodies.

Floor area ratio is defined as the total non-residential square feet of a building divided by the total square feet of the lot the building is located on.

Policy 1.1.2: ***Land Use Categories.*** The land use categories, as depicted on the City's *2025 Future Land Use Map (FLUM)* shall permit the following uses and activities.

Single Family Low Density (SFLD) – The Single Family Low Density category shall be primarily limited to single-family detached homes. This designation serves primarily to place less intensive residential development adjacent to environmentally sensitive areas and natural resources and to allow residential

preference for all income groups and to promote a diversity of housing types within the City. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary schools are permitted in this category.

Single Family Medium Density (SFMD) – The Single Family Medium Density category shall be primarily limited to single-family detached homes. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary and middle schools are permitted in this category.

Medium Density Residential (MDR) - The Medium Density Residential category shall be primarily limited to single-family detached homes, townhomes, or similar type of uses. Elementary and middle schools are also permitted in this category. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code.

High Density Residential (HDR) – The High Density Residential category shall be primarily limited to single family villas, townhomes, or multi-family uses. Residential uses in this category shall be permitted in those areas so designated in accordance with the applicable permitted density and as further controlled by the Land Development Regulations and the Florida Building Code. Elementary, middle and high schools are also permitted in this category.

Green Swamp Single Family Low Density (GSSFLD) – The GSSFLD category shall be limited to single-family detached units, attached single-family units, or townhomes. The cluster development standards of this category are intended to promote innovative residential design, encourage diversity of housing, preserve valuable open space areas, protect significant natural features and sensitive environmental areas, and allow more efficient utilization of land and facilities.

Green Swamp Single Family Rural (GSSFR) – The GSSFR category shall be limited to single-family detached units. The cluster development standards of this category are intended to promote innovative residential design, encourage diversity of housing, preserve valuable open space areas, protect significant natural features and sensitive environmental areas, and allow more efficient utilization of land and facilities.

Mixed Use (MU) – Primarily intended to create sustainability, including the provisions of reducing the dependability on the automobile, protecting more open land, and providing quality of life by allowing people to live, work, socialize, and recreate in close proximity. Elementary, middle, and high schools are also permitted in this category.

Master Planned Community (MPC) – The Master Planned Community category is envisioned to create a sustainable, self-sufficient, mixed use community including a mix of housing types to accommodate multiple stages of life, as well as non-residential uses, such as office, retail, industrial, medical, institutional, educational, and civic uses located in a pedestrian oriented village center. Land subject to this designation will have a Planned Unit Development zoning, which will include a conceptual master plan of the mixed use development. School facilities are allowable uses on all PUD sites.

North Workplace Development (NWD) – Primarily intended to encourage a mix of uses in an area close to the Christopher C. Ford Commerce Park and the Florida Turnpike Interchange. It is also intended to provide flexibility in the siting and design of new developments, and to provide for a mixture of medium and high density residential, commercial office, and community uses to support the primary employers in the development.

Central Business District (CBD) - Primarily intended for residential and commercial development in the historical downtown area. The historical downtown area is an economic, cultural, social, historic and architectural anchor of the City. In order to sustain these qualities, new development and redevelopment within the Central Business District shall be reflective of the architectural styles and fabric of the area. Consistency and compatibility with the existing built environment

shall be considered in the review and issuance of development permits within the Central Business District. In order to preserve the quaint character of downtown Groveland, size limitations will also be placed on individual businesses. Redevelopment will focus on orienting buildings and roadways to a pedestrian scale. Residential development is permitted at higher densities in this area than other parts of the City, in order to foster compact, pedestrian oriented growth that will support downtown businesses. New commercial buildings are expected to accommodate pedestrians by providing storefronts near sidewalks and by offering shade and shelter along major streets.

Office/Commercial (COMM) - The Office/Commercial land use category is intended to provide appropriate locations for neighborhood and community businesses providing services and retail sales for the City and the nearby communities. Permitted uses within the Office/Commercial category shall be limited to the following uses; unless a special exception is granted to applicant by the City Council.

- **General Commercial.** These areas shall include those businesses that provide retail goods and services, which serve the routine and daily needs of residents, including banks and professional services, grocery and convenience stores, retail shops, and restaurants. Public and private elementary and middle schools are also allowed. Low intensity cultural and entertainment and medical facilities are also allowed in this category.
- **Limited Commercial.** These areas shall include low intensity office, service and retail businesses that are compatible when located in close proximity to neighborhoods. These uses are intended primarily to serve the needs of the closely surrounding neighborhood.
- **Professional Office.** These areas shall be limited to small neighborhood scale businesses and professional offices that are compatible with, and have no measurable or noticeable adverse impacts, upon surrounding residential uses. Such uses include offices for doctors and dentists, accountants, architects, attorneys, engineers, land surveyors, real estate brokers,

financial planners, insurance and real estate agents and the like.

Green Swamp Commercial (GSC) – The Green Swamp Commercial land use category is intended to apply to lands located along State Road 50 and State Road 33 in the Green Swamp. The maximum intensity standard for this land use category is 40% impervious surface and a 0.5 FAR. Development shall comply with the Guiding Principles for Development in the Green Swamp Area of Critical State Concern.

Industrial (IND) – The Industrial category shall be limited to manufacturing and production, storage, warehousing and distribution uses as further controlled by the Land Development Regulations. Industrial uses may have outdoor storage and business related activity, but such uses shall not include processes that create negative effects to surrounding properties due to noise, heat, fumes, debris, chemicals or hazardous materials. Educational facilities are not permitted in this category. Support commercial uses are also allowed as ancillary uses.

Public/Institutional (P/I) - These areas include uses such as government facilities and essential utilities, including police, fire and City Hall buildings and water and wastewater facilities. This category also includes schools, religious facilities, day care facilities (child and adult), cemeteries, or similar uses as identified by the City Council. Religious facilities or day care facilities (child and adult) may be allowed in residential areas as a conditional use.

Recreation and Open Space (REC) – These areas generally include public parks or private parks that are open and available to the public. Note: Some park and open space lands may be more appropriately designated as Conservation, such as lands with wetlands or other environmentally sensitive areas. Permitted uses shall include active and passive recreation activities including bikeways and pedestrian trails, or other similar facilities as identified by the City Council. The associated facilities which support the above uses (i.e. restrooms, clubhouse) are also permitted. Additional land shall be acquired only if necessary to meet adopted level of service. At any time land for recreation purposes becomes available to the City, the *Comprehensive Plan*

shall be revised to establish the subject site under a designated land use policy.

Agriculture (AG) – Agriculture lands shall be primarily limited to agricultural uses including: cropland and pasture; orchards; groves; vineyards; nurseries; ornamental horticultural areas; and other agricultural uses as determined by the City Council. This category is intended to support the viability of the local agricultural economy and the production of the local food supply. Acceptable agricultural practices within this designation shall be restricted to the following activities:

1. Agricultural uses consisting of citrus groves, pasture land, forestry, and vegetable and feed crops. No commercial feed lots, confined or exterior, shall be permitted within the City;
2. Single-family housing up to one dwelling unit per five acres;
3. Recreation (active or passive uses); and
4. Public facilities and utilities.

Conservation (CON) - Conservation lands shall include those lands so designated on the *FLUM*. These areas are generally composed of open land, water, marsh and wetlands and environmentally sensitive areas. Conservation lands may be either publicly or privately owned. It is intended that the natural and open character of these areas be retained and that adverse impacts, which may result from development, shall be prohibited or minimized. Adverse impacts shall be presumed to result from activities, which contaminate or degrade wetlands and environmentally sensitive areas, or natural functions and systems associated with such areas. Permitted uses within the Conservation category shall be limited to the following and shall be further controlled by the Land Development Regulations.

- Activities intended for the conservation, re-establishment and re-nourishment, or protection of natural resources.
- Recreation uses and facilities that are customarily described as passive in nature including, but not limited to, fishing, hiking and biking, canoeing, kayaking, and

the use of other similar small, quiet low-speed watercraft.

- Very low intensity outdoor or water-dependent recreational related uses (excluding commercial marinas) that are determined not to be in conflict with the intent of the Conservation category, subject to applicable Federal, State and local policies and permitting requirements.

Policy 1.1.3: ***Adequate Land on the Future Land Use Map to Support Population Demands.*** The City shall ensure that adequate land is designated on the *Future Land Use Map* needed to support the population demands during the short-range (2020-2025) and long-range (2040) planning periods.

Policy 1.1.4: ***Regulating Land Use Activities.*** The City shall regulate land use activities within land use categories shown on the *Future Land Use Map* through the maintenance of zoning districts. The density and intensity of land use activities established for each zoning district shall be consistent with the density and intensity qualitative standards as set forth on the *Future Land Use Map* for the associated land use district.

Policy 1.1.5: ***Additional Requirements for the Mixed Use Land Use Category.*** The Mixed Use designation is intended to be used in instances where a mixture of low to medium density residential, neighborhood commercial, office uses and general commercial uses and community uses may be appropriate, and for which a flexible managed approach will best achieve the Goals, Objective and Policies of this *Comprehensive Plan*. Land subject to this designation will have a Planned Unit Development zoning which will include a master plan of the overall design of the mixed use development, together with performance standards and design guidelines.
Permitted uses include:

- Residential;
- Retail sales and service;
- Office/Commercial;
- Educational;
- Restaurants;

- Community facilities
- Recreation;
- Conservation;
- Public/Institutional;
- Medical facilities;
- Hotels/motels and tourist facilities; or
- Any other use as identified by the City.

In addition, the following shall apply:

- All future development shall be required to connect to the City central water and sewer system;
- Residential uses shall occupy a minimum of 50% and a maximum of 80% of the developable area;
- Commercial, including retail, office uses and community facilities (excluding schools) a minimum of 5% and a maximum of 25% of the developable area;
- Open space uses shall occupy a minimum of 20% of the site;
- Maximum impervious surface is limited to 60%;
- A maximum of 0.25 floor area ratio (FAR) may be considered for non-residential uses;
- Up to 4 dwelling units per gross acre may be considered; and
- Flexible setback requirements are permitted to ensure that mixed use buildings are properly located adjacent to abutting roadways and sidewalks. Such setback requirements shall be determined by the City based on the compatibility with surrounding environments.

Policy 1.1.6: ***Promoting High Quality Residential Development on the Mixed Use and Master Planned Community Land Use Categories.*** The City shall promote a high quality residential development that will create a sense of place and community through the development of the Mixed Use and Master Planned Community Land Use categories. These include:

1. A diversity of housing styles, shapes and materials in order to create variety in the streetscape;

2. Different housing types to be integrated architecturally in order to give the development a harmonious appearance;
3. The creation of visual richness when choosing materials and details. Local characteristics are encouraged;
4. The encouragement of front porches and side entrances for garages;
5. A variety of roof heights, pitches and materials;
6. Landscaping to be incorporated into the overall design as a means of linking the development areas with the open spaces

Policy 1.1.7: **Neighborhood and Village Centers for the Mixed Use and Master Planned Community Land Use Categories.** Within a Mixed Use and Master Planned Community land use categories, neighborhood and village centers are intended to provide uses that meet the retail and service needs of a traditional neighborhood center and its vicinity. In addition to shops and offices, the centers may contain other compatible uses such as civic and institutional uses of community-wide importance, specifically including second-floor residential uses. These centers shall be located so that it is easily accessible by pedestrians from as many of the residential areas as possible.

Policy 1.1.8: ***Streets and Sidewalks Requirements for the Mixed Use and Master Planned Community Land Use Categories.*** All developments within the Mixed Use and Master Planned Community land use categories shall have a connected street system that serves vehicles, pedestrians and bicycles and which connects the neighborhood center to adjacent residential/community areas. Streets shall be laid out to promote pedestrian circulation and ease of access to the community areas. Within the neighborhood center maximum opportunities for shared parking shall be utilized.

Policy 1.1.9: ***Additional Requirements for the North Workplace Development Land Use Category.*** The North Workplace Development category shall be available in the Groveland North Overlay Area for land located along or in the vicinity of US Highway 27 or State Road 19. This designation is intended to encourage a mix of uses in an area close to the Christopher C. Ford Commerce Park and the Florida Turnpike Interchange. The mixed use designation is intended to provide flexibility in the siting and design of new

developments, and to provide for a mixture of medium and high density residential, commercial, office, manufacturing, and community uses. Land subject to this designation will have a Planned Unit Development zoning which will include a master plan of the overall design of the mixed use development, together with performance standards and design guidelines. The master plan shall provide for a pattern of development which encourages corporate workplace environments, reduces the need to travel by car, encourages opportunities for cycling and walking, and which connects the new development to existing and planned development outside the site's boundaries. Development in this category shall be limited to the following four use categories:

A. Residential
Townhomes/Villas
Apartments/Condominiums

B. Commercial/Office
Retail sales and service
Office
Restaurants
Hotels/motels
Medical facilities
Cultural and entertainment

C. Government, Civic and Institutional

D. Low-Intensity Industrial
Research and development
Corporate headquarters
Light manufacturing
Distribution

Performance Standards
Minimum of 2 of the 4 use categories listed above.
Maximum Impervious Surface Ratio (ISR): 65%
Maximum Floor Area Ratio (FAR) for non-residential uses: 0.7
Residential Density: Maximum 7 units per acre.
Public Squares/Recreation: Min 5%
Open Space: Min 20%

The balance of uses within a site will be determined based on the following criteria:

1. All developments shall contain an element of useable public space to allow for social interaction;
2. Commercial uses shall comprise a minimum of 25% of the area and shall be oriented to US 27 and SR 19. Retail uses shall be located to encourage pedestrian activity;
3. Residential dwellings shall be permitted above commercial, office or civic uses and also allowed as separate buildings; and
4. Residential development shall be integrated with other permitted uses, with adequate on-site facilities provided for residents including landscape and open space area, and amenity, parking and service facilities.

Commercial retail/restaurant, professional services, and entertainment-related uses shall comprise a minimum of 25% of the property. In order to encourage sustainability, a minimum of 15% of the property shall be dedicated to research and development, manufacturing, distribution, or corporate offices and a minimum of 10% for medium to high density residential uses (up to 7 units per acre). This land use will also require a minimum of 5% of the land be devoted to public recreation, a minimum of 5% to governmental or civic uses, and a minimum of 20% open space.

Policy 1.1.10: ***Single Family Low Density and Medium Density Development Standards.*** Areas delineated on the *Future Land Use Map* for low to medium density single family residential development shall accommodate residential development with a maximum density established herein and adhere to the following standards:

1. Generally single use residential neighborhoods shall contain no more than 200 dwelling units.

2. Residential neighborhoods shall be planned and designed as follows:

   (a) Housing shall be oriented to parks and open public spaces where applicable;
   (b) To encourage architectural variety, lot sizes shall be varied throughout each neighborhood;

(c) Front porches, side entrances for garages, variety in roof heights, pitches and materials shall be encouraged;
(d) A mixture of single family residential dwelling units, attached dwelling units and zero lot line detached dwelling units shall be encouraged;
(e) All utilities within developments shall be underground unless topography, drainage or similar constraints cause this not to be feasible; and
(f) Each residential neighborhood shall have a park depending on the size of the development. The park shall include activities and facilities that serve the projected population of the development.

3. Developments up to 2 units per acre will be required to connect to the City water system but may install dry lines if central sewer is not available at time of construction. Connection to the City's sewer system will be required within six (6) months of the City's sewer becoming available.

Standards

Impervious Surface Area: 50%

Open Space[1]: 25%

[1] Includes lakes, wetlands, natural areas and recreation areas.

Policy 1.1.11: ***Development Restrictions in the Green Swamp Single Family Low Density and Rural Development Areas.*** The following restrictions will apply to development within the Green Swamp Single Family Low Density and Green Swamp Single Family Rural Development areas:

1. All development will be clustered on the least environmentally sensitive areas;
2. 60% of the site will be retained as open space;
3. Impervious surfaces shall be limited to 40% of the site. This shall include the principal dwellings, all paved area, accessory structures and swimming pools;

4. All developments shall be required to connect to central water and sewer;
5. All developments shall use water conservation devices; and
6. All developments shall contain facilities for the retention of all stormwater on site.

Policy 1.1.12: ***General Pattern of Commercial Land Use.*** Commercial land uses shall be permitted in the following land use categories: Central Business District (CBD), Commercial/Office (COMM), Green Swamp Commercial (GSC), Mixed Use (MU), and North Workplace Development (NWD). Higher intensive commercial activities shall be directed either towards the existing City center located near the one-way pairs along S.R. 50, S.R. 19, US 27 or on mixed use development sites.

Policy 1.1.13: ***Commercial Development Restrictions on Green Swamp Lands.*** The designation shall apply only to land located in the Green Swamp Area of State Critical Concern. Commercial development in this land use shall be restricted to only those commercial uses needed to serve local residents. Commercial development in this land use shall also be limited to:

- Retail (excluding gasoline services and businesses using chemical operations);
- Offices;
- Restaurants including drive-ins;
- Commercial recreation;
- Health facilities;
- Government and civic uses; and
- Nursery Schools or Child Care Centers.

The maximum intensity standard for this land use category is 40% impervious surface and a 0.5 FAR, except as defined in Policy 1.3.6. Development shall comply with the Guiding Principles for Development in the Green Swamp Area of Critical State Concern.

Policy 1.1.14: ***Permitting Community Public Facilities.*** Necessary community public facilities, such as utility and water service lines, shall be permitted within any future land use designation if such activity satisfies established criteria of the *Comprehensive Plan* and the

City's Code of Ordinances. Community public facilities are hereby defined as all public facilities needed to support the infrastructure and population demands during the short-range and long-range planning periods of this *Comprehensive Plan*. These community public facilities include all public park, transportation, sanitary sewer, potable water, and reclaimed water facilities. By December 2020, the above mentioned definition for a "community public facility" shall be provided within the Land Development Regulations. Additionally, performance standards for community public facilities shall be incorporated into the Land Development Regulations to direct the placement of such facilities.

Policy 1.1.15: ***Industrial Development Prohibition on Green Swamp Lands.*** All new industrial uses shall be prohibited in the Green Swamp Area of Critical State Concern. This prohibition shall specifically include facilities engaged in industrial activities, as defined in EPA's National Pollution Discharge and Elimination System for Stormwater Associated with 32 Industrial Activity (NPDES) (Chapter 40, CFR Part 122), including:

- Petroleum pipelines;
- Landfills;
- Incinerators;
- Wholesale chemical operations;
- Petroleum related industries and fuel dealers (with the exception of gas stations and truck stops, which may be permitted);
- Dry cleaning plants; and
- Chemical research operations.

Policy 1.1.16: ***Master Planned Community (MPC) Land Use Category Requirements.*** The Master Planned Community designation is planned to be a self-sufficient community that includes a mix of housing types to accommodate multiple stages of life and non-residential uses, such as office, retail, industrial, medical, institutional and civic uses located in a pedestrian-oriented village center. Land subject to this designation will have a Planned Unit Development zoning which will include a conceptual master plan of the mixed use development, together with performance standards and design guidelines.

Permitted Uses may include:

- Residential;
- Retail sales and service;
- Office/Commercial;
- Educational;
- Community facilities;
- Recreation;
- Public/Institutional;
- Medical facilities;
- Industrial;
- Hotels/motels and tourist facilities; or
- Any other use as identified by the Planned Unit Development

In addition, the following shall apply:

- Any future development shall be required to connect to the City central water system, sewer system, and reuse;
- Residential uses shall occupy a minimum of 50 percent and a maximum of 80 percent of the gross land area;
- Commercial uses including retail, office, industrial, and community facilities (excluding schools) shall occupy a minimum of 5 percent and a maximum of 25 percent of the gross land area;
- Open space and impervious surface shall be calculated at the time of PUD approval in order to account for potential on-site wetlands, which may have a future land use designation of Conservation;
- Open Space uses shall occupy a minimum of 30 percent of the gross lad area within a PUD Master Plan;
- Low Impact Development and Green Building techniques (Policy 1.2.11 and 1.2.12) are required;
- A maximum of 1.00 floor area ratio (FAR) shall be allowed for non-residential uses;
- Up to 5 dwelling units per acre shall be allowed, and;
- Flexible dimensional requirements are permitted to ensure that mixed use buildings are properly located

adjacent to abutting roadways and sidewalks. Such dimensional requirements shall be determined by the Planned Unit Development.

GROVELAND NORTH OVERLAY

Based upon the existing Chapter 180 water and sewer service territories, the City of Groveland has designated an area in which future annexations are likely to take place. All future annexations outside the defined Groveland North Overlay Area shall include a justification based upon changes in water or sewer service areas.

The area is designated in the *Future Land Use Map* series as the *Groveland North Overlay Area Map*. As property located within the Groveland North Overlay Area is annexed into the City, and is subsequently included on the *Future Land Use Map*, the goals, objectives and policies specific to the Groveland North Overlay Area will apply, in addition to all the existing goals, objectives and policies in the City's *Comprehensive Plan*.

The only land use categories available for development within the Groveland North Overlay Area shall be Mixed Use, Single Family Medium Density, North Workplace Development, Office/Commercial, and Industrial.

Policy 1.1.17: ***Development Intensities within the Turnpike Commerce Park.*** Development within the Turnpike Commerce Park shall be limited to the following maximum development intensities:

Land Use	Intensity
Warehouse/ Distribution	5,000,000 Square Feet
Light Manufacturing	1,087,041 Square Feet
Office	152,796 Square Feet
Commercial	32,000 Square Feet

Land uses may be converted from one use to another based on equivalent trips, provided that the revised development program continues to comply with adopted City standards and does not exceed any Development of Regional Impact threshold.

OBJECTIVE 1.2: ***Managing Growth in the Groveland North Overlay Area.*** Manage the anticipated growth within the Groveland North Overlay area in a manner which creates a more effective land use pattern, promotes sustainable development based on residential neighborhoods

and mixed communities which ensure compatibility between the environment, new development and existing developed areas.

Policy 1.2.1: ***Groveland North Overlay Guidelines.*** The following guidelines shall apply to land within the Groveland North Overlay Area:

1. New development within the Groveland North Overlay area shall be developed with neighborhoods that create a sense of place and are supported by Mixed Use Developments, schools, parks and open spaces and civic spaces;
2. New development within the Groveland North Overlay area shall be developed with an orderly transportation network that includes new collector roads and a recreational trail system;
3. A priority within the Groveland North Overlay area shall be to enhance the conservation of lakes and wetlands through conservation designations, recreation areas and trails and through City purchase of wetlands, subject to compliance with all applicable County, Regional, State and Federal permitting requirements; and
4. New development within the Groveland North Overlay area shall be required to identify and reserve land or provide appropriate mitigation for the following public facilities and services, if it is determined that the proposed new development has an impact on the public facilities and services:

    (a) Right-of-way for limited access, collector and local roads, bikeways and recreational trails;
    (b) Water and wastewater treatment facility sites;
    (c) Community and neighborhood parks;
    (d) School sites; and
    (e) Police, EMS and fire station sites.

Policy 1.2.2: ***Conservation Requirements in the Groveland North Overlay Area.*** In order to conserve, protect and appropriately use the natural resources in the Groveland North Overlay area, the following criteria shall apply when property is annexed into the City:

1. All lakes, rivers and wetlands within the Groveland North Overlay area shall have a *Future Land Use* designation of "Conservation". Within these areas, improvements shall be limited to the following:

Passive Recreation:

- Boardwalks and docks not to exceed a width of four feet;
- Hiking trails, not to exceed a width of four feet;
- Picnic areas;
- Fishing piers exceeding a width of five feet may only be located within lakes and not within wetlands; or
- Observation towers.

Conservation Facilities:

- Fire lanes and fire/observation towers;
- Facilities designed to protect nesting, feeding or habitat areas of designated endangered, threatened, or species of special concern, as determined by the Florida Fish and Wildlife Conservation Commission, or to support the propagation of common wildlife;
- Fishery management;
- Facilities designed to protect an archaeological or historical site;
- Facilities designed to retard or eliminate soil erosion problems, particularly shoreline erosion along shorelines;
- Facilities necessary to eliminate unwanted exotic vegetation; or
- Wildlife monitoring devices/stations.

2. All land shall be subject to the policies contained in the *Conservation Element* which protect air quality, water sources, minerals, soils, natural vegetative communities, fisheries, wildlife and wildlife habitats.

Policy 1.2.3: ***Diversity of Land Uses within the Groveland North Overlay Area.*** As parcel annexed within the Groveland North Overlay area are developed, a diversity of land uses shall be provided by a mixture of residential, retail, offices and manufacturing. Workplace development to include support housing will be strongly encouraged.

Policy 1.2.4: ***Development Guidelines in the Groveland North Overlay Area.*** It is the City's intent that as property annexed into the Groveland North Overlay area is developed, the following shall apply:

1. Development shall avoid the creation of urban sprawl and strip development;
2. Innovative land development application principles shall be promoted through the use of Planned Unit Developments, Mixed Use Developments and design principles such as cluster design;
3. A mixture of complimentary land uses that include housing, retail, offices, commercial services, manufacturing, light industrial, education, civic, community and recreation uses shall be required to create economic and social vitality and to encourage the linking of trips and to:

    (a) Create an attractive and high quality environment which is compatible with the scale and character of the surrounding community;
    (b) Protect and enhance the environment, and promote sustainable development principles;
    (c) Develop commercial, residential and mixed use areas that are safe, comfortable and attractive to pedestrians;
    (d) Provide social and community facilities to serve the new development and to enhance existing service levels in the area;
    (e) Reinforce streets as public places that encourage pedestrian and bicycle travel;
    (f) Provide roadway and pedestrian connections to residential areas;
    (g) Provide a network of open space provision in the form of squares, plazas, parks, greens and similar open space design; and

(h) Create major workplace developments, with specific emphasis at the Florida Turnpike/ US Highway 27 interchange.

4. When determined appropriate, planned unit developments shall provide a mixture of housing types and price ranges to provide housing opportunities for all residents of the City and benefit the area's economy; and
5. Incompatibilities between existing and new development shall be mitigated through architectural design, recreational trails, additional landscaping and similar types of screening.

GREEN SWAMP AREA OF CRITICAL STATE CONCERN

OBJECTIVE 1.3: ***Conserving and Protecting the Green Swamp Area of Critical State Concern.*** Conserve and protect the Green Swamp Area of Critical State Concern and its environmental and economic resources.

LEGAL DESCRIPTIONS FOR THOSE PORTIONS OF THE CITY'S BOUNDARIES THAT LIE WITHIN THE GREEN SWAMP AREA OF CRITICAL STATE CONCERN ARE AS FOLLOW:

"Commencing at the N.W. corner of Tract 2, Groveland Farms, in Section 30, Township 22 South, Range 25 East, Lake County Florida, according to Plat Book 2, pages 10 and 11, Public Records of Lake County, Florida, run South 30.00 feet to the South right-of-way of Anderson St., and the Point of Beginning; from said POB, run thence N.89°39'03"E., parallel with and 30.0 ft. South of North line of aforesaid Tract 2 for a distance of 375 ft; thence South parallel with the West line of Tract 2 a distance of 630.01 ft., to the South line of said Tract 2; thence S. 89°39'03"W along said South line 214.42 ft; thence N. 33°01'30"E., 79.66 ft. thence S. 89°39'03"W, a distance of 204.00 ft. to the West line of said Tract 2; thence North along said West line 563.48 ft. to the POB. The West 11.0 feet thereof subject to an easement for ingress and egress; and The Northwest ¼ of the Northeast ¼ of the Northwest ¼ East of S.R. 33 right-of- way, less the North 20 feet thereof, all in Section 30, Township 22 South, Range 25 East, Lake County, Florida; and The North 495 feet of the South ½ of the NE ¼ of the NW ¼ of Section 30, Township 22 South, Range 25 East, Lake county Florida; and The South 165 feet of the NE ¼ of the NW ¼ of Section 30, Township 22, Range 25 East, Lake County, Florida, LESS and EXCEPT the East 1033.26 feet thereof. AND, The East 1033.62 feet of the South 165 feet of the NE ¼ of the NW ¼ of Section 30, Township 22 South, Range 25 East, Lake County, Florida. TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AND ACROSS

THE FOLLOWING DESCRIBED PROPERTY, TO WIT: the South 25 feet of the South 165 feet of the NE ¼ of the NW ¼ of Section 30, Township 22 South, Range 25 East, Lake County, Florida, LESS AND EXCEPT the East 1033.26 feet thereof. AND, the Northwest Quarter (NW ¼) of the Southwest Quarter (SW ¼) if the Northeast Quarter (NE ¼) of Section 30, Township 22 South, Range 25 East, also described as Tract No. Twenty-one (21), according to the Plat of Groveland Farms, recorded in Plat Book 2, at page 11, of the Public Records of Lake County, Florida. AND, Tract No. Twenty (20), according to Florida Development Corporation's Map of Groveland Farms, recorded in Plat Book 2, at Pages 10-11 of the Public Records of lake county, Florida, and being the Northeast Quarter (NE ¼) of the Southeast Quarter (SE ¼) of the Northwest Quarter (NW ¼) of Section 30, Township 22 South, Range 25 East, EXCEPT one and one-third (1 1/3) acres in the Northeast corner of said Tract, thence West 310 feet; thence East 310 feet; thence South 200 feet; thence East 310 feet; thence North 200 feet to the point of beginning; the land hereby conveyed containing Eight and Two Thirds (8 2/3) acres, more or less. AND Tracts 34, 35, 36, 37, 38, 43, 44, 45, 46, 47, 49, 50, 51, 52, 53, 63 and 64, in Section 21, Township 22 South, Range 25 East, according to the Plat of Groveland Farms, recorded in Plat Book 2, Pages 10 and 11, Public Records of Lake County, Florida; AND The East 310 feet of the North 200 feet of Tract 20, Groveland Farms, in Section 30, Township 22 South, Range 25 East, Lake County, Florida, as recorded in Plat Book 2, Pages 10 & 11; AND That part of the South 1/2 of Tract 12, GROVELAND FARMS, in Section 30. Township 22 South, Range 25 East, according to the plat thereof as recorded in Plat Book 2, Pages 10 and 11, Public Records of Lake County, Florida, being described as follows: COMMENCE at a concrete monument at the SW corner of the NE 1/4 of said Section 30, also being the SW corner of Tract 28, of said Groveland Farms; thence N 00°31'35" W along the West line of the said NE 1/4 of said Section 30 and the West line of Tracts 28 and 21 of said Groveland Farms a distance of 1327.80 feet to the NW corner of said Tract 21, also being the SW corner of the aforesaid Tract 12, Groveland Farms and the POINT OF BEGINNING; thence N 89°45'35" E along the South line of said Tract 12, a distance of 414.80 feet to a point on the Easterly edge of a pond; thence along the said Easterly edge of a pond the following described courses; N 43°19'19" W, 56.35 feet; thence N 40°09'50" W, 77.30 feet; thence N 40°40'47" W, 73.76 feet; thence N 42"39'01" W, 79.96 feet; thence N 44°52'46" W, 65.45 feet; thence N 51°43'45" W, 43.22 feet; thence N 71°48'05" W, 46.89 feet; thence N 86°20'40" W, 64.29 feet; thence N 79°20'O3" W, 38.77 Feet more or less to the West line of the aforesaid Tract 12, Groveland Farms, also being the West line of the NE 1/4 of said Section 30, thence S 00°31'35" E along the West line of said Tract 12 and the West line of the said NE 1/4, a distance of 315.63 feet more or less to the SW corner of said Tract 12 and the POINT OF BEGINNING; AND Tracts 39, 40, 41 and 42, Section 21, Township 22 South, Range 25 East, Groveland Farms, according to the plat thereof recorded in Plat Book 2, Pages 10 and 11, Public Records of Lake County, Florida, LESS that part of Tracts 39 and 40 designated as right-of-way, described in ORB 641, page 768, Public Records of Lake County, Florida; AND Tract 37, lying South of the right of way line of State Road No. 50, LESS AND EXCEPT: Beginning at the Southwest corner of Tract 37 of GROVELAND FARMS, in Section 20, Township 22 South, Range 25 East, Lake County, Florida, as recorded in Plat Book 2, Pages 10 and 11, Public Records of Lake County, Florida, run North along the West line of said Tract 37 a

distance of 549.58 feet to the South right of way of State Road 50, thence North 89°41'20" East along said South right of way 200.15 feet, thence South 00°07'41" West 550.02 feet to the South line of said Tract 37, thence South 89°48'44" West 198.92 feet to the Point of Beginning, LESS road right of way; Tracts 38 and 43, lying South of the right of way line of State Road No. 50, LESS AND EXCEPT: That part of said Tract 38 lying East of and within 11 feet and West of and, within 19 feet of the ditch survey line described as follows: Commence on the East line of Section 20, Township 22 South, Range 25 East, at a point 58.10 feet South 00°10'48" East of the Northeast corner of the SE ¼ of said Section 20, thence run South 89°30'12" West a distance of 1,333.65 feet for the Point of Beginning, thence run South 0°10'43" East a distance of 414.77 feet for the end of this ditch survey line description. AND LESS AND EXCEPT: That part of said Tracts 38 and 43 lying within the following described boundaries: Commence on the East line of Section 20, Township 22 South, Range 25 East, at a point 58.10 feet South 00°10'48" East of the Northeast corner of the SE ¼ of said Section 20, thence run South 89°30'12" West a distance of 1,333.65 feet, thence run South 0°10'43" East a distance of 414.77 feet, thence run South 89°28'47" West a distance of 19 feet for the Point of Beginning, thence run North 89°28'47" East a distance of 450 feet, thence run South 0°10'43" ,East a distance of 450 feet, thence run South 89°28'47" West a distance of 450 feet, thence run North 0°10'43" West a distance of 450 feet to the Point of Beginning; all lying and being in Section 20, Township 22 South, Range 25 East, GROVELAND FARMS, according to the Plat thereof recorded in Plat Book 2, pages 10 and 11, Public Records of Lake County, Florida.

The above parcels of land are located within the Area of Critical State Concern (ACSC) entitled "Green Swamp" and fall within the purview of Chapter 380, F.S. Development of these parcels is protected by the following policies:

Policy 1.3.1: ***Amending the Future Land Use Series.*** For each annexation of land within the Green Swamp ACSC, the City shall amend the Future Land Use series to include the newly annexed land.

Policy 1.3.2: The City shall continue to ensure the protection and conservation of environmentally sensitive land within the City and within the Green Swamp ACSC through the Land Development Regulations and the standards established in this *Comprehensive Plan*. The City shall maintain Land Development Regulations that are consistent with the Green Swamp in the plan area agreed between the City and the DCA and which implement the provisions of the *Comprehensive Plan*.

Policy 1.3.3: ***Prohibiting Development within Floodplains and Wetlands.*** The City shall prohibit any development in floodplains and wetlands within the Green Swamp ACSC.

Policy 1.3.4: ***Type of Development Permitted in Green Swamp ACSC.*** All development in the Green Swamp ACSC shall be agricultural, residential, commercial, or recreational in nature. Commercial uses permitted in this area shall be low impact and low intensity. (See policy 1.3.6). All recreational uses, other than passive recreation uses, shall be limited to low impact, low intensity public or private recreation uses that do not require impervious surface coverage of more than 10% of the lot. Alternative paving techniques shall be used to achieve this goal.

Policy 1.3.5: ***Transferring Residential Densities from Wetlands.*** Within the Green Swamp ACSC residential densities shall be transferred from the wetlands within a site based on a density of one dwelling unit per 20 acres.

Policy 1.3.6: ***Non-residential Development Criteria and the Green Swamp ACSC.*** Non-residential development within the Green Swamp ACSC will be limited to a maximum of 40% impervious surface, with the exception of property described as Site 6 (Parcel ID#01-22-24-4305-0370-0000; Alternate Key #2858575) adopted under Ordinance 2004-08-31, which shall be limited to a maximum of 70% impervious surface. All non-residential development located within the Green Swamp ACSC directly on State Road 50 and State Road 33 will be limited to the following uses:

- Retail;
- Office/Personal Services;
- Recreation;
- Churches;
- Assisted Living Facilities; and
- Schools.

Paved roads will be required, together with central water and sewer. For all vacant, annexed land, owners seeking a non- residential classification must file for a *Future Land Use Map* amendment.

Policy 1.3.7: ***Residential Density Cap Applicable to Lands Within Green Swamp.*** No lands (a) either currently within Groveland City limit or later annexed and (b) within the Green Swamp Area of Critical State Concern shall be permitted, approved, rezoned, or designated for residential development at a net density greater than or more

intense than one (1) unit per five (5) acres except for those tracts of land identified within Lake County CASE NO. 04-CA-2843 or DOAH Docket No. 04-003651 and the Banyon Tract. The Green Swamp Area of Critical State Concern is defined by Section 380.0551, Florida Statutes, and Fla. Admin. Code R. 28-26.003.

Policy 1.3.8: ***Native Plants and Irrigation Systems Requirement.*** The use and/or preservation of native Floridian plants and irrigation systems that conserve water shall be required in new development, to the maximum extent feasible, within the Green Swamp ACSC for all landscaped areas including residential and commercial development, golf course and publicly owned spaces.

Policy 1.3.9: ***Approval of Golf Courses in the Green Swamp ACSC.*** Golf courses within the Green Swamp ACSC shall be approved on a case by case basis pursuant to specified approval criteria which are set out in the Land Development Regulations. To reduce the potential for negative impacts to water resources, the developer shall utilize the Audubon International Signature Program (AISP), or an equivalent program. Siting of the golf course is a critical first step in the golf course development process. If the site is not appropriate for the activities associated with developing and maintaining a golf course, there are likely to be problems. To avoid siting a golf course at an inappropriate location, a thorough analysis of the site should be done to evaluate its suitability. Key indicators of the suitability of a site include the following:

1. Proximity to wetlands and surface waters- a golf course should not be sited adjacent to wetlands or surface waters without a 50 foot natural buffer to protect these sensitive resources;
2. Golf courses should not be sited in the 100 year flood plain- additives used on a golf course (chemicals, pesticides and fertilizers) can be spread to adjacent wetlands, surface and groundwater when the golf course is inundated with flood waters; and
3. Geology that has connections to the groundwater (e.g. sinkholes, fissures or fractures).

Policy 1.3.10: ***Impervious Surfaces in the Green Swamp ACSC.*** Impervious surfaces within the Green Swamp ACSC shall be kept to a

minimum by limiting paved areas and encouraging alternatives to impervious paving surfaces.

Policy 1.3.11: ***Required Upland Buffer in the Green Swamp ACSC.*** The City hereby established within the Green Swamp ACSC a fifty (50) foot wide upland buffer from the wetland line in which no structure may be placed.

Policy 1.3.12: ***Wetland Systems and Stormwater Treatment or Storage.*** Wetland systems shall not be used for stormwater treatment or storage within the Green Swamp ACSC.

Policy 1.3.13: ***Guidelines for Recharge Areas in the Green Swamp ACSC.*** Projects located within the Green Swamp ACSC and within the Most Effective Recharge Areas must retain three inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most Effective Recharge Areas are those areas with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Policy 1.3.14: ***Prohibiting Wastewater Sludge in the Green Swam ACSC.*** The City shall prohibit any and all placement of wastewater sludge within the Green Swamp ACSC.

Policy 1.3.15: ***Prohibiting Industrial, Rock, Clay, and Sand Mining Activities.*** The City shall prohibit all new industrial development, peat and lime rock mining, clay mining, and sand mining within the Green Swamp ACSC.

Policy 1.3.16: ***Septic Tank Servicing Requirement in the Green Swamp ACSC.*** Where a development is serviced with a septic tank, the lot owner shall have it cleaned and inspected in accordance with the requirements of the Lake County Public Health Unit at least once every five (5) years.

Policy 1.3.17: ***Maximum Intensity Requirement for the Hooks 40, LLC Development.*** Development within the Hooks 40, LLC property described above shall be limited to the following maximum development intensities:

Land Use	Intensity
SR 50 Commercial	153,000 Square Feet

The Hooks 40, LLC property shall be limited to the uses defined in Policy 1.1.13 and Policy 1.3.6 of this *Element*.

OBJECTIVE 1.4: ***Planning for Residential Neighborhoods.*** Designate and promote sufficient areas for quality residential development and neighborhood cohesiveness, and require the availability of adequate facilities needed to support the population demands during the short- range (2020-2025) and long-range (2040) planning periods.

Policy 1.4.1: ***Residential Densities Guideline.*** Maximum gross residential densities shall be construed to represent the maximum allowable units which may be constructed on the gross land area, determined by dividing the "maximum allowable units" by the "gross land area" (i.e., dwelling units/gross land area). Residential densities shown on the *Future Land Use Map* shall be construed as the maximum gross residential density permitted for development in that residential district. Gross land area shall be construed to represent all land under common ownership proposed for residential development. Density designations shall be restricted or reduced for the following circumstances:

1. Waters of the State shall not be included as gross land area; or
2. Land area which encompasses floodplains, wetland, or other environmentally sensitive lands shall be restricted to density credits determined by criteria and performance standards set forth within the Land Development Regulations. No development shall be permitted in the wetlands other than passive recreation or conservation uses.

Policy 1.4.2: ***Designating Residential Land Uses on the Future Land Use Map.*** The *Future Land Use Map* shall designate sufficient land area for residential land uses according to a pattern which promotes neighborhood cohesiveness and identity, sustainable

development principles and which enables efficient provision of public facilities and services.

Policy 1.4.3: ***Dedicating Recreation Space and Public Open Space.*** Residential Subdivisions, plats, and PUD's shall be required to dedicate recreation space and public open space in accordance with policy 1.1.1 of the *Recreation and Open Space Element.*

Policy 1.4.4: ***Protecting Residential Development from Incompatible Uses.*** Residential areas delineated on the *Future Land Use Map* shall be protected from the encroachment of incompatible non-residential development. The City shall maintain its Landscape Ordinance that requires buffering between incompatible land uses. The vegetated buffer may be applied as credit towards meeting the site's open space requirements.

Policy 1.4.5: ***Impacts of New Development on Adjacent Properties.*** The City shall maintain site design requirements and subdivision regulations in the Land Development Regulations which adequately address the impacts of new development on adjacent properties in all land use categories and zoning districts.

Policy 1.4.6: ***Location of Community Facilities within Residential Areas.*** Supportive community facilities may be located within residential areas but shall be required to comply with performance standards and development requirements set forth within the Land Development Regulations. A "community facility or service" shall mean a building or structure owned and operated or authorized by the City to provide a public service and is limited to fire stations, police substations: emergency medical response stations, and postal drop box stations and other similar community-oriented facilities.

Policy 1.4.7: ***Transportation Systems within Residential Areas.*** Transportation systems within designated residential areas delineated on the *Future Land Use Map* shall be designed to accommodate traffic conditions that further public safety, encourage alternative modes of transportation, and limit nuisances. Access to residential areas shall comply with policies established within the *Transportation Element* that address access management. The design of new residential subdivisions must include the dedication of right-of-

way to enable pedestrian access to adjacent residential subdivisions.

Policy 1.4.8: ***Transition of Residential Densities.*** The City shall continue to orient the transition of residential densities on the *Future Land Use Map* toward higher densities along major transportation corridors and areas adjacent to commercial or other intensive land uses, while lower residential densities shall be directed towards areas further from the City center (i.e., the central commercial district) and in areas adjacent to agricultural lands.

Policy 1.4.9: ***Residential Screening Techniques.*** The City shall require new commercial, light industrial, and manufacturing development to install landscaping, visually obstructive fencing or man-made berms, or other appropriate screening techniques obstructing view of the commercial, light industrial, or manufacturing site from areas designated for low or medium density residential if the proposed commercial, light industrial, or manufacturing building is incompatible with the residential area.

Policy 1.4.10: ***Residential Density and the Future Land Use Map.*** The City shall ensure that residential density on the *Future Land Map* is based on the following considerations:

- Past and anticipated future population and housing trends and characteristics;
- Provision and maintenance of quality residential neighborhoods and preservation of cohesive neighborhoods;
- Protection of environmentally sensitive lands; and
- Transition of density between low, medium and high residential districts.

Policy 1.4.11: ***Group Home and Foster Care Facilities.*** The City shall continue to allow the location of group homes and foster care facilities in residential areas. These facilities shall serve as alternatives to institutionalization. If a group home or similar living arrangement has a capacity of eight or fewer persons and is licensed, operated, or permitted under the authority of the State's Department of Children and Families, the facility is entitled to locate in any residential zone in the City without a special exception. If the group home has a capacity of nine or more persons, the facility

may apply for a special exception to locate in residential areas. These facilities will also be consistent with the density and intensity provisions by category type set forth in this *Comprehensive Plan.*

Policy 1.4.12: ***Monitoring the Impact of Walls and Fences.*** The City shall monitor the impact of walls and fences as a result of residential screening techniques mentioned in Policy 1.4.9 to ensure that such features promote neighborhood safety and community aesthetics and discourage criminal activity.

OBJECTIVE 1.5: ***Planning for Commercial Activities.*** Allocate sufficient land area to accommodate commercial activities which provide goods and services demanded by local and area-wide markets, with consideration to fiscal and environmental impacts to the City of Groveland.

Policy 1.5.1: ***Location and Distribution of Commercial Land Uses.*** The location and distribution of commercial land use categories delineated on the *Future Land Use Map* shall be determined according to the following criteria:

1. Access and vicinity to arterial and collector roads, ease of access and egress from major thoroughfares to commercial sites, ability to achieve a functional internal circulation and off-street parking system. The term "vicinity" is hereby defined as being within ¼ mile to arterial and collector roads. It is important to note that some neighborhood-based commercial activity is more practical along local roadways. As such, the City does not want to restrict commercial uses to just arterial and collector roadways;
2. The promotion of sustainable development within mixed use sites by establishing a pattern of development which reduces the need to travel by car, encourages opportunities for cycling and walking, and prevent strip commercial centers;
3. Ability to comply with adopted performance standards for preventing or minimizing nuisance impacts, such as emission of air pollutants, noise, odor and generation of hazardous waste or products;
4. Impact on the conservation and preservation of natural resources;

5. Demand on existing and planned public services, utilities, water resources and energy resources;
6. Availability of central sanitary sewer systems; and
7. Promote the integration of uses to include live-work environments.

Policy 1.5.2: ***Access to Commercial Sites.*** Access to commercial sites shall utilize adjacent streets adjoining U.S. 27, S.R. 50, S.R. 19, S.R. 33, C.R. 565, and C.R. 565A where such streets serve to provide safe ingress\egress to the site. Such use of existing streets shall not be designed to direct traffic into residential areas. Commercial development pursuing access to State and County facilities shall be required to obtain all access management (curb cut) permits from those entities in accordance with their established rules prior to a site plan being approved by the City.

Policy 1.5.3: ***Density and Intensity of Commercial Uses.*** The density and intensity of commercial uses shall be compatible with the ability of public facilities to provide adequate services according to adopted level of service standards. The *Future Land Use Map* shall not designate more commercial areas than that which existing and planned public facilities and roadways can support at the adopted minimum level of service standards.

Policy 1.5.4: ***Dedicating Land for Commercial Uses to Meet the Regional Market.*** To discourage urban sprawl, Lake County has oriented land use patterns in its *Future Land Use Map* to direct development requiring public services and facilities to urbanized or rural/urban transitional areas which already provide them. Hence, the *Future Land Use Map* for Groveland shall dedicate more land for commercial activities than its population can support in order to meet regional market demands and to discourage urban sprawl into rural areas by development requiring facilities and services of an urban nature.

Policy 1.5.5: ***Commercial Building Design Principles.*** Commercial buildings shall be designed along the following principles:

1. Building facades shall be designed to a human-scale, for aesthetic appeal, pedestrian comfort, and compatibility with the design character of the development. The buildings may be either traditional in their architectural character, or

be a contemporary expression of traditional styles and forms, respecting simply the scale, proportion and character of village shops;

2. The massing of larger commercial buildings shall be softened in a variety of ways, including the use of projecting and recessed sections, to reduce their apparent overall bulk and volume;
3. The design of buildings should support a safe and attractive pedestrian environment;
4. Buildings shall generally be designed for multiple uses, with offices and/or residential units above;
5. Buildings over two stories should serve a role in urban design terms as key or marker buildings, to help provide a varied townscape. Church steeples are exempt from this limitation;
6. Landscaping around commercial buildings and their parking lots shall emphasize native species trees, shrubs and flowers to reduce maintenance, help ensure longevity, and to reinforce the natural spirit of the area. Species should be selected partly on the basis of their visual interest at different times of the year;
7. Public art and landmark buildings should be used to add interest and variety to the townscape; and
8. Flexible setback requirements are permitted to ensure that commercial buildings are properly located adjacent to abutting roadways and sidewalks. Such setback requirements shall be determined by the City based on the compatibility with surrounding environments.

Policy 1.5.6: ***Open Space Requirement and Commercial Development.*** New development shall be required to maintain a portion of commercial sites as open space as identified in the Land Development Regulations.

OBJECTIVE 1.6: ***Discourage Urban Sprawl.*** Discourage urban sprawl through a future land use pattern which promotes orderly, compact development.

Policy 1.6.1: ***Promoting Orderly, Compact Growth and the Future Land use Map.*** Land use patterns delineated on the *Future Land Use Map* shall promote orderly, compact growth. The City shall encourage growth and development in existing developed areas where public facilities and services are presently in place and in those areas

where public facilities can provide the most efficient service. Land shall not be designated for growth and development if abundant undeveloped land is already present within developed areas served by facilities and services.

Policy 1.6.2: ***Implementing the ISBA.*** The City shall continue to coordinate with Lake County through the Interlocal Service Boundary Agreement to develop an areawide planning approach, taking into account environmental suitability, functional relationships and areas where public facilities and services are available or proposed to be available by year 2020.

OBJECTIVE 1.7: ***Innovative Land Development Principles.*** Future growth and development shall be managed through the preparation, adoption, implementation and enforcement of innovative land development regulations.

Policy 1.7.1: ***Planned Unit and Mixed Use Developments as Management Strategies.*** Planned unit development and mixed use development techniques shall be used as a management strategy for promoting smart growth principles, negotiating innovative development concepts, design amenities, and measures intended to encourage unique planning concepts not attainable with certainty under conventional zoning or to protect environmentally, historically, or archaeologically significant sites.

Policy 1.7.2: ***Promoting Cluster Developments.*** As a means to promote conservation design, ecological integrity and maintain the City's character, cluster developments are encouraged by the City. Cluster developments shall be designed along the following principles:

1. The provision of open space within developed areas;
2. The creation of a variety of active and passive recreational uses;
3. The creation of a friendlier pedestrian environment, including walking and cycling opportunities;
4. Enhancement of the environmental setting and significant features;
5. The conservation of on-site wetlands and water bodies;
6. The maintenance of large areas of natural vegetation;

7. The maintenance of vegetation corridors along major water courses; or
8. Connectivity for species, either as continuous corridors or clusters of stepping stones.

Policy 1.7.3: ***Crime Prevention through Site Design.*** Crime prevention shall be considered in site design through application of all of the following guidelines:

1. All proposed building entrances, parking areas, pathways and other elements should be defined with appropriate features that express ownership. Such features should not conflict with the need for natural surveillance;
2. The proposed site layout, building and landscape design should promote natural surveillance. Physical features and activities should be oriented and designed in ways that maximize the ability to see throughout the site. For example, window placement, the use of front porches or stoops, use of low or see-through walls, and appropriate use of landscaping and lighting can promote natural surveillance. Sight-obscuring shrubs and walls should be avoided, except as necessary for buffering; and
3. The proposed site layout and building design should encourage legitimate activity in public spaces. For example, locating outdoor seating in areas that are visible from inside a restaurant helps to discourage crime and supports the activity of dining.

Policy 1.7.4: ***Priority of Creating Public Spaces.*** Priority should be given to the creation of a hierarchy of public spaces that relate to buildings and create a sense of community. Public spaces are "public" when they are within view of a street or other public space, accessible by pedestrians, and can be occupied by people. The public space may include sidewalks, a plaza or park.

Policy 1.7.5: ***Use of Mixed Use Developments.*** To discourage urban sprawl and to maximize existing and planned public facilities, the City has adopted the Mixed Use and North Workplace Development land uses.

Mixed use designations may include single family, multiple family, commercial, recreation, open space and institutional land

uses not to exceed development densities and intensities of use established for these land uses in this *Element*.

Policy 1.7.6: ***Maintaining Innovative Land Development Regulations.*** The City shall maintain innovative land development regulations that encourage mixed use developments and incorporate site design planning techniques that will enhance the quality of large scale developments or redevelopment area(s).

Policy 1.7.7: ***Requiring Underground Utilities.*** The City shall require all new subdivisions, residential and commercial developments, approved after the adoption of this *Comprehensive Plan*, to have underground telephone, cable and electrical utility lines to provide a more attractive, efficient, and safer development, when feasible.

OBJECTIVE 1.8: ***Encourage the Redevelopment and Renewal of Blighted Areas.*** The City shall encourage the redevelopment and renewal of blighted areas to maintain and enhance the quality of life and economic base of Groveland.

Policy 1.8.1: ***Targeting Blighted or Deteriorated Areas.*** The City shall target blighted or otherwise deteriorated areas within the City for special consideration through the Community Redevelopment Agency and the redevelopment plan, and shall pursue available federal, state, county and local funds for redevelopment.

Policy 1.8.2: ***Enforcement of Building Codes.*** The City shall continue the enforcement of building codes to maintain safe structures which promote and preserve the desired character of the City.

Policy 1.8.3: ***Identifying Blighted Areas.*** The City shall annually survey all areas of the City to determine if blighted areas are occurring.

OBJECTIVE 1.10: ***Protection and Conservation of Environmentally Sensitive Lands and Natural Resources.*** Ensure the protection and conservation of environmentally sensitive lands and other significant natural resources.

Policy 1.10.1: ***Managing Environmentally Sensitive Natural Systems.*** Policies in the *Conservation Element* for managing environmentally sensitive natural systems, including but not limited to lakes, wetlands, floodplain areas, significant vegetative communities and wildlife habitats of endangered and threatened species, shall be

implemented through performance standards stipulated in the Land Development Regulations.

Policy 1.10.2: ***Encroachment of Development in Wetlands and Upland Areas Adjacent to Wetlands.*** Development within wetlands and uplands adjacent to wetlands shall be protected from the encroachment of development according to requirements established in the Policy 1.3.4 and Policy 1.3.5 of the *Conservation Element.*

Policy 1.10.3: ***Protection of Floodplains.*** The City shall ensure the long-range protection of the floodplains through:

a. Positioning structures and impervious surfaces outside the 100 year floodplain to the greatest extent possible. The 100 Year floodplain shall be delineated within the *Future Land Use Map* Series, and its demarcations shall be determined by the most recent Flood Insurance Maps prepared by the Federal Emergency Management Agency;

c. Residential development shall cluster dwelling units on uplands located outside the 100 Year floodplain; and

d. Septic tanks, wastewater treatment plants, and spray fields are prohibited within the 100 Year floodplain.

Policy 1.10.4: ***Maintaining Natural Rate of Percolation in Aquifer Recharge Areas.*** The City rests on an area possessing a high aquifer recharge potential. To maintain the natural rate of percolation within aquifer recharge areas, the City shall enforce the following:

a. Enforce the impervious surface ratios and open space standards established in this *Comprehensive Plan.*

b. Ensure that the *Future Land Use Element* does not allocate any manufacturing or light industrial land use activities adjacent to lake front areas or within high recharge groundwater aquifer areas that generate pollutants that may adversely impact the quality of surface and ground waters.

c. Promote the application of permeable parking lot surfaces for commercial developments proposed within high recharge areas.

d. Promote land use activities and development densities which are compatible to high recharge potential percolation rates.

Policy 1.10.5: ***Maintaining Stormwater Management Requirements.*** The City shall maintain stormwater management requirements in the Land Development Regulations which provide specific standards for the design of on-site stormwater systems, as well as strategies and measures to minimize runoff into natural water bodies.

Policy 1.10.6: ***Protection of Vegetative Communities and Wildlife Habitats.*** Vegetative communities and wildlife habitats (particularly those identified as primary habitat for endangered or threatened species) shall be protected and conserved directly or indirectly by rules and principles established in the *Conservation Element.*

Policy 1.10.7: ***Land Uses being Compatible to Soil Types.*** Land use activities, including their densities and intensities, shall be compatible with soil types whose properties are capable of supporting the structures, parking areas, ancillary uses, and facilities proposed to be placed on them. The City shall maintain provisions in the Land Development Regulations which stipulate and define performance standards for land use activities proposed to occur on soil types whose development potential is limited in some form or manner.

Policy 1.10.8: ***Severe Slopes and Land Uses.*** Severe slopes shall be defined as having a gradient exceeding 10 percent. Land uses shall be delineated on the *Future Land Use Map* with consideration to the topography. Alterations to slopes at sites with greater than 10% slope must be approved by the City prior to land preparation activity.

Policy 1.10.9: ***Prohibiting Septic Tanks in Residential, Commercial, and Industrial Areas.*** Septic tanks will not be allowed on new residential, commercial and industrial sites within the City. When financially feasible, the City shall extend central sewer service to all developed properties within the current City limits. The City will also coordinate with the County to limit septic tank permits in unincorporated areas adjacent to the City's urban boundary.

Policy 1.10.10: ***Coordinating with Government Agencies and Protecting Natural Systems.*** The City shall coordinate with State agencies including,

the St. John River Water Management District, the Florida Department of Environmental Protection, the East Central Florida Regional Planning Council as well as Lake County, and other agencies concerned with managing natural resources for the purpose of protecting the function and existence of natural systems.

Policy 1.10.11: ***Lake Shore Protection.*** To protect the lake front areas from the encroachment of development, a shoreline protection zone shall be delineated. There shall be no disturbance within 50 feet of the landward extent of wetlands as set forth in Rule 62-340, with the exception of pilings for docks or piers. There shall be no buildings, pools, ponds, or other structures in this protection zone. There shall be no septic tanks within 75 feet of the landward extent of wetlands as set forth in Rule 62-340. All development shall be subject to the building setback requirements regarding the shoreline protection zone established in the City's Land Development Regulations.

Policy 1.10.12: ***Limiting Development in Wetland Areas.*** The City shall limit development within all wetland areas to land uses supporting conservation facilities and water-related passive recreation activities, as defined in the *Recreation and Open Space Element.* Wetlands shall be identified on the *Future Land Use Map* series as Conservation lands. No development shall be permitted in wetlands except for conservation or passive recreation uses as defined within policies cited herein.

Policy 1.10.13: ***Wetlands and Natural Buffer Zones.*** Wetlands shall be protected from impacts generated by adjacent land uses through natural buffer zones as defined in Policy 1.3.5 of the Conservation Element.

Policy 1.10.14: ***Floodplain Mitigation.*** Development within the 100 Year Floodplain shall provide necessary mitigation to maintain the natural stormwater flow regime. The 100 Year Floodplain Zone shall be delineated within the *Future Land Use Map* Series. The boundary of the 100 Year Floodplain Zone shall be determined by the most recent Flood Insurance Maps prepared by the Federal

Emergency Management Agency. Mitigation shall occur through the following activities:

a. ***Prohibited Land Uses and Activities.*** Storing or processing materials that would, in the event of a 100 Year Storm, be buoyant, flammable, explosive, or potentially injurious to human, animal or plant life is prohibited. Material or equipment immune to substantial damage by flooding may be stored if securely anchored to prevent flotation or if readily removable from the area upon receipt of a flood warning. Manufacturing land uses shall be prohibited from encroaching the 100 Year Floodplain Zone.

b. ***Minimum Floor Height Elevation.*** All new construction and substantial improvements of existing construction must have the first floor elevation for all enclosed areas at eighteen inches above the 100 year flood elevation.

c. ***Construction Materials and Methods.*** All new construction and substantial improvements of existing construction shall be constructed with materials and utility equipment resistant to flood damage, and using methods and practices that will minimize flood damage and prevent the pollution of surface waters during a 100 year flood event.

d. ***Service Facilities and Utilities.*** Electrical heating, ventilation, plumbing, air conditioning, and other service facilities shall be designed or located to prevent water from entering or accumulating within the components during a base flood. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate both infiltration of flood water into the systems and discharges for the systems into flood waters.

e. ***Residential Subdivision Plans and Design.*** Plans and designs for subdivisions shall minimize potential flood damage by locating recreation and conservation uses, if included in the plans, to areas within the Flood Zone, reserving as much land as possible outside the flood zone for other land uses. Flood zones shall be identified on all final development plans submitted to the City.

f. ***Stormwater Facilities.*** The City shall require development to have drainage facilities in place and functioning concurrent with the impacts of development, as stipulated by deadlines established within the Concurrency Management System. Such drainage facilities shall be designed to comply with the City's established level of service standard. Developers shall be required to install all necessary drainage facilities necessary to maintain the natural flow regime of the 100 year floodplain, consistent with level of service standards.

OBJECTIVE 1.11: ***Protection of Archaeological and Historic Resources.*** The City shall assure that land development and conservation activities further the protection of archaeological and/or historic sites that may be discovered in the future.

Policy 1.11.1: ***Preventing Detrimental Impacts to Historic Sites.*** The City shall prevent detrimental impacts of development to historic sites including provisions within the Land Development Regulations which preclude:

1) Destruction or alteration of all or part of such site;
2) Transfer or sale of a site of historical significance without adequate conditions or restrictions regarding continued preservation, maintenance, or use of such property;
3) Encroachment or introduction of visible, audible, or atmospheric elements which are inconsistent with the character of the property; and
4) Alteration or destruction of the site's surrounding environment.

Policy 1.11.2: ***Uncovered Artifacts during Construction.*** Development shall cease construction activities on a development site when unidentifiable artifacts are uncovered during either land preparation or construction. The developer shall notify the City of such potential discovery, and the City and/or the developer shall contact the Florida Department of State of such discovery. Construction shall not begin until the state has determined the archaeological significance of the discovery and the restrictions which shall be imposed on development. Development may continue in areas which will not impact the site of the discovery.

Policy 1.11.3: ***Identifying and Protecting of Archeological Resources and Historical Significant Buildings.*** The City shall identify and protect buildings and improvements that have historical or architectural significance. The City shall use the Florida Master Site File as a resource to identify archeological resources and historically significant structures. All historically significant sites or structures listed on the Florida Master File or the National Register of Historic Places shall be identified in the *Future Land Use Map* Series. In addition, the City shall also distinguish buildings as historic if the following criteria are met:

a. The age of the subject site exceeds fifty years;
b. Whether the building, structure, or object represents the last remaining example of its kind in the neighborhood or City; or
c. Whether documented proof indicates that the site played a significant role in the history of Groveland, Lake County or the State of Florida.

If type, density and intensity of adjacent land use shown on the *Future Land Use Map* is not compatible to the preservation of the historic site, then appropriate buffering and screening techniques shall be requirements imposed on encroaching adjacent new development. Such requirements shall be stipulated within the Land Development Regulations.

Policy 1.11.4: ***Assisting the Historic Preservation Committee.*** The City shall continue to assist the Historic Preservation Committee in its efforts to identify and protect buildings and improvements that have historic or architectural significance.

Policy 1.11.5: ***Adoption of a Historic Preservation Ordinance.*** By December 2020, the City shall adopt a historic preservation ordinance that will provide a means of designation and protect historic properties and create an incentive program to encourage the participation of property owners.

Policy 1.11.6: ***Maintaining the Historic Property Registry.*** The City shall maintain its Historic Property Registry to identify and document local buildings and improvements that have historic or architectural significance.

Policy 1.11.7: ***Increasing Public Awareness of the City' Preservation Efforts.*** The City shall conduct public education programs to increase public awareness of the City's historic preservation efforts to encourage citizen involvement.

Policy 1.11.8: ***Maintaining and Updating the Historic Resource Map.*** The City shall maintain and update accordingly a *Historic Resources Map* in the *Future Land Use Map* series indicating the locations of historically and architecturally significant buildings and improvements.

Policy 1.11.9: ***Providing Technical Assistance to Property Owners.*** The City shall promote the restoration, rehabilitation, and reuse of designated historic properties by assisting property owners in obtaining grants and technical assistance.

Policy 1.11.10: ***Rehabilitating, Relocating, or Demolition of Historic Sites.*** Criteria established in the Land Development Regulations pertaining to the rehabilitation or relocation of a designated historic structure shall follow the U.S. Secretary of the Interior's "Illustrated Guidelines for Rehabilitating Historic Buildings". Additional criteria for approving the relocation, demolition, adaptive reuse, or rehabilitation of a historic structure shall include the following factors:

a. The historic character and aesthetic interest the building, structure, or object and how it contributes to its present setting;
b. Whether there are definite plans for the area to be vacated and the effect of those plans on the character of the surrounding neighborhood;
c. Whether the building, structure, or object can be moved without significant and irreversible damage to its physical integrity;
d. Whether the building, structure, or object represents the last remaining example of its kind in the neighborhood or City;
e. Whether definite plans exist to reuse the subject property if a proposed demolition is carried out, and the effect of those plans on the character of the surroundings; and
f. Whether reasonable measures can be taken to save the building, structure, or object to a level safe for occupation.

Policy 1.11.11: ***Community Redevelopment Areas.*** The City shall continue to utilize its Community Redevelopment Area (CRA) Program and Federal programs such as the Community Development Block Grant (CDBG) program to facilitate redevelopment of dilapidated or abandoned buildings and the renovation, rehabilitation, or adaptive reuse of existing structures in the City's Redevelopment Areas.

Policy 1.11.12: ***Adaptive Reuse and Commercial or Manufacturing Properties.*** The City shall, through administration of the Land Development Regulations, encourage the adaptive re-use of no longer viable commercial or manufacturing properties.

Policy 1.11.13: ***Priority of Adaptive Reuse of Historic Structures.*** Adaptive reuse of historic structures in a manner that will preserve the historic value of such structures shall be given priority over demolition and/or redevelopment that will reduce historic value.

OBJECTIVE 1.12: ***Planning for Public Facilities and Services.*** Assure that needed public services and facilities are developed concurrent with the impact of new development.

Policy 1.12.1: ***Extending Public Facilities and Services.*** The City shall extend public facilities and services only to existing and proposed land use activities, as shown on the *Future Land Use Map*, which shall require and demand such services. Undeveloped land shall not be designated for development without assurance through the *Comprehensive Plan* that public facilities shall be available concurrently with the impacts of development. The impacts of land uses, including their densities and intensities, shall be coordinated with the City's ability to finance or require provision of necessary public facilities at conditions meeting or exceeding the adopted minimum level of service standards.

Policy 1.12.2: ***Timing and Location of Development and the Concurrency Management System.*** The timing and location of public facilities and services shall be coordinated through the City's Concurrency Management System to assure that development occurs in an orderly and timely manner consistent with the availability of public facilities and services.

Policy 1.12.3: ***Protection of Wellfield Areas.*** To protect wellfield areas from potential contamination emanating from adjacent land uses,

wellfield protection zones shall be established that prohibit, restrict, and control development and land use activities within a one hundred ~~and fifty~~(100), two-hundred (200), five hundred (500) and one thousand (1,000) foot radius zone. The following land uses are prohibited within these zones:

~~a. No new development (other than facilities related to the City's water system) shall be permitted within one-hundred and fifty feet from a well;~~

a. Within a ~~five~~one-hundred-foot (100') radius, aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited;

~~a.~~b. No new development (other than facilities related to the City's water system) shall be permitted within one-hundred and fifty feet from a well;

c. Within a two-hundred-foot (200') radius, septic tanks, unlined reclaimed water storage ponds, and sanitary sewer facilities shall be prohibited;

d. Within a 500-foot radius, manufacturing facilities shall be prohibited; and

~~b.~~

~~c.~~e. Within a one thousand foot radius of a well, uses shall be prohibited that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, hazardous/ toxic substances (ref. Groveland Code of Ordinances, Subpart B., Chapter 117, Sec. 117-183) and wastes, industrial chemicals, etc. In addition, industrial percolation ponds, mining activities and similar activities are prohibited;

~~d.~~f. Excavation of waterways or drainage facilities which intersect the water table shall not occur within 1,000 feet;

~~e.~~g. Solid waste disposal facilities shall also be prohibited within the City;

~~f.~~h. All wells and wellhead protection zones shall be delineated on the City's Existing and Future Land Use Maps.

Policy 1.12.4: ***Coordinating with the Development and Service Plans of Utility Companies.*** The City shall coordinate the *Comprehensive Plan* with the development and service plans of utility companies to assure that sufficient right-of-way and other land is available for utility

placements and distribution lines. A Public/Essential Service land use category shall be used to allocate areas on the *Future Land Use Map* to accommodate utilities. Distribution lines, such as telephone lines and water mains, shall be permitted in public right- of-way or as otherwise stated in the Land Development Regulations.

Policy 1.12.5: ***Utility Service Lines and Transportation Right-of-ways.*** As existing utility service lines are placed within existing

transportation right-of-ways, the City shall review future land use plans and transportation improvements to assure that appropriate land and air space are available to accommodate utility lines. Such land use needs shall be delineated as utility open space on the *Future Land Use Map* when necessary. The City shall inform the utility company of all transportation improvements scheduled within the *Five-Year Schedule of Capital Improvements* which require relocation of utility service lines or other ancillary facilities.

Policy 1.12.6: ***Mandatory Compliance with the Concurrency Management System.*** Development orders and permits shall not be issued unless the necessary facilities and services are available concurrent with the impacts of development. Future land use allocations, including their related densities and intensities, shall not exceed the financial and legal ability of the City to provide public facilities to serve those land uses delineated on the *Future Land Use Map*. The City's Concurrency Management System shall determine whether adequate public facility capacities are available to meet the demands generated by new development and redevelopment.

Policy 1.12.7: ***Amendments to the Comprehensive Plan.*** The City shall require all applicants pursuing an amendment to the *Future Land Use Map* to demonstrate that all facilities or service capacities are currently available, or shall be available concurrent with the impacts of development. Any necessary facilities or services shall be part of the *5-year CIP* or the *Long-range Capital Plan*. An amendment to the *Future Land Use Map* shall not constitute the reservation of capacity for any public facility. Reservation of capacities shall only be granted to development orders or permits which demonstrate specific impacts which a development will place on public capacities.

Policy 1.12.8: ***Non-contiguous Properties and Provision of Public Utilities.*** The City shall allow properties that are within the Utility Service Area who currently want public utilities but are not contiguous to the City to be served by the City's utilities as long as a signed agreement (covenant to annex) has been signed by the property owner stating that once such the property is contiguous then their land will be annexed into the City.

Policy 1.12.9: ***Availability of Adequate Water Supplies and Related Facilities.*** The City shall consult with the St. Johns River Water Management District, prior to the approval of a building permit or its functional equivalent, to determine whether adequate water supplies and related facilities to serve new development will be available no later than the anticipated date of issuance by the City a certificate of occupancy or its functional equivalent.

OBJECTIVE 1.13: ***School Facilities Planning.*** Establish criteria and cooperatively plan for the location, and to the greatest extent practicable, the collocation of School Facilities.

Policy 1.13.1: ***General Location of Public Schools.*** Consistent with adopted legislation, public schools in and/or adjacent to the City shall be located proximate to existing and planned urban residential areas, and collocation shall occur proximate with other public facilities, park, libraries and community centers to the greatest extent possible.

Policy 1.13.2: ***Coordination with the Lake County School Board.*** In order to effectively locate and co-locate school facilities, the City and Lake County School Board shall share and coordinate pertinent information relative to existing and planned public school facilities and overall community development. Specific considerations shall include actual construction concurrent with proposed community development, coordination with necessary infrastructure and services, and consistency with the adopted *Comprehensive Plan* and implementing Land Development Regulations. Consistency with the Land Development Regulations shall mean consistency to the extent that the adopted regulations are not in conflict with or the subject regulated is not specifically addressed by Chapter 235, Florida Statutes or the State Uniform Building Code.

Policy 1.13.3: ***Criteria for Public School Location.*** In conformance with mandates and directives of Section 235.193, and Section 235.34, Florida Statues, Public School location shall be based upon siting criteria that includes, but is not limited to school size, land area, land use compatibility, environmental impacts, availability of public utilities, transportation considerations and public safety. Public uses, including schools, are subject to public hearing as part of the approval process that is administered and performed by the City Commission. This process provides an opportunity for public input to discuss project plans for siting, expansion, co-location and

other related development issues the public may feel appropriate to the situation.

OBJECTIVE 1.14: ***Future Land Use Element Sub-area Policies.*** To coordinate land use with the *Elements* of the *Comprehensive Plan*, *Future Land Use Element* sub-area policies applicable to a specific 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 sub-area 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. If a sub-area policy adopts a document verbatim or by reference, a plan amendment is required to change the content or language of that portion of the document that is contained in the adopted sub-area policy.

Policy 1.14.1: ***Development Requirement for Future Land Use Map Amendment 7.*** *Future Land Use Map (FLUM)* Amendment 7, adopted by Ordinance No. 05-08-38 (DCA reference No. 05-2) on December 19, 2005, changes the future land use on the amendment area from Rural and Conservation to Multiple Family Residential and Conservation. Development shall meet the requirements of all applicable goals, objectives, and policies of the *Comprehensive Plan*; however, the land use and development potential made available by *FLUM* Amendment 7 is hereby further limited as follows: Development shall not exceed 210 residential dwelling units.

Policy 1.14.2: ***Development Requirement for Future Land Use Map Amendment 9.*** *Future Land Use Map (FLUM)* Amendment 9, adopted by Ordinance No. 05-08-38 (DCA reference No. 05-2) on December 19, 2005, changes the future land use on the amendment area from Suburban to Community Mixed Development and Conservation. Development shall meet the requirements of all applicable goals, objectives, and policies of the *Comprehensive Plan*; however, the land use and development potential made available by *FLUM* Amendment 9 is hereby further limited as follows: Commercial development shall not exceed 190,000 sq. ft. gross floor area.

Policy 1.14.3: ***Development Requirement for Future Land Use Map Amendment 10.*** *Future Land Use Map (FLUM)* Amendment 10 adopted by Ordinance No. 05-08-38 (DCA reference No. 05-2) on December 19, 2005, changes the future land use on the amendment

area from Industrial and Conservation to Mixed Use Development Old Town and Conservation. Development shall meet the requirements of all applicable goals, objectives, and policies of the *Comprehensive Plan*; however, the land use and development potential made available by *FLUM* Amendment 10 is hereby further limited as follows: Commercial development shall not exceed 300,000 sq. ft. gross floor area.

Policy 1.14.4: ***Development Requirement for Future Land Use Map Amendment 3.*** *Future Land Use Map (FLUM)* Amendment 3 adopted by Ordinance 2007-03-12 (DCA reference No. 07-1) on December 17, 2007, changes the future land use on the amended area from Urban, Suburban, and Rural to North Mixed Development and Conservation. Development shall meet the requirements of all applicable goals, objectives, and policies of the *Comprehensive Plan*; however, the land use and development potential made available by *FLUM* Amendment 3 is hereby further limited as follows: residential development shall not exceed 227 residential units; commercial development shall not exceed 50,000 square feet of gross floor area.

Policy 1.14.5: ***Development Requirement for Future Land Use Map Amendment.*** This Future Land Use Map (FLUM) Amendment, adopted by Ordinance 2010-10-32 (DCA reference Nos. 07D1 & 10-2ERA) on October 18, 2010, changes the future land use on the amendment area from Lake County Suburban and Rural to City of Groveland Mixed Use and Conservation. Development shall meet the requirements of all applicable Goals, Objectives, and Policies of the Comprehensive Plan. Moreover, the land use and development potential made available by this FLUM Amendment is hereby further limited as provided below, although additional limitations may apply:

A. The total amount of residential development shall not exceed 2,235 dwelling units.

B. The total amount of commercial and_ office development shall not exceed 340,000 square feet of gross floor area.

C. Development approvals for up to 650 single-family dwelling units and 20,000 square feet of gross floor area of

commercial and office development shall include the following transportation-related conditions:

1. The applicant shall fund signal timing modifications, such as detectors and a new controller, at the SR 50/SR 19 intersections in order to mitigate the traffic impacts associated with 650 single-family dwelling units and 20,000 square feet of gross floor area of commercial and office development; and

2. The applicant shall fund a traffic signal, when warranted, due to trips generated by the development of the property, at the currently stop controlled intersection of SR 19 and CR 478 (Cherry Lake Road).

D. No development approvals shall be issued for development beyond 650 single-family dwelling units and 20,000 square feet of gross floor area of commercial and office development until the traffic impacts and mitigation for such impacts have been evaluated in a Monitoring and Modeling Study, which shall be submitted to the Florida Department of Transportation for its review and approval.

E. Residential development shall not exceed 650 single-family dwelling units until January 1, 2018.

F. Commercial and office development shall not exceed 20,000 square feet of gross floor area until January 1, 2018.

G. The planned unit development approval for any residential development subsequent to Ordinance 2018-07-17 shall require, as a condition of approval, the dedication of a twenty-five (25) acre site for a public school and a twenty (20) acre site for a public park. The public school site shall be adjacent to the public park site.

H. No development shall proceed until an adequate water supply source is demonstrated, such as an appropriate modification of the City's Consumptive Use Permit or the

designation of an alternative water supply source that is approved by the City and the SJRWMD.

I. All development shall utilize, whenever feasible, available lower quality sources of water, including stormwater, surface water, and reclaimed water in place of higher-quality water resources. Stormwater, surface water, and reclaimed water shall be utilized, to the maximum extent feasible, as nonpotable water sources for irrigation.

J. All development shall utilize best management practices equivalent to or better than those set forth in A Guide to Florida-Friendly Landscaping, prepared bv the University of Florida's Institute of Food and Agricultural Sciences, for landscape installation, irrigation, and fertilizer and pesticide applications.

OBJECTIVE 1.15: ***Land Use Coordination and Soils and Topography.*** To require that soil conditions, topography, and availability of facilities and services are coordinated with land uses.

Policy 1.15.1: ***Coordinating Future Land Uses with Soil Conditions.*** Land use activities, including their densities and intensities, shall be compatible to soil types whose properties are capable of supporting the structures, parking areas, ancillary uses, and facilities proposed to be placed on them.

In the event the *Future Land Use Map* identifies a land use allowed within an incompatible soil type, a field study may be performed on the site by a professional hydrologist, registered engineer, or other similar profession to delineate actual boundaries and soil types exhibited on the subject site. The City shall reserve the right to have such a field study verified by the local U.S. Soil Conservation Office or a comparable State agency.

Policy 1.15.2: ***Engineering Practices, Topography, and Soils.*** The City shall maintain a unified Land Development Code and continue to require that sound engineering practices are required with respect to the topography and soil conditions, prior to the approval of development activities in City.

OBJECTIVE 1.16: ***Identifying a Defined Planning Area.*** To identify an area surrounding the existing City limits as the defined planning area for the City.

Policy 1.16.1: ***Defined Planning Area Definition.*** To protect the City's unique charm and hometown character, the City hereby adopts the Utility Service Area as the official planning area (see the City's *Utility Service Area Map*).

Policy 1.16.2: ***Defined Planning Area and Concurrency.*** All land within the defined planning area established in Policy 1.16.1 that annexes into the City shall be subject to the City's adopted Concurrency Management System and level of service standards.

Policy 1.16.3: ***Annexing within the Utility Service Area.*** To fill out and even out the City's border, the City shall continue to annex areas within the Utility Service Area that are contiguous to the City limits. The City shall also, by year 2040, remove existing enclaves within the City limits to fill out and even out the City's borders.

OBJECTIVE 1.17: ***Electric Infrastructure.*** To maintain, encourage, and ensure adequate and reliable electric infrastructure is readily available in the City.

Policy 1.17.1: ***Permitting New Electric Distribution Substations.*** The City shall allow new electric distribution substations in all land use categories except Conservation. The City shall, if possible, avoid locating substations where they would be incompatible with adjacent land uses [Chapter 163.3208 (4), F.S.].

Policy 1.17.2: ***Compatibility of New Electric Distribution Substations.*** The City shall require the compatibility of new electric distribution substations with surrounding land uses (including heightened setback, landscaping, buffering, screening, lighting, etc.) as part of a joint public/private site planning effort.

Policy 1.17.3: ***New Electric Distribution Substation Standards.*** The following standards shall apply to new distribution electric substations:

In nonresidential areas, the substation must comply with the setback and landscaped buffer area criteria applicable to other similar uses in that district, if any.

Unless the City Council approves a lesser setback or landscape requirement, in residential areas, a setback of up to 100 feet between the substation property boundary and permanent equipment structures shall be maintained as follows:

1. For setbacks between 100 feet and 50 feet, an open green space shall be formed by installing native landscaping, including trees and shrub material, consistent with the relevant local government's land development regulations. Substation equipment shall be protected by a security fence consistent with the City's Land Development Regulations.

2. For setbacks of less than 50 feet, a buffer wall 8 feet high or a fence 8 feet high with native landscaping consistent with the relevant local government's regulations shall be installed around the substation.

Policy 1.17.4: ***New Electric Distribution Substation Compliance.*** All new distribution electric substations in City shall comply with the guidelines and standards established in Chapter 163.3208, F.S.

OBJECTIVE 1.18: ***Compatible and Consistent Land Uses.*** To ensure that land uses are compatible and consistent with surrounding land uses.

Policy 1.18.1: ***Existing Non-Compatible Land Uses.*** The City shall reduce or eliminate existing non-complying land use activities to the greatest reasonable and practical extent without intruding on the constitutional rights of the effected land owners. No existing non-conforming structure shall be increased or expanded. The Land Development Regulations shall define circumstances under which the existing non-conforming use shall be eliminated or reduced in intensity, and shall provide principles for regulating improvements to existing non-complying structures as well as changes to non-conforming uses.

Policy 1.18.2: ***Managing Future Land Use.*** The *Future Land Use Map* and related policies together with the Land Development Code shall be applied as a planning and management tool in order to prevent development of land uses which do not conform to the City's character as reflected in the City's adopted *Future Land Use Map*, *Zoning Map*, and other applicable laws, ordinances, and administrative rules.

OBJECTIVE 1.19: ***Renewable Energy Resources.*** To encourage the development and use of renewable energy resources, efficient land use patterns, and reducing greenhouse gas emissions in order to conserve and protect the value of land, buildings, and resources, and to promote the good health of the City's residents.

Policy 1.19.1: ***Energy Efficient Land Use Pattern.*** The City shall maintain an energy efficient land use pattern and shall continue to promote the use of transit and alternative methods of transportation that decrease reliance on the automobile.

Policy 1.19.2: ***Promoting Walking and Bicycling.*** The City shall continue to encourage and develop the "walk-ability and bike-ability" of the City as a means to promote the physical health of the City's residents, access to recreational and natural resources, and as a means to reduce greenhouse gas emissions.

Policy 1.19.3: ***Establishing an Energy Management Plan.*** By December 2020, the City shall develop and implement an Energy Management Plan to minimize electric, fuel and water resources in City buildings, fleet vehicles and on public properties.

Policy 1.19.4: ***Solar Collectors.*** No action of the City shall prohibit or have the effect of prohibiting solar collectors, or other energy devices based on renewable resources from being installed on a building and as further set forth within Section 163.04, Florida Statutes.

Policy 1.19.5: ***Construction of Public Facilities and Buildings.*** Public buildings and facilities shall be constructed, and adapted where reasonably feasible to incorporate energy efficient designs and appropriate "green" building standards. Green Building standards that should be observed are contained in the Green Commercial Buildings Designation Standard, Version 1.0, published by the Florida Green Building Coalition, Inc.

Policy 1.19.6: ***Energy Efficient Design and Construction Standards.*** The City shall continue to promote and enforce energy efficient design and construction standards as these become adopted as part of the State Building Codes. The City shall also promote commercial and residential standards that are promulgated from time to time by the Florida Green Building Coalition, Inc.

Policy 1.19.7: ***Promoting Mixed Use Developments.*** The City shall continue to promote mixed use developments in areas planning for urban development or redevelopment as a mean to produce energy efficient land use patterns and reduce greenhouse gas emissions.

Policy 1.19.8: ***Development Incentives for Smart Growth Development.*** The City shall revise its Land Development Regulations, by December 2020, to offer incentives and flexibility for development projects that will make development application, review and approval processes easier, faster and more cost effective for projects that are consistent with the Smart Growth Principles of the *Comprehensive Plan* and that can be demonstrated to reduce infrastructure costs, promote the preservation of open space and habitat lands, provide energy efficient land use patterns, and reduce greenhouse gas emissions. Other incentives shall also be evaluated for projects that participate in energy-efficient development programs such as:

- U.S. Environmental Protection Agency's Energy Star Buildings and Green Lights Program to increase energy efficiency through lighting upgrades in buildings;
- Rebuild America;
- Building for the 21st Century;
- Energy Smart Schools;
- National Industrial Competitiveness through Energy;
- U.S. Department of Environmental Protection's Pollution Prevention (P2) Program;
- U.S. Green Building Council (LEED);
- Florida Water Star^{SM} Program; or
- Florida Green Building Coalition (FGBC), including pursuing certification as a Green Government.

OBJECTIVE 1.20: ***Low Impact Development.*** Establish guidelines for and promote the use of Low Impact Development (LID) techniques to allow developers more flexibility in the site design and development.

Policy 1.20.1: ***Defining Low Impact Development.*** Low Impact Development is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water, and air. The approach emphasizes the integration of site design and planning techniques that conserve the natural systems and hydrologic functions of a site.

Policy 1.20.2: ***Low Impact Development and Stormwater Management Techniques.*** The City shall encourage all new development and redevelopment projects to implement permeable surfaces, bioretention areas, grassed swales, vegetated roof tops, or rain barrels in the development, when feasible, as a Low Impact Development stormwater management technique(s) to:

- Reduce stormwater runoff;
- Minimize pollutant discharges;
- Decrease soil erosion;
- Maintain aquifer recharge; and
- Maintain base flows of receiving streams.

Policy 1.20.3: ***Incorporating Natural Site Elements in the Design Process.*** As a Low Impact Development technique, the City shall ensure that all development and redevelopment projects, when feasible, incorporate natural site elements such as wetlands, river or stream corridors, drainage ways, or mature forests as a design element to further protect the City's natural resources.

Policy 1.20.3: ***Promoting the Benefits of Low Impact Development Techniques.*** Prior to the approval of a final site plan, the City shall promote the benefits of implementing Low Impact Development techniques to all applicants of developments.

GOAL 2: To sustain and support economic development efforts in the City leading to long-term economic opportunities that will diversify Groveland's tax base and encourage high-wage employment opportunities in the area.

OBJECTIVE 2.1: ***Economic Development Partnership.*** Implement and enforce policies which require development of partnerships with public and private sectors in an effort to bring economic development and employment opportunities to Groveland.

Policy 2.1.1: ***Establishing an Economic Development Advisory Committee.*** By December 2020, the City shall establish an Economic Development Advisory Council to undertake a prolonged effort to ensure a citywide vision and common voice pertaining to economic development policy formation and implementation. The Economic Development Advisory Council shall:

- Be comprised of representatives from regional economic development partners, the City of Groveland, the City's Community Redevelopment Agency, the South Lake Chamber of Commerce, educational institutions, and target industry sectors;
- Develop a coordinated and collaborative approach to economic development policy and program formation and implementation; and
- Recommend economic development policies, programs and projects to City Council.

Policy 2.1.2: ***Working with the City's Community Redevelopment Agency.*** The City shall work with the Community Redevelopment Agency to help create opportunities for locally owned businesses within the downtown area.

OBJECTIVE 2.2: ***Increasing the Public Awareness.*** Increase the public awareness of the economic development opportunities and initiatives in the City.

Policy 2.2.1: ***Educating and Garnering Support for Economic Development.*** The City shall use networking opportunities, newsletters and publications regarding general economic development techniques, current and proposed policies and initiatives, and significant opportunities and challenges to educate and garner support of community leaders, the business community, and citizens.

Policy 2.2.2: ***Supporting Leadership Programs and Business Networking Opportunities.*** The City shall support leadership programs and business networking opportunities to identify current and future community leaders and encourage their involvement in enhancing employment opportunities, economic prosperity and quality of life in Groveland.

Policy 2.2.3: ***Promoting the Tourism Activities in the City.*** The City shall actively promote itself as a destination for tourism activities in Central Florida and continue to promote eco-tourism businesses and opportunities.

Policy 2.2.4: ***Promoting the City's Quality of Life.*** To promote the quality of life in Groveland to target businesses and their employees, the City shall provide an overview of the following in the corresponding economic development newsletters and publication:

- Recreational facilities;
- Access to affordable and/or workforce housing;
- Cultural activities;
- Protection and conservation of natural resources;
- Education facilities; and
- Access to transportation facilities.

OBJECTIVE 2.3: ***Encouraging High-wage Employment and Targeting Industry Sectors.*** To encourage high-wage employment opportunities, diversify the tax base, and target industry sectors compatible to the Groveland area.

Policy 2.3.1: ***High-wage or High-talent Employment Incentives.*** The City shall target greater incentives to those companies who provide higher-paying/higher-talent employment opportunities.

Policy 2.3.2: ***High-wage or High-talent Employment Recruitment Efforts.*** The City shall emphasize when possible the higher-pay/higher-skill employment opportunities in recruitment efforts.

Policy 2.3.3: ***Partnering with Lake-Sumter Community College and UCF.*** The City shall partner with Lake Sumter Community College and/or University of Central Florida to help establish new programs supporting targeted industry sectors and shall encourage the addition of a campus in the City.

Policy 2.3.4: ***Ensuring that Training Programs Match the City's Economic Development Needs.*** The City shall maintain and solidify relationships between Workforce Central Florida, Lake-Sumter Community College, Lake-Tech, Lake County Schools and the business community and work in partnership to ensure that training programs match the needs of existing businesses and target industry sectors.

Policy 2.3.5: ***Stimulate Target Industry Sectors.*** The City shall continue to implement policies and programs designed to stimulate a local demand market for targeted industry sectors, as outlined in City Ordinance No. 2015-05-06. City staff shall continually evaluate the appropriateness of adopted policies and programs and recommend modifications to City Council when necessary.

Policy 2.3.6: ***Encouraging Commercial and Industrial Development.*** The City shall encourage commercial and industrial development in the City's commercial zones and industrial parks.

OBJECTIVE 2.4: ***Ensuring the Availability of Public Facilities and Services.*** Ensure that the public facilities and services needed to support future commercial, industrial, or manufacturing development are readily available.

Policy 2.4.1: ***Concurrency for Future Development.*** The City shall continue to, through its Concurrency Management System, ensure that the public facilities and services needed to support future commercial, industrial, or manufacturing development is readily available on an on-going and timely basis.

OBJECTIVE 2.5: ***Establishing Permitting Guidelines.*** Establish guidelines to ensure that the permitting process does not deter target businesses from developing in the City.

Policy 2.5.1: ***Streamlining the Permitting Process.*** The City shall continue to utilize guidelines within its Land Development Regulations, as outlined in City Ordinance No. 2015-05-06, to streamline the permitting process so that target businesses will be able to lower development costs.

Policy 2.5.2: ***Establishing an Economic Development Incentive Program.*** The City shall continue to implement incentive programs for targeted industry sectors that yield a net benefit to area tax payers. The City shall continually evaluate the appropriateness of City sponsored

incentive programs and recommend modifications to City Council when necessary.

OBJECTIVE 2.6: ***Providing Technical Assistance.*** Provide technical assistance to small business owners.

Policy 2.6.1: ***Designating a Small Business Advocate.*** Within 12 months of the adoption of this *Comprehensive Plan*, the City shall designate a City employee to serve as an advocate and provide technical assistance to small business owners. This City employee will help small business owners navigate the paperwork and fees in a timely manner so that they may save money and time.

GOAL 3: To sustain and support the continuation of productive agricultural uses in the Groveland area that result in gains to the local economy, greater food security, preservation and rural heritage.

OBJECTIVE 3.1: ***Encouraging Community Gardens, Green Roofs, and Edible Landscapes.*** To encourage the use of community gardens, green roofs, and edible landscapes by Groveland's residents.

Policy 3.1.1: ***Identifying Sites for Community Gardens.*** The City shall identify potential sites for community gardens on appropriate City-owned lands considering areas such as parks, libraries, recreation and senior centers, public easements, rights-of-way and surplus lands.

Policy 3.1.2: ***County Sponsored Community Garden Program.*** In cooperation with the Lake County Library District, the City shall explore the feasibility of a County sponsored community garden program at the Marion Baysinger Memorial Library as well as future District library sites in Groveland.

Policy 3.1.3: ***Incorporating Perennial Edible Landscapes.*** The City shall explore opportunities to incorporate perennial edible landscaping at City-owned facilities and rights-of-way. Evaluation shall include an audit of all available public spaces on City properties where edible landscapes may be appropriately located.

Policy 3.1.4: ***Encouraging Perennial Edible Plants in Landscaped Areas.*** By December 2020, the City shall amend the Land Development Regulations to encourage the use of perennial edible plants in landscaped areas.

OBJECTIVE 3.2: ***Supporting Locally Produced Agricultural Goods.*** To support the direct sale of locally produced agricultural goods.

Policy 3.2.1: ***Partnering with Local Farmers and Community Groups.*** The City shall partner with local farmers and community groups to develop and implement educational strategies on the benefits of purchasing locally grown and/or processed foods.

Policy 3.2.2: ***Supporting the Development of Markets and Programs.*** The City shall support the development of markets and programs that promote the sale of locally produced agricultural goods, including but not limited to farmers markets, community gardens, farm to institution programs, and agritourism opportunities. The City shall partner with local community groups and organizations and other local governments to pursue funding sources for the development of a sustainable local food system.

OBJECTIVE 3.3: ***Protecting and Conserving Agricultural Lands.*** Protect and conserve lands in the Groveland area for long-term agricultural use.

Policy 3.3.1: ***Promoting Agriculture and Protecting Farming Operations from Incompatible Uses.*** The City shall promote agriculture as a viable land use and continue to protect farming operations from incompatible adjacent land uses.

Policy 3.3.2: ***Best Management Practices.*** The City shall encourage the most recent, applicable best management practices for agriculture and silviculture uses in the City.

Policy 3.3.3: ***Recognizing Agribusiness as an Economic Asset.*** The City shall continue to recognize agribusiness as an economic asset to the Groveland area and as a major sector of the Countywide economic base.

Policy 3.3.4: ***Development of Alternative Agricultural Products.*** The City shall support the development of alternative agricultural products in the Groveland area to help diversify the economic base.

Policy 3.3.5: ***Utilization of Reclaimed Storm Water and Irrigating Crops.*** The City shall encourage the utilization of reclaimed storm water for irrigation of appropriate crops.

Exhibit "B"

Public Facilities Element of the City of Groveland Comprehensive Plan
(see attached)

PUBLIC FACILITIES ELEMENT

SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, NATURAL GROUNDWATER AQUIFER RECHARGE, AND POLICE & FIRE PROTECTION

Groveland
FLORIDA

CITY OF GROVELAND

LAKE COUNTY, FLORIDA

ADOPTED ON APRIL 1, 2019

ORDINANCE 2018-10-34

PUBLIC FACILITIES ELEMENT
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CHAPTER 4
PUBLIC FACILITIES ELEMENT

***It is important to note that the old data and analysis from the *2010 Comprehensive Plan* is being superseded by new data and analysis presented below; however, the current Goals, Objectives, and Policies have been included in this *Element.* Chapter 4 – Potable Water Element, Chapter 5 - Sanitary Element, Chapter 6 – Solid Waste Element, Chapter 8 – Aquifer Recharge, and Chapter 9 – Stormwater Management Element have been renamed Chapter 4 – Public Facilities Element. This *Element* was updated accordingly to reflect the new planning period.

A. INTRODUCTION

1. SCOPE OF THE ELEMENT

This *Element* has been prepared to meet the requirements of the Community Planning Act, Chapter 163, Florida Statutes (F.S.). In relevant part, the Act requires comprehensive plans to describe:

1) sanitary sewer, solid waste, drainage, potable water and aquifer recharge protection problems and needs;
2) ways to provide for future requirements; and
3) general facilities that will be required for solution of the problems and needs.

2. ORGANIZATION OF THE ELEMENT

This *Element* is divided into sections containing:

1) the applicable support documents, which are the technical reports summarizing the data and analysis on which the *Element* is based; and
2) the goals, objectives and policies for the *Element*, as adopted in the *Comprehensive Plan* for the City.

The support documents are presented as sub-elements for the different types of facilities in the *Element*. Each sub-element includes:

1) background information about relevant terms, concepts and regulatory provisions;
2) a survey of existing conditions; and
3) an assessment of existing and future needs and recommendations for meeting those needs.

Population estimates were derived from the *Future Land Use* and *Housing Elements* and are presented in Table 1 below.

TABLE 1: POPULATION PROJECTION BY AGE, – 2010-2040

Age Group	2010	2016	2020	2025	2030	2035	2040
0-14 years old	2226	3539	4685	8,129	9,795	11,364	12,760
15-24 years old	1096	1839	2374	4,207	5,047	5,762	6,620
25-34 years old	1197	1704	2133	4,098	4,835	4,607	6,369
35-44 years old	1428	2159	2870	4,631	5,395	6,621	7,347
45-54 years old	1053	1787	2352	3,868	4,757	5,155	5,678
55-64 years old	851	1263	1607	3,091	3,766	4,233	4,915
65-74 years old	578	944	1228	2,163	2,568	3,131	3,610
75+ years old	300	371	430	842	1,050	1,233	1,419
Total	**8729**	**13606**	**17679**	**31029**	**37214**	**42105**	**48717**

Source: Shimberg Center for Affordable Housing, University of Florida and ECFRPC August 9, 2018

B. SANITARY SEWER

1. INTRODUCTION

This section of the *Public Facilities Element* assesses the availability, demands, and needs of the sanitary sewer system in Groveland. This section also presents an analysis of the soils found in Groveland as they correspond to the suitability to support the use of septic tanks in the City.

2. EXISTING CONDITIONS

The City owns and operates its central sanitary sewer system. The City's sewer system consists of two (2) wastewater treatment plants: Wastewater Treatment #1 and the Sunshine Plant Wastewater Treatment Facility #2. Table 2 below shows the capacity and the current demand for the two treatment plants.

TABLE 2: WASTEWATER TREATMENT PLANTS CAPACITY AND CURRENT DEMAND

	Wastewater Treatment Facility #1		Sunshine Plant Wastewater Treatment Facility #3
Capacity	1 MGD		1 MGD
Avg. Gallons Per Day (GPD) in 2017	.209		.138 MGD
Total Gallons Treated in 2017	76.298 MG		50.363
Avg. GPD for First 7 Months of 2017	.307 MGD		.144 MGD
Total Gallons for First 7 Months of 2017	65.36 MG		30.634

Source: City of Groveland's 2008-2009 Concurrency Report

The City has adopted sanitary sewer level of service standards of 250 gallons per day per equivalent residential unit (ERU). The City's system is operating at the adopted level of service.

Within the City's Utility Service Area, there are properties with individual septic tanks and drain fields. These septic tanks are permitted through the Lake County Health Department and they must provide service consistent with the adopted level of service standards and meet the guidelines established by the Lake County Health Department.

Effluent from septic tank systems is discharged to the drainfield where it is allowed to percolate into the soil. Soil permeability and depth to the water table are limiting factors on septic tank performance. Raised drainfields may be required where the water tables are high.

The *Federal Water Pollution Control Act* (PL 92-500) is the controlling national legislation relating to the provision of sanitary sewer service. The goal of this *Act* is the restoration and/or maintenance of the chemical, physical and biological integrity of the nation's waters. The *Act* established the national policy of implementing areawide waste treatment and management programs to ensure adequate control of sources of pollutants.

The Florida Department of Health and Rehabilitation Services (DHRS) regulates septic tank and drainfield installation within the State. These requirements have been adopted by rule in Chapter 10D-6, F.A.C.

The Lake County Health Department regulates and approves septic systems within the City. A percolation test and studies of the soil are used to determine size, siting and type of individual systems.

No septic tanks, including those approved by the Florida Department of Environmental Protection, are permitted in Groveland unless the site is outside the City limits or located more than 500 feet from a sewer line, and the City agrees not to extend the line to the property. The City ensures that the following separation guidelines regarding septic tank locations are enforced during the development review process:

- 200 feet from sewage disposal system to any public water well;
- 75 feet from any sewage disposal system to any private water well;
- 75 feet from the high-water line of any lake, canal, stream or other body of water. Lots created prior to 1972 require 50 feet from the high-water line of any surface;
- 10 feet from any water main or service line installed below the ground;
- 5 feet from the property line and building foundations; and

Additionally, limitations are in effect relating to the size of the facilities to be constructed (i.e. number of bedrooms), including the projected volume of waste as compared to the size of the property upon which construction is to occur.

Currently, the City does not have a systematic monitoring of septic systems. System checks are done on a compliance basis.

3. SOILS

Soils are an important aspect in land development. The physical and chemical properties of soils restrict the intensity of development through limitations on road construction, landfill siting, septic tank operation, and building placement.

There are a variety of soil types in Groveland (see the City's *Soils Map*). The general descriptions of the soils in the City are found below in Table 3 All upland soils are generally suitable for development for the use of septic tanks.

TABLE 3: SOILS

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Acres
Anclote and Myakka Soils	Yes	Very Poorly Drained	High	Moderate	10.45
Apopka Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	1,173.82
Apopka Sand, 5 to 12 Percent Slopes	No	Well Drained	Moderate	High	920.10
Arents	No	Somewhat Poorly Drained	Unranked	Unranked	291.41
Astatula Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	13.17
Borrow Pits	Partially Hydric	Unranked	Unranked	Unranked	43.66
Brighton Muck, Depressional	Yes	Very Poorly Drained	High	High	67.57
Candler Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	3,100.34

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Acres
Candler Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	1,910.31
Candler Sand, 12 to 40 Percent Slopes	No	Excessively Drained	Low	High	9.82
Ellzey Sand	Partially Hydric	Poorly Drained	High	High	77.30
Eureka Loamy Fine Sand	Yes	Poorly Drained			2.8
Immokalee Sand	Partially Hydric	Poorly Drained	High	High	53.98 51.24
Kendrick Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	162.41
Kendrick Sand, 5 to 8 Percent Slopes	No	Well Drained	Moderate	High	75.82
Kendrick Sand, Thin Subsurface	No	Well Drained	Moderate	High	69.54
Lake Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	73.31
Lake Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	2.94
Lochloosa Sand	No	Somewhat Poorly Drained	High	High	130.36
Myakka Sand	Partially Hydric	Poorly Drained	High	High	375.47
Ocoee Mucky Peat	Yes	Very Poorly Drained	High	High	1,544.05
Oklawaha Muck	Yes	Very Poorly Drained	High	Low	555.04
Ona Fine Sand	Partially Hydric	Poorly Drained	High	High	47.62
Orlando Fine Sand, 0 to 5 Percent Slopes	No	Well Drained	Low	High	11.08
Orsino sand	No	Moderately Well Drained	Low	Moderate	13.15
Paola Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	39.47
Placid and Myakka Sands, Depressional	Yes	Very Poorly Drained	High	High	1,618.60
Placid Sand, Depressional	Partially Hydric	Very Poorly Drained	High	High	152.82
Pomello Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	13.20
Pompano Sand	Partially Hydric	Poorly Drained	High	Moderate	42.45
Seffner Sand	Partially Hydric	Somewhat Poorly Drained	Low	Moderate	40.87
Sparr Sand, 0 to 5 Percent Slopes	No	Somewhat Poorly Drained	Moderate	High	207.7
Swamp	Yes	Very Poorly Drained	Unranked	Unranked	189.96
Tavares Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	887.92
Water	Unranked	Unranked	Unranked	Unranked	2,001.93
Wauchula Sand	Partially Hydric	Poorly Drained	High	High	336.14

Notes: Drainage Class - Identifies the natural drainage conditions of the soil and refers to the frequency and duration of wet periods.
Concrete Corrosion - Susceptibility of concrete to corrosion when in contact with the soil.
Steel Corrosion - Susceptibility of uncoated steel to corrosion when in contact with the soil.

Source: City of Groveland Soils Map

4. ANALYSIS

The City shall require all new development within 500 feet of a City central sanitary sewer line to connect to the system. At the time of development, if the development is not required to connect to the central sanitary sewer system, the City will require the developer to install dry lines for both sanitary and reclaimed and the associated lift stations and force mains. The City's wastewater system has sufficient capacity to meet the population demands during the short-range (2020-2025) and long-range (2040) planning periods. The City will continue to analyze the appropriateness and feasibility of wastewater treatment for future growth.

The soils in the City are generally suitable for septic tanks; however, the City requires existing septic tanks with drainfields that fail, that are within 500 feet of the City's sanitary sewer collection system and accessible by a legally recorded easement or right- of-way, to connect to the City's sanitary sewer system. The City shall continue to prohibit septic tanks to be located in environmentally sensitive areas or within 200 feet of a public potable water well or within 75 feet of a private potable water well. The City shall also continue to enforce the water and sewer concurrency standards.

C. SOLID WASTE

1. INTRODUCTION

Solid waste is defined as "any garbage, refuse, sludge...and any other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from residential, industrial, commercial, mining, and agricultural operation, and from community activities". Hazardous waste is defined as "a solid waste, or combination of solid waste which because of its quantity, concentration, or physical, chemical, or infectious attributes, may:

(a) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness, or

(b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed" (U.S.C. 6903 (5)).

This section of the *Public Facilities Element* assesses the City's needs for solid waste disposal and the adequacy of the existing disposal method.

2. EXISTING CONDITIONS

The City provides once per week refuse collection, once per week yard waste collection, once per week recyclables collection, and a bulk pick up upon request within 48 hours through a contract with a private hauler. The County's main Astatula Landfill in Tavares has been closed. The County is currently under contract with Heart of Florida in Sumter County to dispose of its Class I waste.

The City will continue to dispose refuse at the County's incinerator facility. The County will deposit waste ash in an ash monofill south of the incinerator near the Sumter County Line.

Lake County maintains and operates 5 residential drop-off (RDO) facilities throughout the County and a Citizen Convenience Center at the otherwise closed Astatula Landfill where per the State, residents can self-haul their solid, hazardous, recycling materials and special wastes. Special wastes consist of used motor oil, furniture, waste tires, white goods, and electronic wastes. Each RDO handles different amounts and types of waste depending on its size and location. Collectively, they receive on average 3,000 tons per year. The Citizen Convenience Center at the former Astatula Landfill is the closest RDO to the City.

Based on the City's *2008 – 2009 Annual Concurrency Report*, there are 2,773 solid waste customers in Groveland. With 12 months of data, the average amount of garbage generated each month was 234.19 pounds per month or 7.8 pounds per household per day.

The City's population is estimated to be 13,606 by the latest Census Bureau American Community Survey (ACS) and other East Central Florida Regional Planning Council (ECFRPC) data. With 2,773 solid waste customers, that would equate to persons per household. (The 2012-2016 Census ACS estimated the average number of persons per household in Groveland is 2.88). Using the persons per household, and the average of 7.8 pounds of solid waste per customer per day, each person in the City generated an average of 2.92 pounds per day. The City's adopted level of service for solid waste is a maximum of 6 pounds per person per day. Thus, the current LOS of 2.92 pounds per day meets the City's adopted concurrency standard.

The City shall continue to cooperate with the County to comply with the latest State regulations regarding the disposal of solid waste. The Public Works Manager is the City's liaison with the County.

3. ANALYSIS

As previously noted, the solid waste generated in Groveland is currently meeting the adopted level of service standard of 6 pounds per person per day. As noted in Table 1 above, the City's population is projected to increase to 48,717 by 2040. The City has assessed the projected solid waste needs based on the 2040 population projections.

The adopted solid waste level of service is 6 pounds per person per day. As such, the City would be able to generate 292,302 pounds a day of garbage in 2040 (see Table 4) and continue to meet the level of service. The City shall continue to monitor the adopted LOS standards through the annual concurrency review and identify and address all deficiencies during the planning period.

TABLE 4: SOLID WASTE LEVEL OF SERVICE PROJECTIONS, –2020-2040

Year	Population	Adopted LOS Standard	Pounds per Year	Pounds per Day
2020	17,679	6 pounds per person per day	38,717,010	106,074
2025	31,029	6 pounds per person per day	467,953,510	186,174
2030	37,214	6 pounds per person per day	81,695,760	223,824
2035	42,105	6 pounds per person per day	92,209,950	252,6730
2040	48,717	6 pounds per person per day	106,690,230	292,302

Sources: City of Groveland,, Shimberg Center for Affordable Housing, ACS, and ECFRPC

Like all local governments in Lake County, Groveland uses the Heart of Florida Landfill in Sumter County as its primary landfill for its solid waste needs. At the current time, the City has no plans to change its solid waste collection methods. The City shall continue to cooperate with the County on recycling efforts.

Hazardous wastes are corrosive, toxic, flammable, or reactive substances that may harm public health and the environment. Some examples of hazardous wastes are motor oil, paints, pesticides, fluorescent light bulbs, and pool chemicals. Hazardous wastes are collected at the Household Chemical Collection Center, near the former Phase II landfill, or at the residential drop-off facilities. The County also operates a mobile hazardous waste disposal unit. The 302 Facilities (extremely hazardous chemicals facilities) in the City are presented in Table 5 below. A detailed inventory of the facilities with small quantity generators in and/or adjacent to the City is available from the County.

TABLE 5: 302 FACILITIES IN GROVELAND

SERC ID	Facility ID	Facility Name
5967		City of Groveland – Sunshine Parkway WTP 3
6038		Silver Springs Citrus South
9553		City of Groveland – North Sampey Wells 3A and 5
9554		City of Groveland – Pomello Well 1
10204		Woodlands at Church Lake – WTP and WWTP
21888		City of Groveland – North Sampey WWTP
24838		International Sterilization Laboratory
32206		General Utilities – B RV Resort
34752		City of Groveland – Water Plant 5

	6077721	Embarq Florida Inc dba CenturyLink
	6104596	Niagara Bottling LLC
	6189321	National DCP LLC
	3991575	General Utilities – Bees RV Resort
	4099987	Port Consolidated - Groveland
	4984552	Amerigas Propane - Groveland
	4992073	VCNA Prestige Concrete Products Inc. Groveland Block
	4999823	South Highway 33 Substation (Sumter Electric Coop.)
	4999848	Groveland Substation (Sumter Electric Coop.)
	4999851	Industrial Park Substation (Sumter Electric Coop.)
	4999856	Groveland Office (Sumter Electric Coop.)
	5001476	Ryder Transportation Services - 1276A
	5001890	Howard Fertilizer and Chemical Company, Inc of Groveland
	5008400	Scotts Hyponex (#1031)
	5011789	Florida Supply Chain Center, Domino's LLC
	5015370	Port Consolidated - Groveland
	5021915	C & C Pumping Services, Inc.
	5022045	City of Groveland - Water Side Point Vac Station
	5022609 5024159	Lake County School Board – Groveland Bus Lot Quietflex Manufacturing Company, L.P.
	5093420	Maritec Industries
	5382028	J Malever Construction Company, Inc.

Source: East Central Florida Local Emergency Planning Committee Hazardous Materials Emergency Response Plan 2017 Current Revision.

The City has no hazardous waste landfill or any hazardous waste management personnel. No system for household collection of such waste has yet been established; however, as County regulations are formulated, the City will comply and citizens are urged to use County facilities and collection days.

D. DRAINAGE

1. INTRODUCTION

Drainage is the conveyance, treatment and attenuation of water generated from storm events. Drainage systems are designed to safely and efficiently manage stormwater to reduce the threat to human safety and property from flooding caused by stormwater, while also preventing untreated stormwater from entering the County's waterbodies. The adequacy and efficiency of a drainage system depends upon variables such as:

- system capacity;
- intensity and duration of a storm event;
- topography;
- soil permeability;

- and level of the water table.

Drainage systems designed to accommodate stormwater from a rainfall event of average intensity and duration may be unable to accommodate stormwater generated by an exceptionally intense or long rainfall event. These variables, as well as physical limitations such as elevation, available land, and cost are considered in the planning of drainage systems.

This section addresses major natural drainage features, existing facilities and programs, and opportunities for stormwater management in Groveland.

2. EXISTING CONDITIONS

The City regulates and enforces stormwater drainage through its Land Development Regulations and the concurrency requirements of this *Comprehensive Plan*. The City has established the minimum drainage level of service standard for water quality as:

Facility Type	Pollution Abatement Treatment
Retention with Percolation or Detention with filtration	Runoff from first inch of rainfall or one-half inch of runoff if it has less than 50% impervious surface and less than 100 acres, whichever is greater
Detention without filtration or wet detention	The first inch of runoff from the site or 2.5 inches times the site's impervious surface, whichever is greater

In addition, the City's land development code requires that stormwater management systems be designed based on the 10-year, 24- hour storm at minimum, but must also address the effects of the 25- year, 24- hour storm.

Projects located within the Green Swamp Area of Critical State Concern and within the most effective recharge areas must retain three (3) inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most effective recharge areas are those with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Stormwater drainage within the City is currently accommodated by both natural and man-made drainage features.

Level of service standards established in the *Comprehensive Plan* will continue to remain consistent with State statutes pertaining to the performance of drainage systems. The City ensures the provision of adequate stormwater drainage systems through the development review process. Permits are also required from all applicable State, Federal, and local agencies with regard to stormwater. No development is approved or is allowed to begin construction until all such permits are received by the City.

The stormwater regulations established in the City's Land Development Regulations are consistent with the applicable stormwater drainage requirements of the County, State, and Federal agencies. The drainage facilities within the City are operated and maintained either by the City or by Homeowners' Associations.

3. ANALYSIS

The City requires that all new development provide evidence to show that level of service (LOS) ratings in stormwater conveyances serving the new development will not be degraded to an LOS lower than currently exists as a result of the new development's construction and stormwater runoff contribution.

The City has been promoting Low Impact Development (LID) techniques which mimic a site's pre-development and hydrologic condition. These techniques will address infiltration, attenuation, and treatment needs of each specific site. Low Impact Development works with nature to manage stormwater as close to its source as possible, with an emphasis on cost-effective strategies at the lot level. Low Impact Development employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. Low Impact Development practices include, but are not limited to, bioretention facilities, rain gardens, vegetated rooftops, grass swales, rain barrels, permeable pavements, or the replication of predevelopment hydrology. By implementing Low Impact Development principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed

The City shall continue to enforce the stormwater standards established in the City's Land Development Regulations and this *Comprehensive Plan*. Once the update of the Stormwater *Master Plan* is completed, projects will be included in the City's *Capital Improvements Program* as funds become available.

E. POTABLE WATER

1. INTRODUCTION

The source of Groveland's potable water is the Floridan Aquifer. The City's potable water system provides water for both residential and non-residential purposes, including fire-fighting demands.

This section presents the existing conditions and capacity of the water treatment, storage and distribution components in the system, calculates the current level of service, and uses it to determine future growth demand on the potable water system.

2. EXISTING CONDITIONS

The City owns and operates a public water system comprised of five water treatment plants and associated water transmission and distribution pipes. The City's five water plants are grouped into two separate systems. The south system is comprised of water treatment plant (WTP) 1 and WTP 2 and the recently completed WTP 5. The north system is comprised of WTP 3 and WTP 4. The maximum design and storage capacities of the five water treatment plants in the City's water system are depicted below in Table 6.

TABLE 6: WATER TREATMENT PLANTS DESIGN AND STORAGE CAPACITIES

Water Treatment #	Design Capacity	Storage Capacity
WTP 1 (Pomelo)	617,000 gallons per day (GPD)	50,000-gallon elevated storage tank
WTP 2 (Sampey)	1,440,000 GPD	250,000-gallon ground storage tank and 100,000-gallon elevated storage tank
WTP 3 (Sunshine)	4.99 million GPD	1.5 million gallon ground storage tank
WTP 4 (Palisades)	1,152,000 GPD	15,000-gallon pressure tank
WTP 5	1,944,000 GPD	750,000-gallon ground storage tank

The St Johns River Water Management District has issued Consumptive Use Permit (CUP) Number 2796, regulating the amount of water withdrawal from the aquifer permissible for potable water purposes. The 2018 maximum daily and annual withdrawals permitted under each CUP below in Table 7.

TABLE 7: SJRWMD CONSUMPTIVE USE PERMIT MAXIMUM ANNUAL AND DAILY WITHDRAWALS, 2018

Consumptive Use Permit (CUP)	Maximum Annual Withdrawal for 2010	Average Daily Withdrawal
CUP 2796-5	914 million gallons	2.5 million gallons per day
		150 GPD per person

Source: City of Groveland Utilities Department

According to the Director of Public Services, there have been no issues with the plants' maximum flows being exceeded subsequent to the last EAR.

The City's Utility Department is responsible for ensuring the minimum line pressure is maintained or exceeded. Digital electronic pressure recording devices monitor and record pressure readings. In addition to these measures, electronic pressure monitors that display the distribution pressure 24-hours-per-day are located at the water production facilities. The City is currently meeting the 50 pounds per square inch of average daily flow adopted level of service standard.

The City provides water to all residential and non-residential uses within the City limits as well as within its Utility Service Area (see the City's *Utility Service Area Map*). All development within the City is connected to the City's water system.

There are no private water treatment plants in the City. The City requires all new subdivision developments to tie into the City's water system.

3. ANALYSIS

Based on the City's 2020 concurrency data, the combined existing maximum-day capacity of the three water treatment plants that serve the south system is greater than the projected maximum-day demand in 2040. Because this projected demand is less than the existing capacity, no additional or upgraded water treatment plant facilities are needed or recommended at this time.

The combined existing storage capacity provided by the storage facilities at all treatment plants exceed the projected total finished-water storage needed until 2022 and there is a shortfall in total finished-water storage capacity in the years from 2022 to 2040. This means that the City must plan to address this projected shortfall in total storage capacity in a timely manner, so that adequate storage capacity is available at all times during this period. The City has space available on the site of WTP 2 and WTP 5 for at least one additional ground storage tank at each site. It is recommended that the City plan to construct by mid-2016, additional storage capacity in the amount of at least 250,000 gallons. The City has already had preliminary work done to determine the suitability of soils at each location (WTP 2 and WTP 5) to support a tank and preliminary locations within each site have been proposed. The City will fund this additional storage capacity in its *Capital Improvement Budget* at the appropriate time to allow for permitting and construction. It is anticipated at this time, that permitting and final design would commence in 2014, with construction in 2015 so that the additional storage capacity would be available by mid-2016.

Overall, the City's potable water system is designed to accommodate future growth. With the revisions to the Consumptive Use Permit allotments and the installation of storage tanks at WTP 2 and WTP 5, there should be sufficient water capacity and storage for future growth as well. The City will continue to monitor and maintain the potable water services provided in the City's Utility Service Area during the planning period.

The City shall continue to enforce the guidelines established in the City's Cone of Influence and Wellhead Protection Areas. The City's Wellhead Protection Areas are featured on the City's *Existing Land Use Map* and *Future Land Use Map.*

The City shall continue to promote the following principles of xeriscape landscaping to be used for new developments or for new houses in older portions of the City:

- appropriate planning and design;
- use of soil amendments;
- efficient irrigation;
- practical turf areas;
- use of drought tolerant plants;
- use of mulches; and
- appropriate maintenance.

The City shall continue to work with Lake County and the St Johns River Water Management District to encourage water conservation through a combined program of public education and plumbing and irrigation system retrofits and refinements.

The City shall continue to enforce the standards established in the adopted *Water Conservation Ordinance* and *Landscaping Ordinance* as strategies to conserve water in the City's Utility Service Area.

F. NATURAL GROUNDWATER AQUIFER RECHARGE

1. INTRODUCTION

Recharge is a process whereby rainfall percolates downward through the soil to reach the underlying aquifers. Indicators which help to identify recharge areas are soil type, texture, slope, and land use. Water percolates more efficiently through soils with coarse texture than through clay and organic textured soils.

The slope and land use affect the length of time that water is retained. Therefore, these factors affect how much water will percolate, or run off the surface. If land is covered by impervious surfaces such as buildings, parking lots and roads, then little recharge can occur. Lateral seepage must occur under these areas for any recharge function to exist. Recharge can be preserved either through land use intensity controls or design requirements for maintaining or improving recharge.

The geology in Lake County is similar to other areas in Central Florida. At the surface are deposits of sands. These sands grade to finer materials and contain more silts and clays with depth. These surficial deposits range in thickness from a few feet to hundreds of feet. Underlying the sands in most areas of the County is a confining bed of clay. These clays are generally considered a part of the Hawthorn formation. Below the clay are thick sequences of carbonate rocks - limestone, dolomitic limestones, and dolomite.

The St Johns River Water Management District has designated a large portion of Lake County as a "Priority Water Resource Caution Areas". These are areas where existing and reasonably anticipated sources of water and conservation efforts may not be adequate (1) to supply water for all existing legal uses and reasonably anticipated future needs and (2) to sustain the water resources and related natural systems.

The Floridan aquifer is the principal source of drinking water for Lake County. Most of the water in the Floridan aquifer is derived from the areas average annual rainfall of approximately 50 inches as recorded by the Florida Climate Center at its Clermont Station. The recharge rate in Groveland and the surrounding area is 1 to 10 inches per year and the discharge rate is less than 1 inch per year according to 2003 aquifer recharge GIS data from the Florida Geographic Data Library.

2. Analysis

The City enforces recharge provisions though the guidelines and standards established in this *Comprehensive Plan*.

The City shall continue to protect the groundwater and aquifer recharge by enforcing the standards established in the City's Cone of Influence and Wellhead Protection Areas. The City shall also continue to protect and conserve the groundwater by restricting development on environmentally sensitive lands.

The City's well-drained sandy soils, lakes and ponds, wooded areas, and grassy yards contribute to water recharge. The larger residential lots also contribute to the water recharge in the area. The City's stormwater regulations have been identified and discussed earlier and contribute to recharge.

There are no known groundwater recharge problems in Groveland. The City shall continue to protect the quality of groundwater recharge through enforcing the City's Land Development Regulations. The quality of groundwater recharge shall also be protected by ensuring that all stormwater conveyances serving new development do not degrade the LOS lower than currently exists as a result of the new development's construction and stormwater runoff contribution.

The City's Land Development Regulations and the *Goals, Objectives* and *Policies* in this *Comprehensive Plan* are adequate measures focused on the protection of the ground water and aquifer recharge in the Groveland area.

G. PUBLIC SAFETY: POLICE

1. INTRODUCTION

The Police Department is charged with protecting the health, safety, and welfare of City residents by working to prevent crimes / code enforcement violations from occurring;

working to solve crimes, resolve code violations and apprehend offenders when crimes have occurred; and to increase traffic safety. Additionally, the department educates the public on how to deter and respond to crimes.

2. EXISTING CONDITIONS

The City of Groveland has an estimated 2016 population of 13,606 persons. These residents are served by a Police Department which employees 50 persons. These employees include 34 sworn officers, 10 dispatch personnel, four (4) civilian personnel, and two (2) code enforcement officers. The department has 38 vehicles to use in preventing and resolving crimes and code enforcement issues. The Police Department operates out of a single state located at 408 West Orange Street in Groveland.

3. ANALYSIS

The City has an LOS of 2.4 officers per 1,000 residents. With an estimated population of 13,606 residents, meeting the LOS would require 33 officers. The City has 34 officers, and therefore meets this requirement.

H. PUBLIC FACILITIES ELEMENT: FIRE

1. INTRODUCTION

The Groveland Fire Department is charged with protecting the public health, safety, and welfare by responding to put out fires; responding to vehicular accidents; responding to medical emergencies; and educating the public on fire, health, and life safety issues.

2. CURRENT CONDITIONS

For the fiscal year 2018-2019, the Groveland Fire Department will have 21 employees, including nine (9) shift fire fighters/paramedics; nine (9) fire fighter /EMTs; two (2) captains; one (1) fire safety inspector; and one (1) chief. The department currently has 11 motor vehicles and a boat, including: one (1) engine; one (1) reverse engine; one (1) brush truck; one (1) utility truck; three (3) command staff pick-up trucks; and a boat. The department has two (2) stations, Station 94 (Cherry Valley Trail) and Station 95 (West Orange Street).

3. ANALYSIS

The Groveland Fire Department currently has an International Standards Office (ISO) rating of 4. It currently has a LOS of five minutes per call average. The tallest current department apparatus is able to fight a fire in a two-story building.

I. GOALS, OBJECTIVES AND IMPLEMENTING POLICIES

GOAL 1: Assure provision of sanitary sewer, solid waste, potable water, and drainage facilities and services that efficiently maximize capacity of existing facilities; promotes managed growth; protects public health and safety; and maintains environmental quality, with consideration to limited financial resources.

GENERAL APPLICATIONS

OBJECTIVE 1.1: ***Implement a Capital Improvement Schedule.*** The City's *Five-Year Capital Improvement Schedule* established within the *Capital Improvements Element shall* adequately time improvement needs with available funding and location of development. This *Improvement Schedule* shall be consistent with public facility improvement needs identified within this *Comprehensive Plan.*

Policy 1.1.1: ***Evaluation of Capital Improvement Schedule.*** The City shall annually evaluate (during the annual concurrency review established in the *Capital Improvements Element*) the implementation of capital improvements proposed within the *Capital Improvement Program* and rank improvements according to priority of need.

Policy 1.1.2: ***Criteria for Ranking and Evaluating Capital Improvements.*** Proposed Capital Improvement Projects shall be evaluated and ranked according to the following priority level guidelines:

1. ***Indicated Need***: Implementation is needed to:
   - Protect public health, safety, and environmentally sensitive natural resources;
   - Comply with State or Federal requirements to provide facilities and services;
   - Preserve or maximize the use of existing facilities; and
   - Improve efficiency of existing facilities.

2. ***Additional Facility Needs***: Implementation is needed to:
   - Eliminate facility or capacity deficiencies for service provided to existing developed areas; and
   - Extend facilities and expand capacities in a manner consistent with the *Future Land Use Element* goals, objectives, and policies and the *Future Land Use Map.*

3. ***Adequate Funding***: Adequate Funding for a project shall be available prior to its commencement, and project cost shall

not cause accrued debt obligation to exceed beyond the limits of the City's debt capacity.

Policy 1.1.3: ***Deficiencies of Capital Improvements.*** In the event deficiencies should develop in the provision of public facilities, the City shall grant existing deficiencies priority among capital improvements scheduled within the *Capital Improvement Program*. The City shall issue no development permits for new development that will result in an increase in demand on deficient facilities.

POTABLE WATER

OBJECTIVE 1.2: ***Potable Water Facilities***. Annually evaluate the potable water infrastructure to maximize its use, correct deficiencies, and enhance the ability to increase capacity of the facilities in order to meet or exceed adopted LOS standards. Such annual evaluation shall be submitted to the St. Johns Water Management District.

Policy 1.2.1: ***Maximizing the Use of Potable Water Treatment Facilities.*** The City shall maximize the use of the five potable water treatment facilities connected to the central water system.

Policy 1.2.2: ***Implementation of a Preventive Maintenance Program.*** The City shall maintain its potable water treatment facilities in optimum condition by the implementation of a preventive maintenance program.

Policy 1.2.3: ***Potable Water Level of Service.*** The City shall use the following Level of Service in its evaluation of future potable water infrastructure service:

250 gallons per day per equivalent residential unit (ERU). ERU totals are calculated by dividing the estimated population by 2.88 persons (2.88 persons per household was reported by the 2012- 2016 ACS). Upon the completion of the 2020 Census data, the 2020 Census estimate for persons per household shall trump the 2012-2016 ACS for persons per household.

This LOS shall be based on the average daily demand

Policy 1.2.4: ***Criteria for Central Water System.*** The City's central water system shall be based on the following:

1. Minimum storage capacity of the City water system shall be at least 25% of the maximum daily demand plus fire flow of 1,000 gallons per minute for 2 hours.

2. The potable water distribution system shall provide a minimum pressure of 50 pounds per square inch of average daily flow.

Policy 1.2.5: ***Reviewing Water Fee Methodology and User Rates.*** The City shall review the water fee methodology and use rates annually to insure adequate funding for treatment, storage and distribution facilities.

Policy 1.2.6: ***Improvements and/or Additions to Potable Water Facilities.*** All improvements and/or additions to potable water facilities to correct deficiencies shall be compatible and adequate to meet the adopted level of service standards. These improvements and/or additions to potable water facilities shall comply, at a minimum, with standards recognized and approved by the Florida Department of Environmental Protection and the St. Johns Water Management District.

OBJECTIVE 1.3: ***Future Potable Water Facilities.*** Ensure the supply and treatment of safe potable water during the short-range (2020-2025) and long-range (2040) planning periods to meet the adopted level of service standards.

Policy 1.3.1: ***Meeting Future Demands Concurrent with Development.*** Based upon the adopted level of service, the City shall plan for replacement, expansion and extension of potable water facilities to meet future demands concurrent with new development.

Policy 1.3.2: ***Planning for Adequate Future Water Treatment Facilities.*** The City shall plan for adequate future treatment facilities which, at a minimum, meet all Federal and State drinking water criteria.

OBJECTIVE 1.4: ***Maximize use of Existing Facilities and Minimize Urban Sprawl.*** Direct growth to areas either currently serviced by the water system or planned for growth to maximize the use of existing and planned facilities and to minimize urban sprawl.

Policy 1.4.1: ***Providing Potable Water Services in the Utility Service Area.*** The City shall be the provider of potable water service to residential and non-residential establishments within the City's Chapter 180 Utility Service Area.

Policy 1.4.2: ***Coordinating the Provision of Potable Water Services.*** The City shall coordinate the provision of potable water service to all new development within its service area in accordance with the *Future Land Use Element* policies, land use allocations delineated on the *Future Land Use Map*, and the areas planned for development.

Policy 1.4.3: ***Criteria for Developments to Connect to the Potable Water System.*** Within the City limits, all new development shall connect to the City's potable water system. When the existing potable water line is not located adjacent to the property, the City shall require the new development to extend the potable water system at the developer's expense to service subject property. Such provision shall be coordinated with City's planned expanded/new facilities in order to ensure that the adopted level of service is maintained.

Policy 1.4.4: ***Potable Water Connection Requirement for Development Located in the Utility Service Area.*** In unincorporated areas within the City's adopted Chapter 180 Utility Service Area, new commercial and industrial development, and new residential developments of 50 homes or greater, within 500 feet of the City's existing water line shall connect to the City's potable water system at the developer's expense. Such provision shall be coordinated with City's planned expanded/new facilities in order to ensure that the adopted level of service is maintained.

Policy 1.4.5: ***Non-contiguous Properties and Provision of Potable Water.*** The City shall allow properties that are within the Utility Service Area who currently want potable water, but are not contiguous to the City, to be served by the City's utilities as long as a signed agreement (covenant to annex) has been signed by the property owner stating that once such the property is contiguous then their land will be annexed into the City.

Policy 1.4.6: ***Availability of Adequate Water Supplies and Related Facilities.*** As necessary, the City shall consult with the St. Johns River Water Management District, prior to the approval of a building permit or its functional equivalent, to determine whether adequate water supplies and related facilities to serve new development will be available no later than the anticipated date of issuance by the City a certificate of occupancy or its functional equivalent.

OBJECTIVE 1.5: ***Consistency of the City's Water Supply Plan***. Ensure consistency with the City's adopted *Water Supply Facilities Work Plan,* the *Comprehensive Plan,* and the St. Johns River Water Management District's *Water Supply Facilities Plan*.

Policy 1.5.1: ***Adoption of Water Supply Work Plan.*** The City hereby adopts by reference the goals, objectives, and policies in the City's 10-*year Water Supply Facilities Work Plan (WSFWP) 2010-2020* and its subsequent plan to ensure that the adopted *Comprehensive Plan* is consistent with and compatible to the adopted *Work Plan.*

Policy 1.5.2: ***Development of Efficient, Cost-effective, and Technically Feasible Water Sources.*** In conjunction with the SJRWMD and other local governments, the City will seek the development of efficient, cost-effective and technically feasible water sources that will supplement future demands, without causing adverse impact to water quality, wetlands, and aquatic systems.

Policy 1.5.3: ***Maximizing the use of Existing Potable Water Facilities.*** The City will 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 aquifer storage and recovery, reclaimed water, system interconnects, and water conservation. Information on water conservation techniques for new construction shall be made readily available through the Building and Community Development Departments.

Policy 1.5.4: ***Designing and Implementing and Effective Water Supply Plan.*** The City will participate in the implementation of the East Central Florida Water Supply Planning Initiative, updates of the SJRWMD's water supply assessments, and updates of the District's *Water Supply Plan (2005)*, to enable the City to design and implement an effective water supply plan.

Policy 1.5.5: ***Level of Service Consistency.*** The City's *WSFWP* shall be consistent with the Potable Water Level of Service standards as established in the *Comprehensive Plan*.

Policy 1.5.6: ***Update of the City's Water Supply Facilities Work Plan.*** The City shall coordinate with the St. Johns River Water Management District during updates to their *Regional Water Supply Plan*, to identify potentially feasible alternative water supply projects in the City. Within 18 months of the adoption of St. Johns River Water Management District's *Water Supply Plan*, the City shall complete updates of the appropriate elements and adopt related plan amendments to address all of the 10-year water facilities supply work plan components of Chapter 163, F.S.

Policy 1.5.7: ***Expansion and Upgrade of Facilities***. The City's *WSFWP* shall be used to coordinate and prioritize the expansion and upgrade of facilities needed to withdraw, treat, store, transmit, and distribute potable water to meet current and future needs. The City shall also prioritize the identification and utilization of alternate renewable sources of water to meet the projected increases in demand.

Policy 1.5.8: ***Maintaining 5-year Capital Improvements Schedule.*** The City shall maintain its *Five-year Schedule of Capital Improvements* to ensure the expansion and upgrade in capacity of water facilities in accordance with the City's *WSFWP*.

Policy 1.5.9: ***Assessing SJRWMD's Water Supply Facilities Work Plan***. The City' *WSFWP (Work Plan)*, shall assess existing and projected water sources and needs for at least a 10-year planning period and consider the *Regional Water Supply Plan* of the St. Johns River Water Management District. The *Work Plan* shall identify traditional and alternative water supply sources that the City may use to meet existing and projected water demands. The alternative water supply projects in the *Work Plan* will be selected from the applicable District's Regional Water Supply Plans or otherwise proposed by the City.

OBJECTIVE 1.6: ***Water Conservation***. Promote and expand the conservation and responsible use of the City's potable water.

Policy 1.6.1: ***Requiring the use of Water Saving Devices.*** The City's shall require the use of water saving devices in new or renovated building construction. The development review process shall include a review of development applications to assure such fixtures will be installed. No certificate of occupancy shall be issued unless such fixtures are in place concurrent with the deadlines established for water facilities within the City's Concurrency Management System.

Policy 1.6.2: ***Native and Drought Tolerant Landscaping.*** The City shall encourage the use of native and drought tolerant landscaping that incorporates the principles of design, appropriate plant selection, soil improvement, efficient irrigation, mulching, turf concentration, and proper maintenance.

Policy 1.6.3: ***Water Reuse Program.*** The City shall develop a water reuse program in association with improvements to the Sampey Road and Sunshine Parkway waste water treatment plants. The program will focus on providing reuse water where feasible to high volume water users and for landscape irrigation.

Policy 1.6.4: ***Extension of the Reclaimed Water System.*** The City shall require extension of the reclaimed water system into new residential and non-residential development .

Policy 1.6.5: ***Water Meters.*** The City shall continue to require the metering of all water to ensure accountability of water use and implement its Meter Replacement Program for small and medium size meters.

Policy 1.6.6: ***Water Conservation Promoting Rate Structure.*** The City shall continue to implement a water conservation promoting rate structure. Upon the completion of the Rate Structure Study, the city shall incorporate the findings in the corresponding elements of this *Comprehensive Plan.*

Policy 1.6.7: ***Public Education Programs.*** The City shall continue its public education programs on water conservation. At a minimum the program will include:

1. Sending conservation messages in utility bills;
2. Encouraging employee ideas for the water conservation program;
3. Providing water conservation signs in employee restrooms;
4. Providing water conservation materials to schools;
5. Encouraging residents to use sensors and controls such as rain shutoff sensors, soil moisture sensors, web based smart irrigation sprinkler controllers or evapotranspiration controllers for in-ground irrigation systems.
6. Providing information relating to water conservation in public areas of the Building and Community Development departments.

Policy 1.6.8: ***Leak Detection and Repair Program.*** The City shall conduct periodic water audits and implement a leak detection and repair program if the system losses and unaccounted for water utility uses exceed 10%.

Policy 1.6.9: ***Establishing Less Sod and Irrigation Best Practices.*** By December 2020, the City shall amend the Land Development Regulations to establish standards that encourage less sod and irrigation best practices.

Policy 1.6.10: ***Adopting a Reuse Water Master Plan.*** By December 2022, the City shall adopt or update a master plan for the City to maximize the potential for reuse water.

Policy 1.6.11: ***Protection and Conservation of Water Supplies and Future Demand.*** By December 2022, the City shall amend the Land Development Regulations to incorporate additional strategies to

further the protection and conservation of potable water supplies and delay the future demand for alternative water supplies. Such strategies shall include, at minimum, the following programs or standards:

- Water wise principles and site design standards;
- Appropriate plant selection and location standards;
- Requiring new residential, commercial, and mixed-use developments to incorporate programs such as Florida Water Star^{SM}, ENERGY STAR, the Florida Green Building Coalition's Green Home and Development Standards, Florida Yards and Neighborhood Program, and the U.S. Green Building Council's LEED program that encourages water efficiency in household appliances, plumbing fixtures, irrigation systems, and landscapes;
- Require Low Impact Development standards for a portion of the stormwater plan;
- Irrigation design and installation standards; and
- Establishing incentives for developments that incorporate strategies that promote the reduction in the use of water and the protection of the environment and natural resources.

OBJECTIVE 1.7: ***Fire Protection***. Provide adequate delivery and distribution of potable water to meet fire protection demand within the City and the City's Utility Service Area.

Policy 1.7.1: ***Monitoring the Water System and Fire Protection Demands.*** The City shall monitor, evaluate, repair and replace, as needed, the existing water delivery and distribution system to ensure the system can deliver needed gallon per minute flows to meet fire protection demands.

Policy 1.7.2: ***Water System and Fire Hydrant Mapping and Numbering.*** The City shall maintain an active water system and fire hydrant mapping and numbering program.

Policy 1.7.3: ***Fire Flow Testing of Hydrants.*** The City's Fire Department shall continue to conduct fire flow testing of hydrants to ensure adequate system capacity.

Policy 1.7.4: ***Fire Flow and Levels of Service.*** Fire flow levels of service shall be based upon delivery of 1,000 gpm for 2 hours with a required residual pressure of twenty (20) psi.

Solid Waste

OBJECTIVE 1.8: ***Solid Waste Disposal and Collection***. Assure that adequate solid waste collection and disposal capacities are available to support demands generated by existing and new development concurrent with the issuance of a development permit or at the time service will be demanded.

Policy 1.8.1: ***Solid Waste Level of Service.*** The City's hereby adopts a minimum level of service standard for solid waste collection services of 6 pounds per day per resident.

Policy 1.8.2: ***Private Collection Services.*** The City shall continue to rely on private collection service to residential, commercial, and industrial land uses located within the City limits. In the event the private collection service does not have the capacity to provide service to new development, additional service shall be obtained through expanded franchise agreements with private waste management businesses.

Policy 1.8.3: ***Availability of Full-service Pickup.*** The City shall ensure, through its agreements with private providers, that full-service pickup shall be available within the City.

Policy 1.8.4: ***Evaluating the Private Collection Services.*** The City shall monitor and evaluate the private franchise system for residential, commercial, and industrial solid waste collection to ensure that the most efficient and cost-effective service is being provided.

Policy 1.8.5: ***Illegal Dump Sites.*** The City shall implement programs for the clean-up of illegal dumpsites in a timely, efficient and environmentally sound manner.

Policy 1.8.6: ***Disposal of Solid Waste.*** The City shall continue to use Sumter County Heart of Florida Landfill, the County self-service landfills, and the trash burning facility through the year 2035, or until a new central County land fill is approved and developed, for final disposal of solid waste. The development of a new landfill shall be a capital improvements priority.

Policy 1.8.7: ***Coordinating Solid Waste Programs with Lake County.*** The City shall coordinate with Lake County on an annual basis to:

a.) assure that Groveland is allocated a proportional share of capacity in County-operated or utilized landfills, or other disposal facilities;
b.) reduce solid waste disposal levels through recycling programs administered by the City and Lake County; and

c.) offer assistance to Lake County in the management of hazardous waste as pursuant to State regulations (403.7265, F.S.).

Policy 1.8.8: ***Concurrency Management System and Solid Waste.*** The City shall monitor performance of solid waste collection services, available capacities, and compliance with levels of service through its *Concurrency Management System*. Results shall be sent annually to the Florida Department of Environmental Protection as a courtesy.

Policy 1.8.9 ***Discourage Use of Disposable Plastic Items***. The City shall discourage the use of disposable plastic bags, utensils and encourage the use of reusable items. If reusable items are not practicable, then compostable items should be encouraged to the extent feasible. Such actions can decrease litter, lessen impacts at landfills and use less energy.

OBJECTIVE 1.9: ***Recycling Programs***. Reduce the volume of municipal solid waste by encouraging and promoting recycling programs.

Policy 1.9.1: ***Recyclable Collection Process.*** The City shall continue to have a recyclable collection process in place for curbside pickup of newspapers, glass, plastics and aluminum.

Policy 1.9.2: ***Collection Process for Yard Waste.*** The City shall continue to have a collection process in place for curbside pickup of yard waste.

OBJECTIVE 1.10: ***Illegal Dumping and Disposal***. Implement and enhance programs to address potential problems of illegal dumping of both hazardous and non-hazardous waste materials.

Policy 1.10.1: ***Fines and Penalties for Illegal Dumping.*** The City shall continue to implement specific fines and penalties for illegal dumping and related activities.

Policy 1.10.2: ***Monitoring Construction Sites and Vacant Lots.*** The City shall monitor construction sites and vacant lots to prevent or abate illegal dumping activities prohibited by City ordinances.

Policy 1.10.3: ***Increasing Public Awareness.*** The City shall increase public awareness through educational campaigns directed at the general public and businesses regarding illegal dumping and proper disposal of non-hazardous and hazardous waste.

Policy 1.10.4: ***Supporting Volunteer Clean-up Programs.*** The City shall support volunteer clean-up programs and projects where feasible and appropriate.

OBJECTIVE 1.11: ***Disposal of Hazardous Waste.*** Coordinate with Lake County to monitor and control the disposal of hazardous waste.

Policy 1.11.1: ***Proper Handling and Disposal of Hazardous Wastes.*** The City shall continue to educate its citizens regarding the proper handling and disposal of hazardous wastes.

Policy 1.11.2: ***Coordinating with Lake County and Providing Technical Assistance.*** The City shall coordinate with Lake County in the placement of local hazardous waste collection centers and provide technical assistance on various issues pertaining to the management of hazardous waste according to State regulations. Technical assistance shall include the exchange of information regarding hazardous waste within the City.

OBJECTIVE 1.12: New landfill in Lake County. The City shall encourage and work with Lake County in finding a location for and constructing a replacement landfill within the County to handle the City's solid waste.

Sanitary Sewer

OBJECTIVE 1.12: Existing Wastewater Treatment. Identify and correct any existing deficiencies in the City's wastewater system, ensure that the minimum level of service for sanitary sewer is met, and provide a level of treatment that meets the water quality standards for effluent limitations established by the Florida Department of Environmental Protection.

Policy 1.12.1: ***Evaluating the Sewer System.*** The City shall maintain a sewer system evaluation and survey program to identify those elements of the infrastructure in need of repair or replacement. The City shall, through an ongoing program, evaluate the age and condition of existing wastewater infrastructure to locate pipes, lift stations, force mains and other facilities to determine the end of their economic life and to project costs for their replacement.

Policy 1.12.2: ***Wastewater Levels of Service.*** The City shall provide wastewater service based upon the following Level of Service:

250 gallons per day per equivalent residential unit (ERU). ERU totals are calculated by dividing the estimated population by 2.88 persons (2.88persons per household was reported by the 2012- 2016 ACS). Upon the completion of the 2020 Census data, the

2020 Census estimate for persons per household shall trump the 2012-2016 ACS estimate for persons per household.

Policy 1.12.3: ***Capacity of Force Mains and Lift Stations.*** The capacity of the collection force mains and lift stations shall be based on the following peaking factors based upon the average design flow (ADF): flows to 0.050 MGD ADF use a 3.5 factor, flows 0.050 to 0.250 MDG ADF use a 3.0 factor, and flows above 0.250 MGD ADF use a factor of 2.5.

OBJECTIVE 1.13: ***Future Wastewater Treatment.*** Provide additional facilities and capacities to meet wastewater demands generated by future development.

Policy 1.13.1: ***Expanding or Constructing New Facilities.*** The City shall plan the construction of expanded or new sanitary sewer treatment facilities when capacity allocation of existing facilities is at seventy-five percent (75%) of available capacity, and should have improved or new facilities ready for operation when capacity allocation of existing facilities is at ninety percent (90%) of available capacity.

Policy 1.13.2: ***Meeting the Population Demands.*** Based on the requirements of Policy 1.13.1, the City shall ensure that sanitary sewer plants are expanded and/or new plants are constructed to provide for the projected population increase of the City between 2018 and 2035.

Policy 1.13.3: ***Sewer Impact Fees and User Rates.*** The City shall maintain adequate sanitary sewer impact fees and user rates to ensure funding for new treatment, collection, and effluent disposal systems.

Policy 1.13.4: ***Review of Wastewater Rates.*** The City shall have a yearly formal review of all wastewater rates. Rates should be modified, as required, to reflect the current and projected cost of materials, labor, and services.

Policy 1.13.5: ***Monitoring the Availability of Funds.*** The City shall monitor the availability of funds at the state and federal levels of government for the construction of wastewater facilities and, where applicable and practical, encourage wastewater planning consistent with the eligibility requirements of the funding program.

OBJECTIVE 1.14: ***Maximize Existing Facilities and Discourage Urban Sprawl.*** Maximize existing sanitary sewer facilities within the City's Utility Service Area and promote compact efficient growth patterns.

Policy 1.14.1: ***Sanitary System Connection Requirement.*** The City shall require all new development within 500 feet of City central sanitary sewer line to connect to the system. At the time of development, if the development is not required to connect to the central sanitary sewer system, the City will require the developer to install dry lines for both sanitary and reclaimed and the associated lift stations and force mains. Such provision shall be coordinated with City's planned expanded/new facilities in order to ensure that the adopted level of service is maintained.

Policy 1.14.2: ***Non-contiguous Properties and Provision of Sanitary Sewer.*** The City shall allow properties that are within the Utility Service Area who currently want sanitary sewer service, but are not contiguous to the City, to be served by the City's utilities as long as a signed agreement (covenant to annex) has been signed by the property owner stating that once the property is contiguous, then their land will be annexed into the City.

Policy 1.14.3 ***Promotion of Compact and Clustered Development.*** For all development that will connect to Groveland utilities, compact, clustered or high density development is encouraged as part or all of a new development. This development type will help to limit urban sprawl, lower the infrastructure costs and allow for lower cost housing alternatives.

OBJECTIVE 1.15: ***Reclaimed Wastewater.*** Develop and maintain a water reuse program in association with improvements to the Sampey Road and Sunshine Parkway Waste Water Treatment Plants.

Policy 1.15.1: ***Requirement to Extend the City's Reclaimed Water System.*** The City shall require extension of the reclaimed water system into new residential and non-residential development where feasible, such as the Eagle Ridge Reclaimed Water Facility proposed under alternative water project options under the 2015 Regional Water Supply Plan.

Policy 1.15.2: ***Conducting Informational and Educational Campaigns.*** The City shall conduct informational and educational campaigns to encourage industrial/commercial customers within the City's Utility Service Area to implement water conservation programs or use reclaimed water where practical and economically feasible.

OBJECTIVE 1.16: ***Septic Tanks.*** Mandate connection to the central sewer system when available for existing residences and non-residential establishments served by septic systems..

Policy 1.16.1: ***Defining the term Available.*** "Available" shall mean within five-hundred (500) feet of a sanitary sewer collection system and accessible by a legally recorded easement or rights-of-way.

Policy 1.16.2: ***Identifying Areas that Require Central Sewer Services.*** By December 2022, the City shall identify those areas within the City's Utility Service Area, which are served by septic systems and prioritize areas requiring central sewer service based on soil suitability, density, and environmental concerns.

Policy 1.16.3: ***Line Extensions and the Capital Improvements Schedule.*** Prioritize and incorporate line extensions into the City's *Capital Improvements Schedule* to connect existing septic areas to the central sanitary sewer system. The City shall require the participation of the existing residents and/or developers in the cost of the sewer line extensions.

Stormwater Management

OBJECTIVE 1.17: ***Stormwater Facility Deficiencies and Functions of Natural Drainage Features.*** To identify and correct stormwater facility deficiencies, maximize the use of existing facilities, and protect the functions of natural drainage features which serve the City.

Policy 1.17.1: ***Correcting Identified Drainage Deficiencies.*** Upon completion of the City's *Stormwater Master Plan* update, the City shall amend the *Comprehensive Plan* to include any recommended deficiencies or drainage improvements. Recommended improvements shall be added to the City's *5-year Schedule of Capital Improvements* as funds become available.

Policy 1.17.2: ***Upgrading and Retrofitting Stormwater Facilities.*** The City shall upgrade and retrofit stormwater facilities with roadway construction wherever feasible.

Policy 1.17.3: ***Drainage Projects Review Criteria.*** The City shall review drainage projects in accordance with the following priorities:

(A) Those improvements which increase public safety and welfare;
(B) Those improvements which reduce property damage associated with flooding;
(C) Those improvements which maintain or improve the quality of water flowing into rivers, lakes, and wetlands;
(D) Those improvements which preserve, restore, or enhance natural habitats and wetlands; and

(E) Those improvements which reduce cost maintenance costs for the City.

Policy 1.17.4: ***Minimum Drainage Level of Service – Water Quantity.*** The City hereby adopts, for existing as well as new development, the following minimum stormwater drainage level of service standards for retention volume and design storm:

a. Retention Volume – Complete retention of the post-development minus the pre- development run off occurring at the established design storm.

b. Design Storm – The following interim level of service standards will be used until the *Comprehensive Plan* is amended to incorporate findings and recommendations of the *Storm Water Master Plan* update:

Facility Type	Design Storm
Canals, ditches, roadside swales, or culverts for stormwater external to the development	25 Year
Canals, ditches, roadside swales, or culverts for stormwater internal to the development	10 Year
Crossdrains	25 Year
Storm sewers	10 Year
Major Detention/Retention Structures [1]	For the Probable Maximum Precipitation as required by SJRWMD
Minor Detention/Retention Structures [1]	25 Year
Development occurring in the 100 year Flood Zone must elevate the first floor 18" above the 100 year Flood Elevation*	

Major/Minor Detention/Retention Structures are based on Hazard Classification for Dams and Impoundments as defined by the St. Johns River Water Management District

*to be updated in Land Development Regulations by 2025

Policy 1.17.5: ***Minimum Drainage Level of Service – Water Quality.*** The City hereby adopts, for existing as well as new development, the following minimum stormwater drainage level of service standards for pollution abatement treatment:

Facility Type	Pollution Abatement Treatment [1]
Retention with percolation or detention with filtration	Runoff from first inch of rainfall or one-half inch of runoff if it has less than 50% impervious surface and less than 100 acres, whichever is greater.
Detention without filtration or wet detention	The first inch of runoff from the site or 2.5 inches times the site's impervious surface, whichever is greater.

[1] If the site's runoff directly discharges to Class I, Class II, or Outstanding Florida Waters (OFW), then the Pollution Abatement Treatment Requirements shall be increased by an additional fifty percent (50%) more than described, an offline retention or off-line detention with filtration of the first inch of runoff shall be required. The City shall discourage the use of detention with filtration pollution abatement systems due to their high failure rate and costly maintenance; thus, the City shall allow detention with filtration only if detention without filtration cannot be used.

OBJECTIVE 1.18: ***Protecting Natural Drainage Features.*** Protect natural drainage features and ensure that future development utilizes stormwater management systems are compatible with State and local regulations.

Policy 1.18.1: ***Stormwater Management Systems and SJRWMD's Standards.*** The City shall ensure that the stormwater management systems level of service standards for stormwater quantity and quality, at a minimum, meet or exceed the requirements of SJRWMD.

Policy 1.18.2: ***Requirement for Development within the Green Swamp.*** Projects located within the Green Swamp Area of Critical State Concern and within the Most Effective Recharge Areas must retain three inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most Effective Recharge Areas are those areas with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Policy 1.18.3: ***Quality of Post-development Runoff.*** The City shall ensure that the quality of post-development runoff from developments shall meet or exceed the receiving water quality criteria established in State law and other applicable surface water quality standards.

Policy 1.18.4: ***Low Impact Development (LID) Techniques.*** LID techniques shall be required for a portion of the Stormwater Management System. Examples of LID techniques include, but are not limited to, permeable parking area materials; rain barrels, and bioswales.

OBJECTIVE 1.19: ***Function and Integrity of Natural Hydrological Systems.*** Maintain the function and integrity of natural hydrological systems by minimizing development's impact on flood storage capacity and protecting and/or enhancing the function of existing wetlands and lakes.

Policy 1.19.1: ***Incorporating Best Management Practices.*** Upon completion of the Upper Ocklawaha River Basin Management Action Plan, the City shall amend the Land Development Regulations to incorporate the Best Management Practices, Low Impact Development techniques, non-structural stormwater management strategies, and xeriscaping to manage stormwater and its environmental impacts.

Policy 1.19.2: ***Restoring and Protecting the Water Quality.*** To assist the Florida Department of Environmental Protection, the St. Johns River Water Management District, and the Lake County Water Authority in their efforts to restore and protect the water quality in the Upper Ocklawaha River Basin, the City shall:

- Promote the use of wet retention and dry retention stormwater ponds;
- Promote the use of Low Impact Development techniques;
- Actively seek funding for stormwater retrofit projects, which include activities ranging from the installation of baffle boxes to the creation of detention ponds; and
- Identify strategies to eliminate or reduce direct discharge to the lakes in the City.
- Encourage the use of bioswales and the use of similar techniques for stormwater detention/retention.

Policy 1.19.3: ***Maintaining Stormwater Management Facilities.*** The City shall maintain its stormwater management facilities in such a manner that the impacts to natural systems shall be minimized.

Policy 1.19.4: ***Private Stormwater Management Facilities.*** The City shall require that all private stormwater management facilities be maintained in

such a manner that the effectiveness for stormwater abatement and water quality improvement are maximized.

Natural Groundwater Aquifer Recharge

GOAL 2: Protect and maintain groundwater aquifer high recharge areas.

OBJECTIVE 2.1: ***Aquifer Recharge Protection***. Protect aquifer recharge areas to maintain suitable groundwater levels and to protect groundwater quality.

Policy 2.1.1: ***Post-development Runoff Volumes.*** The City shall protect groundwater resources by not allowing increases in post-development runoff volumes in areas that have a high potential for groundwater recharge (> 12 inches/year).

Policy 2.1.2: ***Land Uses and Water Contamination.*** The City shall prohibit land uses which have a high potential risk for water contamination in areas that have a high potential for groundwater recharge (> 12 inches/year).

Policy 2.1.3: ***Wellhead Protection.*** In order to protect the quality and quantity of Groveland's potable water supply, a wellfield protection zone shall be established within a radius distance of ~~75,~~100, 150, 200, ~~and~~ 500 and 1,000 feet from potable water wells. The following land uses are prohibited within these zones.

Within a 100-foot radius, aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited. No new development shall be permitted within 150 feet from a well. Within a 200-foot radius, septic tanks, unlined reclaimed water storage ponds, and sanitary sewer facilities shall be prohibited. Within a 1,000-foot radius of a well, uses shall be prohibited that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, hazardous/ toxic substance (ref. Groveland Code of Ordinances, Subpart B, Chap.117, Sec.117-183) and wastes, industrial chemicals, etc. In addition, industrial percolation ponds, mining activities and similar activities are prohibited. Excavation of waterways or drainage facilities which intersect the water table shall not occur within 1,000 feet.

~~No new development shall be permitted within 75 feet from a well. Within a 200-foot radius distance, septic tanks, sanitary sewer facilities, or solid waste disposal facilities shall be prohibited.~~

~~Within a 500-foot radius of a well, manufacturing uses shall be prohibited, including activities that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, petroleum products, hazardous/toxic wastes, industrial chemicals, etc. In addition,~~

~~wastewater treatment plants, percolation ponds, mining activities and similar activities are prohibited.~~ Low density single family, commercial, retail and office land uses shall be allowed within the 500-foot zone for potable water wells.

Policy 2.1.4: ***Coordination with State and Federal Agencies.*** The City shall continue to coordinate with Lake County, St Johns River Water Management District, and state and federal agencies to achieve regional aquifer recharge protection objectives.

Policy 2.1.5: ***SJRWMD's Consumptive Use Permit and Groundwater Withdrawals.*** The City shall coordinate with St Johns River Water Management District in its consumptive use permit applications to determine the extent to which groundwater withdrawals can be made without resulting in harm to the water resources and associated natural systems and shall manage its groundwater withdrawals in compliance with the conditions of its consumptive use permits to avoid such harm.

Policy 2.1.6: ***Reclaimed Water System.*** The City's reclaimed water system shall be used to provide re-use water for irrigation and to decrease potable water demand.

Policy 2.1.7: ***Requirement for Development within the Green Swamp.*** Projects located within the Green Swamp Area of Critical State Concern and within the Most Effective Recharge Areas must retain three inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most Effective Recharge Areas are those areas with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Public Facilities: Police Protection

GOAL 3: To enhance the Police Department's ability to deter crime, solve existing crimes, increase traffic safety, and educate the public to prevent crime.

OBJECTIVE 3.1: To enhance the built environment and develop further capabilities to prevent and solve crimes and to, better respond to traffic issues.

Policy 3.1.1: Through its membership on the City's new Development Review Committee (DRC), the Police Department shall seek opportunities to make new development projects safer through applying crime prevention through environmental design (CPTED) principles.

Policy 3.1.2: Through its membership on the DRC, the Police Department shall seek to enhance traffic safety through its review of new developments.

OBJECTIVE 3.2: By 2020, the Police Department shall have completed a study for developing a LOS based on work load.

Public Facilities: Fire Protection

GOAL 4: To enhance the Fire Department's ability to respond to fight fires; respond to vehicular accidents; and respond to medical incidents.

OBJECTIVE 4.1: To enhance the built environment and develop further capabilities to fight fires, respond to vehicular accidents, and respond to medical incidents.

Policy 4.1.1: As a member of the new City of Groveland DRC, the Fire Department shall review all development projects for fire safety standards, including acceptable access for fire trucks.

Policy 4.1.2 As a member of the DRC, the Fire Department shall monitor building height trends so as to properly plan for the purchase to new fire trucks capable of fighting fires for building heights proposed.

OBJECTIVE 4.2: By 2025, the Fire Department shall have made changes needed to achieve and have adopted a response time LOS of five (5) minutes for 90 percent of calls.

Exhibit "C"

Conservation Element of the City of Groveland Comprehensive Plan
(see attached)

CONSERVATION ELEMENT

Groveland
FLORIDA

CITY OF GROVELAND

LAKE COUNTY, FLORIDA

ADOPTED ON APRIL 1, 2019
ORDINANCE 2018-10-34

CONSERVATION ELEMENT
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CHAPTER 5
CONSERVATION ELEMENT

***It is important to note that the old data and analysis from the *2010 Comprehensive Plan* is being superseded by new data and analysis presented below; however, the current Goals, Objectives, and Policies have been included in this *Element.* This *Element* was updated accordingly to reflect the new planning period.

A. INTRODUCTION

1. Purpose

The purpose of the *Conservation Element* is to provide a guide for the conservation, use, and protection of natural resources located within the City. The *Element* is intended to protect and enhance the public health, safety, welfare and the quality of the environment.

In addition, the *Element* establishes a plan and policy direction concerning conservation of natural resources and will provide a basis for decision-making by City officials. As growth occurs, the need for protection and management of the City's natural resources will increase.

The City's natural resources are identified and analyzed. A description of these resources and their significance is also presented. Policies to maintain and enhance these resources as well as shape growth patterns of the City are included.

2. Environmental Setting

The City is situated in the Ocklawaha River and Withlacoochee South watersheds in the following drainage basins:

- Apshawa Lake Outlet
- Clear Lake Outlet
- Lake Wash Outlet
- Palatlakaha Reach
- Steward Lake Outlet
- Walled Sink
- Church Lake
- Howey Slough
- Little Everglades
- Pine Island Lake
- Summer Lake Outlet

There is little topographic relief within the City. The upper limit is approximately 200 feet above sea level located north of Cherry Lake Road, east of S. Obrien Road, and south of West Libby Road. Around this area, there is a difference of about 105 feet in elevation (see the City's *Contour Map*).

B. INVENTORY OF CONSERVATION RESOURCES

1. Rivers, bays, lakes, estuarine systems, natural reservations, etc.

The Palatlakaha River flows through Groveland. Additionally, there are over 2,000 acres of lakes or ponds in Groveland that can be used for recreational activities such as boating, swimming, and other water related activities. The named lakes in the City include:

- Cherry Lake (407 acres)
- Lake Lucy (349 acres)
- Sumner Lake (339 acres)
- Lake Hiawatha (154 acres)
- Schoolhouse Lake (130 acres)
- Lake Palatlakaha (106 acres)
- Dukes Lake (102 acres)
- Lake Catherine (68 acres)
- Lake Spencer (56 acres)
- Palatlakaha River (51 acres)
- Lake Desire (48 acres)
- Lake David (46 acres)
- Lake Douglas (33 acres)
- Wilson Lake (32 acres)
- Long Lake (27 acres)
- Deacon Lake (26 acres)
- Cook Lake (20 acres)
- Lake Christa (14 acres)
- Wolf Lake (12 acres)
- Lake Audrey (9 acres)
- Lake Diane (2 acres)

. Several of the lakes in the City are part of the Clermont Chain of Lakes, which is classified as "A Florida Outstanding Water" (F.A.C. 62-302.700 (9) Outstanding Florida Waters are waters designated by the State that are worthy of special protection because of their natural attributes. This special designation is applied to certain waters, and is intended to protect and maintain existing acceptable quality standards. The lakes are used for boating, swimming, fishing and other water activities. Overall, pollution comes from home fertilizations and road runoff. Groveland has adopted measures to ensure the conservation and protection of these lakes.

2. Floodplains

Floodplains are valuable resources which provide a rich diversity of vegetation and wildlife. These areas are sources for groundwater recharge that filters through soils during high water levels. The 100-year floodplains are also subject to inundation during a 100-year storm, causing potential loss of life and property, disruption of services, and economic loss. These areas cannot tolerate continued development which, in effect, retards their ability to absorb water and restrict the flow of water from adjacent higher elevation areas.

The County's Geographic Information Systems (GIS) database shows that there are 100-year floodplains in the City (see the City's *Floodplains Map*). The Federal Emergency Management Agency (FEMA) flood zone designations in Groveland are as follows:

- Zone A – Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones; and
- Zone AE - The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
- Zone B or Zone X (shaded) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500- year) flood

Development within floodplains will continue to be closely scrutinized to ensure compliance with established regulations.

3. Groundwater Resources

The Floridan aquifer is the principal source of drinking water for all of Lake County. Currently almost all of the ground water pumped in Lake County comes from the Upper Floridan but the potential for utilizing the lower Floridan aquifer is just beginning to be explored in Lake County.

Aquifer recharge is the process whereby rainfall percolates downward through the soil to reach the underlying aquifers. Recharge to the Floridan aquifer occurs in areas of the County where the elevation of the water table of the surficial aquifer is higher than the elevation of the potentiometric surface of the Floridan aquifer. In these areas, water moves from the surficial aquifer in a downward direction through the upper confining unit to the Floridan aquifer. The surficial aquifer system in the County is recharged by rainfall. Recharge is augmented locally by artificial recharge - wastewater or reuse water land application, rapid-infiltration basins, and septic systems.

Groveland is located in a recharge area with a recharge rate of more than 20 inches per year and a discharge rate of less than 1 inch per year.

The federal Safe Drinking Water Act, as amended in 1986, established a new program for the States to delineate and manage Wellhead Protection Areas for the protection of public ground water supplies. The Wellhead Protection Program is the first resource-based approach at the federal level for ensuring that ground water supplies are protected from a wide range of potential contaminating sources. The U.S. Environmental Protection Agency is the principal federal agency for implementing the Wellhead Protection Program with the states.

Wellhead protection areas are the surface and subsurface areas surrounding a water well or well field supplying a public water system, through which contaminants are reasonably likely to move toward and reach the water well or well field. Factors to consider in developing wellhead protection include:

- delineating protection areas around well fields;
- assessing the locations and threats to the well(s);
- developing management approaches and educational outreach programs; and
- regulatory or non-regulatory tools to reduce contamination threats.

The City has adopted a wellfield protection zone within a radius of ~~seventy-five~~one hundred (100), one hundred and fifty (150), two hundred (200), five hundred (500), and one thousand (1,000) feet from potable water wells. The following land uses are prohibited within these zones:

- ~~No new development (other than facilities related to the City's water system) shall be permitted within 150 feet from a well;~~
- Within a ~~500~~100-foot radius, aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited;
- No new development (other than facilities related to the City's water system) shall be permitted within 150 feet from a well;
- Within a 200-foot radius, septic tanks, unlined reclaimed water storage ponds, and sanitary sewer facilities shall be prohibited;
- Within a 500-foot radius, manufacturing uses are prohibited;
- Within a 1,000-foot radius of a well, uses shall be prohibited that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, hazardous/ toxic substances (ref. Groveland Code of Ordinances, Subpart B, Chapter 117, Sec. 117-183) and wastes, industrial chemicals, etc. In addition, industrial percolation ponds, mining activities and similar activities are prohibited; and
- Excavation of waterways or drainage facilities which intersect the water table shall not occur within 1,000 feet.

~~The City also has established a 500-foot in radius wellhead protection area within which manufacturing uses are prohibited.~~ The wellhead protection areas for the City's potable water supply wells are shown on the Existing and Future Land Use Maps.

4. Commercial Valuable Mineral Sources

There are three commercially valuable minerals utilized in Lake County: sand, clay and peat. A large amount of fill dirt is also removed.

The County has extensive deposits of clay and sand that cover the majority of Lake County and major deposits of peat located near lakes Apopka, Griffin and Minnehaha and the Okahumpka Marsh. These deposits were utilized as muck farms, but they have since been purchased for conservation or urban development. The County possesses two limestone deposits along its western border at Okahumpka and the Green Swamp Area of Critical State Concern. There are also substantial phosphate deposits in the far northern portion of Lake County along Lake George. However, the Ocala National Forest has land use policies that strictly forbid the mining of phosphates in the Forest. There are no mining operations in Groveland.

5. Areas with Soil Erosion Problems

Soil erosion is not a significant issue in Lake County, with the exception of where large areas are prematurely cleared for development.
Slopes of more than 10 percent are considered unsuitable for septic tank drain fields. These slopes generally correspond with the ridge and upland regions of the County, where the soils have some potential for erosion when denuded of vegetation and are usually classified as having low runoff potential. There are a variety of soil types in Groveland (see the City's *Soils Map*). The general descriptions of the soils in the City are found below in Table 1.

TABLE 1: SOILS

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Acres
Anclote and Myakka Soils	Yes	Very Poorly Drained	High	Moderate	10.45
Apopka Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	1173.82
Apopka Sand, 5 to 12 Percent Slopes	No	Well Drained	Moderate	High	920.1
Arents	No	Somewhat Poorly Drained	Unranked	Unranked	291.41
Astatula Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	13.17
Borrow Pits	Partially Hydric	Unranked	Unranked	Unranked	43.66
Brighton Muck, Depressional	Yes	Very Poorly Drained	High	High	67.57
Candler Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	3100.34
Candler Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	1910.31
Candler Sand, 12 to 40 Percent Slopes	No	Excessively Drained	Low	High	9.82
Ellzey Sand	Partially Hydric	Poorly Drained	High	High	77.35
Eureaka Loamy Fine Sand	Yes	Poorly Drained			2.8
Immokalee Sand	Partially Hydric	Poorly Drained	High	High	51.24
Kendrick Sand, 0 to 5 Percent Slopes	No	Well Drained	Moderate	High	162.41
Kendrick Sand, 5 to 8 Percent Slopes	No	Well Drained	Moderate	High	75.82
Kendrick Sand, Thin Subsurface	No	Well Drained	Moderate	High	69.54
Lake Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	73.31

Map Unit Name	Hydric Soil	Drainage Class	Steel Corrosion	Concrete Corrosion	Acres
Lake Sand, 5 to 12 Percent Slopes	No	Excessively Drained	Low	High	2.94
Lochloosa Sand	No	Somewhat Poorly Drained	High	High	130.36
Myakka Sand	Partially Hydric	Poorly Drained	High	High	375.47
Ocoee Mucky Peat	Yes	Very Poorly Drained	High	High	1,544.05
Oklawaha Muck	Yes	Very Poorly Drained	High	Low	555.04
Ona Fine Sand	Partially Hydric	Poorly Drained	High	High	47.62
Orlando Fine Sand, 0 to 5 Percent Slopes	No	Well Drained	Low	High	11.08
Orsino sand	No	Moderately Well Drained	Low	Moderate	13.15
Paola Sand, 0 to 5 Percent Slopes	No	Excessively Drained	Low	High	39.47
Placid and Myakka Sands, Depressional	Yes	Very Poorly Drained	High	High	1,618.6
Placid Sand, Depressional	Partially Hydric	Very Poorly Drained	High	High	152.82
Pomello Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	13.2
Pompano Sand	Partially Hydric	Poorly Drained	High	Moderate	42.45
Seffner Sand	Partially Hydric	Somewhat Poorly Drained	Low	Moderate	40.87
Sparr Sand, 0 to 5 Percent Slopes	No	Somewhat Poorly Drained	Moderate	High	207.7
Swamp	Yes	Very Poorly Drained	Unranked	Unranked	189.96
Tavares Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	Low	High	887.92
Water	Unranked	Unranked	Unranked	Unranked	2,001.93
Wauchula Sand	Partially Hydric	Poorly Drained	High	High	336.14

Notes: Drainage Class - Identifies the natural drainage conditions of the soil and refers to the frequency and duration of wet periods.
Concrete Corrosion - Susceptibility of concrete to corrosion when in contact with the soil.
Steel Corrosion - Susceptibility of uncoated steel to corrosion when in contact with the soil.

Source: U.S. Department of Agriculture, Natural Resources Conservation Service's Lake County Soils Geographic Information Systems database, August 2018.

6. Environmentally sensitive lands; fisheries; important habitat or corridors; marine habitats, rare or endangered ecosystems or wildlife; and vegetative communities including forests

Groveland has about 5,320 acres of lands designated as Conservation on the *Future Land Use Map.* The City identifies Conservation lands as all wetlands, some forests, public managed lands, floodplains, flood prone areas, and other areas in which valuable natural resources are found. No buildings are allowed on conservation lands. Permitted uses are boardwalks, docks, observation decks, and similar facilities as allowed by the City and all regulatory agencies.

Wetlands by definition are transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered with shallow waters. They provide habitat for many species of birds, fish, and animals, and contain Aquifer Recharge Zones that allow the groundwater to be replenished. Wetlands are protected by local, regional, state, and federal regulations because of the numerous benefits they provide.

Wetland functions are interconnected with the hydrology of the area. This connection determines the presence, extent, movement, and quality of water in the wetland. It is estimated that wetlands account for about 5540.47 acres or 33.45% of land in the City (see the City's *Wetlands Map*). The City has established guidelines and standards for wetland buffer zones in this *Plan* and in the Land Development Regulations.

There are no first magnitude springs in the Groveland area.

7. Green Swamp Area of Critical State Concern

Portions of the City are within the Green Swamp Area of Critical State Concern. The Green Swamp is a 560,000-acre region that lies in portions of Lake, Polk, Sumter, Pasco, and Hernando counties. In 1974, the Florida Legislature designated 187,000 acres of the Green Swamp as an Area of Critical State Concern. Lake County contains 110,988.8 acres of the Green Swamp.

The Green Swamp River Systems rank possibly second only to the Florida Everglades in terms of hydrologic and environmental significance to the State. Overlying an important zone of groundwater recharge for peninsular Florida and the highest elevation potentiometric surface of the Floridan Aquifer, the Green Swamp ecosystem is important to the preservation of clean potable groundwater supplies. The Green Swamp is the headwater for the Hillsborough, Withlacoochee, Ocklawaha, and Peace rivers, which provide most of the area's water supply, and has a diverse ecological environment containing numerous plant species and 330 animal species, of which approximately 30 are either threatened or endangered, including the Florida black bear, Florida scrub jay, and wood stork.

The water flowing from the Green Swamp is generally of higher quality than other watersheds in the State. This is due to the Green Swamp being largely undeveloped, plus its lengthy surface water detention time. As such, water quality and quantity protection in the Green Swamp is an important issue due to its overall position in the natural geologic landscape in Florida, the resultant high potentiometric surface of the Floridan Aquifer, combined with the lack of a strong confining unit between surface waters and groundwater over much of the Green Swamp.

A majority of the Green Swamp is an area of wetlands and uplands with a high seasonal water table (i.e., generally saturated soil conditions). Less saturated soils representing old dune lines are found in ridges (generally oriented north to south) especially on the eastern side of the Swamp. Soils in these ridges are sandy. In fact, mining of these sandy ridges within the Swamp to market to the central Florida construction industry is an active business along with citrus production. Due to the prevalence of wetlands, high groundwater levels, frequency of seasonal flooding or porous sandy conditions in majority of the Green Swamp, disposal of wastewater effluent or septage presents problems of groundwater or surface water contamination. Percolation ponds, spray fields, septic systems or land application of wastewater treatment plant residuals each experience similar difficulties relating to a limited treatment ability presented by the prevailing soil conditions.

More than 30,000 people visit the Green Swamp Wilderness Preserve each year to enjoy the various recreational opportunities, which include hunting, fishing, horseback riding, camping, hiking, canoeing, bird watching, and bicycling.

The City has adopted the Green Swamp Single Family Low Density, Green Swamp Single Family Rural, Green Swamp Commercial, and Green Swamp Industrial land uses to address development within the Green Swamp. Additionally, the City has established the following standards for development within the Green Swamp:

- All development must be clustered on the least environmentally sensitive areas;
- 60 percent of the site must be retained for open space;
- All recreational uses, other than passive recreation uses, shall be limited to low impact, low intensity public or private recreation uses that do not require impervious surface coverage of more than 10 percent of the lot;
- Golf courses shall be approved on a case by case basis pursuant to specified approval criteria which are set out in the Land Development Regulations; and
- There is a 50-foot-wide upland buffer from the wetland line in which no structure may be placed.

8. Air

Air quality is another example of a natural resource that impacts the City's and surrounding area's quality of life. The Florida Department of Environmental Protection and the United States Environmental Protection Agency monitor air quality data in Lake County. Lake County does not have an established program dedicated to monitoring air quality. Overall, Lake County's air quality can be considered good. The County meets all Clean Air Act standards.

The City requires that air pollutants, including smoke, particular matter, odor and toxic matter be consistent with Florida Department of Environmental Protection's air pollution standards.

9. Water

The City currently owns, operates and maintains a central potable water treatment and distribution system. The City's potable water system provides water for both residential and non-residential purposes, including fire-fighting demands. The City's water system consists of five water plants and associated water transmission and distribution pipes. The City's five water treatment plants (WTP) are grouped into two separate systems. The south system is comprised of Pomelo WTP 1 and Sampey WTP 2 and the recently completed WTP 5. The north system is comprised of Sunshine WTP 3 and Palisades WTP 4. The City's potable water system is currently meeting the potable water adopted level of service standards and there is an adequate amount of capacity to support future growth. A detailed analysis of the City's potable water system is featured in the *Public Facilities Element* of this *Comprehensive Plan*.

10. Sinkholes

Sinkholes are a natural and common geologic feature in areas underlain by limestone and other rock types that are soluble in natural water. The term sinkhole is used for closed depressions in the land surface that are formed by surficial solution or by subsidence or collapse of surficial materials owing to the solution of near-surface limestone or other soluble rocks. Fifteen small sinkholes, with the most recent sinkhole occurring in 2015, have been noted over the years in the Groveland area (see the City's *Contour Map*). It is important to note that the origin of most lakes in the County is sinkhole related subsidence in the covered karst terrain.

11. Vegetative and Land Cover Types

Data Documentation for Lake County prepared by the St. Johns River Water Management District (SJRWMD) in 2014 was examined with regard to the land cover within the City. The SJRWMD identified 71 classes of vegetative and land cover types in Groveland (see Table 2).

TABLE 2: SJRWMD'S LAND USE AND LAND COVER FOR GROVELAND

FLUCCS*	Description	Acres
1100	Residential, Low Density - Less than 2 dwelling units per acre	191.86
1180	Rural residential (2-5 acres per dwelling unit)	44.91
1190	Low density under construction	9.94
1200	Residential, Med. Density - Two to five dwelling units per acre	800.04
1290	Medium density under construction	13.86
1300	Residential, High Density	721.96
1390		183.86
1400	Commercial and Services	284.87
1480	Cemeteries	13.93
1510	Food processing	11.27
1520	Timber processing	0.49
1550	Other light industry	105.35
1611	Clays	0.06
1620		8.48
1650	Reclaimed mining lands	4.51
1670		92.84
1700	Institutional	67.31
1800	Recreational	4.59
1820	Golf course	4.10
1850	Race tracks	5.16
1860	Community recreational facilities	0.09
1890		6.08
1900	Open land (urban)	347.72
1920		353.46
2110	Cropland and Pastureland	2,599.57
2120	Unimproved pastures	257.26
2130	Woodland pastures	102.91
2140	Row crops	184.46
2150	Field crops	316.22
2210	Citrus groves	1,134.02
2410	Tree nurseries	333.29
2430	Ornamentals	168.76
2510	Horse farms	1.29
2600		1.29
2610		1.10
3100	Herbaceous Upland Nonforested	248.67
3200	Shrub and Brushland	24.05
3300	Mixed Upland Nonforested	53.60
4110	Upland Coniferous Forests	66.57
4120	Longleaf pine - xeric oak	10.10
4200	Upland Hardwood Forest	293.52
4340	Upland mixed coniferous/hardwood	261.37
4400		55.63

FLUCCS*	Description	Acres
4410	Coniferous pine	774.50
4430	Forest regeneration	329.15
5100	Streams and waterways	14.29
5200	Lakes	783.20
5250	Marshy Lakes	3.69
5300	Reservoirs	246.24
6110	Wetland Hardwood Forests	20.31
6170	Mixed wetland hardwoods	9.02
6210	Cypress	83.54
6250	Hydric pine flatwoods	55.44
6300	Wetland Forested Mixed	312.07
6410	Freshwater marshes	2,115.90
6430	Wet prairies	290.88
6440	Emergent aquatic vegetation	553.42
6460	Mixed scrub-shrub wetland	783.14
6500		0.56
7400	Disturbed land	67.32
7410	Rural land in transition w/o positive indicators of intended activity	8.69
7430		0.49
8110		23.69
8130	Bus and truck terminals	17.54
8140	Roads and highways	150.49
8180	Auto parking facilities - when not directly related to other land uses	0.98
8200	Communications	1.27
8310	Electrical power facilities	2.27
8330	Water supply plants	16.18
8340	Wastewater treatment plants	14.65
8370	Surface Water Collection Basin	182.17
	TOTAL	**16,253.52**

Notes: *FLUCCS = Florida Land Use, Cover and Forms Classification System
Source: St. Johns River Water Management District's GIS Land Use and Land Cover 2004-2005 District Wide Data.

12. Topography

An examination of the City's *Contour Map* indicates that the highest elevation in the City is at 200 feet above sea level located north of Cherry Lake Road, east of S. Obrien Road, and south of West Libby Road. Around this area, there is a difference of about 105 feet in elevation. Lakes and major wetland areas are shown at between 80 and 120 feet..

13. Issues

The probability exists of pollution from many sources included, but not limited to:

- Homes along the lakefronts (fertilizers, septic tanks, etc.);

- Stormwater runoff from local streets; or
- Malfunctioning septic tanks within the City's Utility Service Area.

C. ANALYSIS

1. Rivers, bays and lakes [9J-5.013(1) (a)1, F.A.C.]

As previously mentioned, there are over 2,000 acres of lakes or ponds within the City limits. While the majority of these lakes are maintained by State agencies, the City will continue efforts to inform lakefront property owners about water quality and protection measures in and/or adjacent to Groveland. The City will enforce appropriate codes on lakefront areas that are in the City's jurisdiction.

To protect lakefronts from the encroachment of development, the City has established a shoreline protection and lakefront littoral zone. Only passive recreational activities are permitted within the lakeshore protection zone. The City will continue to ensure that no other construction activity will encroach into the lakeshore protection zone.

The residents of Groveland see the lakes as a critical element of their quality of life and understand the importance of preserving and maintaining the lakes' water quality. The City shall continue to support initiatives to improve and protect the lakes in the Groveland area.

2. Floodplains

To protect the floodplain area, the City requires applicants for development and redevelopment projects to position structures and impervious surfaces to areas outside of the flood zone to the extent possible. Industrial, manufacturing, commercial, and office land uses are prohibited from encroaching the uplands of the 100-year flood zone, with the exception of 100% permeable surface parking areas designed for seasonal or occasional overflow demands. The City has additional flood plain protection measures established in the Land Development Regulations.

3. Minerals

As previously mentioned, there are three commercially valuable minerals utilized in Lake County: sand, clay and peat. A large amount of fill dirt is also removed. The City anticipates that these commercially valuable minerals will continue to be extracted in various parts of the County during the short range (2020-2025) and long-range (2040) planning period. The City will continue to ensure that all Federal, State and County regulations regarding mining operations shall be are followed.

4. Soil Erosion

The City has established soil erosion and sedimentation control measures in the Land Development Regulations.

5. Environmentally sensitive lands, fisheries, wildlife, marine habitats and vegetative communities including forests [9J-5.013(1)(a)5, F.A.C. and 9J-5.013 (2)(c)9, F.A.C.]

As previously stated, the City has identified about 5,320 acres of conservation lands on the *Future Land Use Map*. These are environmentally sensitive lands with natural resources that the City shall continue to protect and conserve. In addition, the City considers the lakes in the area as natural resources and as such, the City shall use its full authority and the cooperation of other governmental agencies to protect, maintain, and enhance the water quality of these lakes.

Species such as indigo, coral, and rattlesnakes; doves, quail, osprey, woodpeckers and other birds; squirrels, raccoons, rabbits, otters, pileated and other woodpeckers, and owls, are seen in the City.

No attempt has been made to instigate identification of rare or unique plants and animals or vegetative communities. It is hoped that as a result of public participation in this *Plan*, that additional information and efforts will result.

The City shall continue to require that no development other than water-related passive recreation, conservation facilities, and stormwater/infrastructure improvements permitted by a regulatory agency will be allowed within wetland areas of Groveland.

6. Green Swamp Area of Critical State Concern

The City recognizes the importance of the Green Swamp and will continue to enforce the development guidelines established in this *Comprehensive Plan* and the City's Land Development Regulations. The City will also coordinate with the St. Johns River Water Management District, Lake County, Florida Department of Environmental Protection, and other State or Federal agencies in their efforts to preserve, restore, and protect the environmentally sensitive lands and natural resources in the Green Swamp.

7. Air

Overall, the air quality in Groveland is good. The City will continue to review the air quality plans of Lake County on a regular basis to monitor the air quality standards in the Groveland area.

8. Water Quantity and Quality

Lake County Water Resource Management (WRM) does water testing for the County. Annual Reports available online at https://www.groveland-fl.gov/417/Water-Quality-Reports. The City will continue to review the water quality plans of Florida Department of Environmental Protection on a regular basis to monitor the water quality standards in the Groveland area.

The City's potable water system provides water for both residential and non-residential purposes, including fire-fighting demands. Overall, the City's potable water system is designed to accommodate future growth. With the revisions to the Consumptive Use Permit allotments and the installation of storage tanks at water treatment plant (WTP) 2 and WTP 5, there should be sufficient water capacity and storage for future growth as well. The City will continue to monitor and maintain the potable water services provided in the City's Utility Service Area during the planning period.

9. Sinkholes

The City is in an area with occasional sinkhole problems. When a sinkhole develops, the City shall implement proper planning and engineering strategies to repair or alleviate damages needed to reduce adverse environmental impacts.

10. Wellfield Protection Areas

The City shall maintain a 100-foot radius wellhead protection area within which aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited. The City shall continue to restrict development from occurring within a ~~75~~150-foot radius of any public wells. No septic tanks or sanitary sewer facilities~~, or solid waste or disposal facilities~~ shall be permitted within a 200-foot radius of any existing or proposed public well. The City shall also maintain a 500-foot radius wellhead protection area within which manufacturing uses are prohibited. Land use restrictions within the wellhead protection area are established in the City's Land Development Regulations.

11. Hazardous Waste

Hazardous waste is discussed in the *Public Facilities Element*. Solid waste disposal is achieved through franchise agreements with solid waste haulers. Hazardous waste is regulated by State and local rules. The City shall provide education to its residents and businesses on the importance of proper handling of hazardous wastes, especially in relation to protecting natural resources.

12. Coordination

The City shall work independently and with Lake County and regulatory agencies in an

effort to educate and enforce lakefront regulations in order to protect the water quality. The City will also work independently as well as with Lake County and regulatory agencies in an effort to preserve some of the natural environment along the lakes as a habitat for native species.

D. GOALS, OBJECTIVES AND IMPLEMENTING POLICIES

GOAL 1: Conservation of Natural Resources. Conserve, protect, and effectively manage natural resources within the City, particularly environmentally sensitive lands, wetlands, groundwater quality, and scarce vegetative communities.

OBJECTIVE 1.1: ***Protecting Air Quality***. Protect air quality within the City by complying with or exceeding air standards established by the Florida Department of Environmental Protection and the United States Environmental Protection Agency. [9J-5.013(2)(b)(1), F.A.C.]

Policy 1.1.1: ***Maintaining Good Air Quality.*** The City shall continue to maintain good air quality through codes, ordinance, and regulations that address issues of smoke, landscaping and tree protection which contribute to the enhancement of air quality.

Policy 1.1.2: ***Land Uses and Air Quality.*** Groveland shall coordinate with Lake County and neighboring cities and towns to ensure that land use controls applicable to adjacent jurisdictional areas promote land uses which shall not adversely impact air quality within Groveland.

Policy 1.1.3: ***Monitoring Air Quality.*** The City shall cooperate with Lake County and State and Federal agencies in monitoring air quality in the City.

Policy 1.1.4: ***Automobile Emission Pollution.*** The City shall continue to reduce the potential for automobile emission pollution by:

1. Requiring vegetative buffers strips and/or berms between roadways and new developments.;
2. Establishing additional bikepaths/walkways so as to promote the reduction in use of automobiles; and
3. Promote planned unit development or mixed use type of land use, where feasible.
4. Transition city fleets to electric or hybrid vehicles.
5. Promote and encourage installation of electric vehicle charging stations in the city center and other public spaces.
6. Require businesses with over 50 employees to install and maintain an electric charging station.

Policy 1.1.5: ***Open Burning.*** The City shall discourage open burning due to its adverse impacts on air quality.

Policy 1.1.6: ***Alternative Energy Resources.*** The City shall encourage the use of alternative energy resources that do not degrade air quality.

OBJECTIVE 1.2: Protect Quality of Surface and Ground Waters. Protect the quality of surface and ground water by controlling existing and potential sources of contaminants and by coordinating with Lake County and other appropriate agencies. [9J-5.013(2)(b)(2), F.A.C.]

Policy 1.2.1: ***Prohibited Land Uses within Certain Areas.*** The City shall not permit any Industrial Future land use Map designations, amendments or Industrial zoning districts within 500 feet of lake front areas. Within areas of high groundwater aquifer recharge, industrial Future Land Use Map designations, amendments or Industrial zoning districts shall be prohibited. The storage and placement of chemicals and other environmentally hazardous material within the 100-Year Flood Plain, well field protection zones, and Conservation Future land use designation shall be restricted or prohibited according to policies cited herein this *Element*. The manufacturing of hazardous waste materials is prohibited within commercial and industrial land use designations in the *Future Land Use Map*.

Policy 1.2.2: ***Commercial and Industrial Development Operating Permits.*** The City shall include principles within the development review process which require applicants of proposed commercial and industrial developments to provide evidence, prior to the issuance of a Certificate of Occupancy, that all appropriate operating permits have been issued by State regulatory agencies, particularly for commercial or industrial uses and operations using on-site storage facilities for chemical or hazardous materials and wastes.

Policy 1.2.3: ***Stormwater Management Techniques.*** Sediments, silt, and pollution carried by urban runoff shall be reduced to the greatest extent possible through Low Impact Development (LID) stormwater management techniques designed to retain and detain stormwater runoff. This shall include mandatory on-site retention, erosion controls, and the use of native vegetation.

Policy 1.2.4: ***Post-development Groundwater Infiltration Rates and Volumes.*** The City shall require that impervious surfaces be limited in prime recharge areas (> 12 inches/year). Post-development groundwater infiltration rates and volumes within primary groundwater recharge areas shall meet the least restrictive of the following standards:

- Post-development rates and volumes must be at least equal to pre-development rates and volumes; or

- Post development rates and volumes must achieve at least 70% infiltration, ponding for stormwater retention/detention or structural exfiltration systems.

Policy 1.2.5: ***Discharge into Lakes.*** No onsite sanitary sewer system shall directly discharge into any lake, nor shall a system use surface waters for back-up or overflow discharge. New development shall be required to connect to the City sewer service in accordance with criteria established in the *Public Facilities Element* and the City's Concurrency Management System. The City will request regular County inspections of existing septic tanks within 150 of lakes.

Policy 1.2.5.1 The City shall pursue grants and other funding sources which are available from the State of Florida, Lake County, and/or St. Johns River Water Management District to connect existing septic systems that may impact lakes to City sewer service or to upgrade the non-performing septic systems.

Policy 1.2.6: ***Protecting the Shoreline from Soil Erosion.*** To protect shoreline from erosion and to reduce sediments and suspended solids introduced to surface waters, the City shall coordinate with relevant State and federal agencies upon the presence of shoreline erosion problems to identify and analyze best management practices to implement corrective measures to retard or prevent further erosion.

Policy 1.2.7: ***Acquiring Land for Recreational or Conservation Uses.*** The City shall pursue grants and other funding sources which are available from the State of Florida, Lake County, and/or St. Johns River Water Management District to acquire land along lakefront and environmentally sensitive areas for recreation or conservation purposes.

Policy 1.2 8: ***Agricultural Best Management Practices.*** Agricultural activities are limited within Groveland. The City shall encourage existing agriculture land use activities to use best management practices in order to reduce pesticide and fertilizer runoff, prevent soil erosion, and preserve water quality. To the extent allowed by law, agricultural runoff into water bodies shall be prohibited.

Policy 1.2.9: ***Reducing Pollutant Loads.*** The City shall participate in the Florida Department of Environmental Protection's Total Maximum Daily Load Program to reduce pollutant loadings in the Upper Ocklawaha River Basin.

Policy 1.2.10: ***Shoreline Protection and Lakefront Littoral Zones.*** Development occurring adjacent to lake shoreline or wetland areas shall prepare a design and management plan prior to the construction of the on- site improvements. This plan shall include and comply with the following guidelines:

a. ***Preserve Native Vegetation***. Only native vegetation shall be maintained within the shoreline and lakefront littorals zone with no mowing lower than three feet allowed within 20 feet of the normal high-water line.

b. ***Shoreline Management Plan.*** Require a shoreline management plan that describes procedures to assure minimal impacts to water quality and shoreline erosion. Where deemed necessary, silt screening shall be implemented to retain effluvial sediments carried by runoff stormwater or wave action.

c. ***Protection of Littoral Zone.*** Applicants of new development or redevelopment shall include the following:

1. Include typical cross sections of the surface water management system showing 100-Year Water Mark elevation and the negative-3-foot contour (i.e., below average elevation), which ever is greater.

2. Specify what vegetation will be removed or planted in the littoral zone within the proposed development plan, including the extent, method, type and timing of any planting to be provided.

3. Provide a description of any management procedures to be followed in order to assure the continued viability and health of the lakefront littoral zone. The lakefront littoral zone as established should consist entirely of native vegetation and should be maintained permanently as part of the water management system. As a minimum, 10 square feet of vegetated lakefront

littoral zone per linear foot of lake shoreline is required as part of the surface water management system.

d. ***Limiting Development.*** Limit development within the lakefront littoral zone to water-dependent structures such as docks and piers.

e. ***Class III Waters Protection.*** Class III Waters, as defined by the Florida Administrative Code (F.A.C.) and/or Florida Statutes (F.S.), shall be protected through the following activities:

1. Dredging activities shall be limited to the appropriate regulatory agency approved dredging.

2. Ensure good water quality by coordinating with the FDEP, Florida Department of Natural Resources (FDNR), and the St. Johns River Water Management District in monitoring the quality of stormwater run-off and all discharge. The City shall notify the appropriate agency with jurisdiction as potential issues or problems are identified by the City.

3. Limit the use of Class III waters to water dependent activities that are not contrary to the public interest and satisfy a community need.

f. ***Shoreline Protection Zone.*** To protect the lake front areas from the encroachment of development, a shoreline protection zone shall be delineated. There shall be no disturbance within 50 feet of the landward extent of wetlands as set forth in Rule 62-340, with the exception of pilings for docks or piers. There shall be no buildings, pools, ponds, or other structures in this protection zone. There shall be no septic tanks within 75 feet of the landward extent of wetlands as set forth in Rule 62-340. All development shall be subject to the building setback requirements regarding the shoreline protection zone established in the City's Land Development Regulations.

Policy 1.2.11: ***Promoting Low Impact Development (LID) Techniques.*** The City shall promote the use of Low Impact Development techniques which mimic a site's pre-development and hydrologic condition. These techniques will address infiltration, attenuation, and

treatment needs of each specific site. Low Impact Development works with nature to manage stormwater as close to its source as possible, with an emphasis on cost-effective strategies at the lot level. Low Impact Development employs principles such as preserving and recreating natural landscape features, and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. Low Impact Development practices include, but are not limited to, bioretention facilities, rain gardens, vegetated rooftops, grass swales, rain barrels, permeable pavements, or the replication of predevelopment hydrology. By implementing Low Impact Development principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. To ensure all new development utilize low impact development techniques, the City shall amend its land development codes to phase in LID as a requirement.

Policy 1.2.12: ***Promoting Green Building Techniques.*** The City shall promote "green building" techniques that reduce and ultimately eliminate the impacts of buildings on the environment and human health, take advantage of renewable resources, and the reduce rainwater run-off to protect minerals, soils and vegetation.

OBJECTIVE 1.3: ***Wetland Protection.*** Protect the natural functions of identified wetland areas. [9J-5.013(2)(b)(3), F.A.C.]

Policy 1.3.1: ***Designating Wetlands as Conservation Areas.*** The City shall designate all wetlands within the City as Conservation within the *Future Land Use Element* and on the *Future Land Use Map*. The City may designate significant high recharge areas and undisturbed natural vegetative communities as Conservation depending on the necessity to protect such areas under this designation. The precise delineation of each area must be through specific studies and field determination.

Policy 1.3.2: ***Tiered Approach to Wetlands Protection.*** The City hereby adopts a tiered approach to wetland protection. The general location of extent of these wetland systems are displayed on the City's *Wetlands Map*. The exact boundaries shall be construed to coincide with the jurisdictional boundaries set by St Johns River Water Management District, the Florida Department of Environmental Protection, or the U.S. Army Corps of Engineers.

Policy 1.3.3: ***Defining Wetlands.*** Wetlands shall be defined according to the following categories:

Category I wetland areas shall mean those wetland areas which meet at least one of the following criteria:

1. Any wetland of any size that has a hydrological connection to nature surface water bodies or the Floridian aquifer;
2. Any large isolated uninterrupted wetlands 100 acres or larger; or
3. Any wetland of any size that provides critical habitat for Federal and/or State listed, threatened or endangered species.

Category II wetland areas shall mean those wetland areas which meet any of the following criteria:

1. Isolated wetlands or formerly isolated wetlands which by way of man's activities have been directly connected to other surface water drainage.
2. Isolated wetlands between 5 acres and 100 acres.

Category III wetland areas shall mean those isolated wetlands of less than 5 acres.

Policy 1.3.4: ***Development Restrictions within Wetlands.*** No development shall occur in Category I wetlands except as permitted under Policy 1.6.3. In Category II wetlands, in addition to those activities permitted under Policy 1.6.3, encroachment and alteration may be allowed if:

1. Sufficient justification is provided to the City to demonstrate that the proposed use of the land is in the wider public interest.
2. Such activity complies with the requirements of all Federal, State, and regional agencies claiming jurisdiction over wetland alteration.
3. Adequate mitigation of any adverse hydrological and physical alterations is provided.
4. The site is located outside the Green Swamp Area of Critical State Concern.

Category III wetlands shall be protected consistent with the applicable environmental regulatory agencies' permitting

requirements. The City reserves the right to contact and provide comments to those agencies or to intervene during the permit application review and issuance process. The City shall not issue permits for site alterations without prior issuance of the required permits from the other environment regulatory agencies. In accordance with Policy 1.13.1 no development is permitted in wetlands in the Green Swamp Area of Critical State Concern.

Policy 1.3.5: ***Wetlands and Natural Buffer Zones.*** Wetlands shall be protected from impacts generated by adjacent land uses through natural buffer zones.

1. No development of disturbance of area is permitted within 25 feet of a designated wetland area. These areas shall be marked with appropriate signage as conservation areas.

2. No building or impervious surface area (with the exception of wet retention areas) is permitted within 50 feet of a designated wetland area in the Green Swamp, or wetlands within environmentally sensitive areas associated with waterbodies, wildlife habitats and corridors, or protected species.

3. A minimum of 25-feet from a designated wetland area shall be permitted for isolated wetlands outside of the areas listed above. A wildlife or environmental study may be required to substantiate this policy unless determined to be a category III wetland.

Policy 1.3.6: ***Identifying the Location of Wetland Areas.*** The location of wetland areas on a site shall be accurately identified during site development review. The City shall not issue a development order or permit for a parcel until all wetland areas on that parcel have been identified and either dedicated in a conservation easement or appropriately mitigated.

Policy 1.3.7: ***Transfer of Development Rights and Wetlands.*** To further protect pristine Class I wetlands, create wildlife corridors and allow for passive recreation activities defined herein, the City shall allow the transfer of development rights at the densities, established in the *Future Land Use Element*, from the wetlands located on a site to the upland portion the applicable site; given that there is sufficient uplands on the existing parcel of land or lot of record (at the time of this *Comprehensive Plan* adoption) to locate the proposed

development. However, when the St. Johns River Water Management District and/or other regulatory agencies have approved a mitigation plan to compensate for the loss of wetlands, the City will require any development to be consistent with the terms of the mitigation plan. The transfer of density may occur provided other plan provisions regarding upland and floodplain resource protection, compatibility of adjacent land use, stormwater management and setbacks, etc. are met.

OBJECTIVE 1.4: ***Protecting the Quantity of Surface and Ground Water.*** Protect the quantity of surface and ground water through preservation of permeable surface and through promotion of conservation activities affecting the consumption of potable water. [9J-5.013(2)(b)(2), F.A.C.]

Policy 1.4.1: ***Conserving Potable Ground Water Sources.*** To conserve potable ground water sources and to accomplish reasonable reductions in water consumption, the City shall:

a. Implement, where feasible, water reuse or reclamation systems for residential, commercial and industrial operations which utilize large quantities of non-potable water;
b. Require new development to incorporate native and drought tolerant landscaping in the site design;
c. Require the installation of water saving plumbing devices in all new construction;
d. Send conservation messages, such as the appropriate times and days to water lawns, in utility bills;
e. Encourage existing residents and require new development to use sensors, web based smart irrigation sprinkler controllers and other rain shutoff sensors, soil moisture sensors, or evapotranspiration controllers for in-ground irrigations systems; and
f. Encourage residents to perform visual weekly inspections of irrigation systems to identify leaks, broken sprinkler heads, and other system malfunctions. The City shall hold workshops to education residents in conjunction with the Water Management District.

Policy 1.4.2: ***Emergency Conservation of Water Sources.*** The City shall continue to plan for the emergency conservation of water sources in accordance with the policies of St Johns River Water Management District. The City shall enforce the provision of the Water Management District's emergency water shortage plans.

Policy 1.4.3: ***Wellfield Protection Zone.*** To protect the quality and quantity of Groveland's potable water supply, the City shall maintain a wellfield protection zone within a radius of one hundred (100) one hundred and fifty (150), two hundred (200), five hundred (500) and one thousand feet (1,000) from potable water wells. The following land uses are prohibited within these zones:

a. ~~a.~~ Within a one-hundred-foot (100') radius, aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited;

b. No new development (other than the facilities related to the City's water system) shall be permitted within one hundred and fifty (150) feet from a well;

~~b. Within a five-hundred-foot radius, aboveground or underground storage tanks, sanitary hazard as defined in F.A.C. 62-550, storage or treatment of solid waste in tanks, and transmission facilities conveying reclaimed water shall be prohibited;~~

c. Within a two-hundred-foot (200') radius, septic tanks, unlined reclaimed water storage ponds, and sanitary sewer facilities shall be prohibited;

d. Within a one-thousand-foot (1,000') radius of a well, uses shall be prohibited that require the storage, use, handling, production or transportation of restricted substances on the Florida Substance List, and agricultural chemicals, hazardous/toxic substances (Groveland Code of Ordinances, Subpart B, Chapter 117, Sec. 117-183) and wastes, industrial chemicals, etc. In addition, industrial percolation ponds, mining activities and similar activities are prohibited;

e. Excavation of waterways or drainage facilities which intersect the water table shall not occur within 1,000 feet; and

f. Solid waste disposal facilities shall also be prohibited within the City.

Policy 1.4.4: ***Alternative, Renewable Sources of Water.*** In accordance with the policies as set forth in the *Intergovernmental Coordination Element* and the *Public Facilities Element*, the City shall seek alternative, renewable sources of water other than surface and ground water to meet current and future needs. These sources are identified in the City's *Water Supply Facilities Work Plan*.

Policy 1.4.5: ***Water Conservation Techniques and Programs.*** The City shall promote and establish and/or require water conservation techniques and programs when and where feasible for current development and require same for new development. These techniques and programs

are identified in the City's *Water Supply Facilities Work Plan.*

Policy 1.4.6: ***Water Supply Facilities Plan.*** Groveland's *Water Supply Facilities Work Plan (Work Plan)* shall assess existing and projected water sources and needs for at least a 10-year planning period and consider the *Regional Water Supply Plan* of the St. Johns River Water Management District. The *Work Plan* will also identify traditional and alternative water supply sources, including water conservation efforts, which the City may use to reduce or satisfy existing and projected water demands.

Policy 1.4.7: ***Water Conservation and Work Plan.*** The City will continue to implement the water conservation efforts identified in the *Work Plan.* These efforts will include concentrating on outreach and education as well as irrigation system modifications and indoor plumbing retrofits.

OBJECTIVE 1.5: ***Conserve, Appropriately Use and Protect Fisheries.*** Conserve, appropriately use and protect fisheries indigenous to lakes within Groveland. [9J-5.013(2)(b)(4), F.A.C.]

Policy 1.5.1: ***Land Uses Compatibility and Fisheries.*** The City shall promote land use activities within the *Future Land Use Element* and designated on the *Future Land Use Map* which are compatible with preservation of fisheries within the City's lakes. The City shall prohibit any land use which shall detrimentally affect water quality or water temperature within any lake.

Policy 1.5.2: ***Coordination with Environmental and Wildlife Preservation Agencies.*** The City shall coordinate with and assist Federal and State environmental and wildlife preservation agencies to protect fish populations within the City's lakes and to promote environmental management activities which enhance fish propagation through natural processes or by managed fish restocking.

Policy 1.5.3: ***Coordination with the Lake County Water Authority.*** The City shall coordinate with the Lake County Water Authority to control any aquatic weed, algae blooms, or other aquatic plant proliferation occurring within the City's lakes. After such an event, the City shall determine the causes of the event and shall implement actions to prevent or minimize impacts from future incidences.

OBJECTIVE 1.6: ***Conserve Wildlife, Wildlife Habitats, and Vegetative Communities.*** Conserve and protect wildlife, wildlife habitats, and vegetative communities through the management of

growth and development within the City. [9J-5.013(2)(b)(4), F.A.C.]

Policy 1.6.1: ***Endangered and Threatened Species.*** The City shall coordinate with the Florida Fish and Wildlife Conservation Commission, adjacent local governments, the U.S.D.A. Soil Conservation Service, the U.S.D.A. Division of Forestry to ensure the conservation and protection of endangered and threatened species, and their habitats, which occur within its jurisdiction.

Policy 1.6.2: ***Inventory of Upland Vegetative Communities.*** An inventory of the type and extent of all-natural upland vegetative communities is required for all proposed development sites exceeding 50 acres as well developments located adjacent to lakes and pristine wetlands and uplands (see also policy 1.13.7 for development within the Green Swamp Area of Critical State Concern), utilizing the Florida Land Use and Cover Classification System to identify vegetative types. This will include an inventory of identified important wildlife corridors. Identified onsite natural upland habitat shall be incorporated into the site's open space requirement to the greatest extent possible, taking into account site characteristics and other natural features within the site. Important wildlife corridors and links between ecosystems should also be incorporated into the open space requirement.

Policy 1.6.3: ***Permitted Uses and Facilities on Conservation Lands.*** Only conservation facilities and passive recreation uses shall be permitted within areas designated for Conservation (CON). Such activities and uses shall be described as follows:

(A) Passive Recreation:

(1) Boardwalks and docks not to exceed a width of four feet;
(2) Hiking trails, not to exceed a width of four feet unless part of a regional trail system that maintains a wider standard;
(3) Picnic areas;
(4) Fishing piers exceeding a width of five feet may only be located within lakes and not within wetlands; and
(5) Observation towers.

(B) Conservation Facilities:

(1) Fire lanes and fire/observation towers;

(2) Facilities designed to protect nesting, feeding or habitat areas of designated endangered, threatened, or species of special concern, as determined by the Florida Fish and Wildlife Conservation Commission, or to support the propagation of common wildlife;
(3) Fishery management;
(4) Facilities designed to protect an archaeological or historical site;
(5) Facilities designed to retard or eliminate soil erosion problems, particularly shoreline erosion along shorelines;
(6) Facilities necessary to eliminate unwanted exotic vegetation; and
(7) Wildlife monitoring devices/stations.

Policy 1.6.4: ***Protection of Upland Vegetative Communities and Wildlife Habitats.*** Upland vegetative communities and wildlife habitats (particularly those identified as primary habitat for endangered or threatened species) for which the City or a State agency deems environmentally significant shall be protected from adverse impacts associated with development to a degree necessary to maintain the perpetual viability of the endangered or threatened specie(s).

OBJECTIVE 1.7: ***Conserve and Appropriately Use Soils***. Conserve and appropriately use soils through the use of best management practices to minimize soil erosion problems as part of the development review process. [9J-5.013(2)(b)(3), F.A.C.]

Policy 1.7.1: ***Soil Erosion Control.*** The City shall require that appropriate measures be taken during land clearing and building operations to assure that exposed, destabilized, or otherwise altered soil is expeditiously covered with an acceptable erosion control material. The provision shall be applicable to the act of subdividing and installing related improvements, as well as during the development review process, including the period during which improvements may occur as well as the length of time soil may be exposed to the environment. Compaction of soils from heavy machinery shall be limited to where absolutely necessary and shall remain at least 15 feet from trees greater than 4" diameter at breast height (DBH).

Policy 1.7.2: ***Notifying USDA about Soil Erosion.*** The City shall notify the local office of the U.S.D.A. Soil Conservation Service of any soil erosion problems that may occur within the City's jurisdiction.

Policy 1.7.3: ***Mining Activities.*** No new mining activities shall be allowed within the City's jurisdictional limits and discouraged in any neighboring area. [9J-5.013(2)(c)(4), F.A.C.]

Policy 1.7.4: ***Soil Erosion and Sedimentation Control Plan.*** To prevent both soil erosion and sedimentation, the City shall require a soil erosion and sedimentation control plan whenever a development will involve any clearing, grading, or other form of distributing land by movement of earth, provided that any one of the following applies:

- Excavation, fill, or any combination thereof will exceed 500 cubic yards;
- Fill will exceed 3 feet in vertical depth at its deepest point as measured from the natural ground surface;
- Excavation will exceed 4 feet in vertical depth at its deepest point as measured from the natural ground surface;
- Excavation, fill, or any combination thereof will exceed an area of 1,000 square feet;
- Plant and/or tree cover is to be removed from an area exceeding 1,000 square feet on any parcel of land; or
- Whenever excavation or fill is proposed within 100 feet of a stream, stream channel, or body of water, a soil erosion and sedimentation control plan shall be provided.

OBJECTIVE 1.8: ***Protecting Environmentally Sensitive Areas.*** Protect environmentally sensitive lands from the encroachment of development in order to preserve their natural functions and assure their perpetual existence. Environmentally sensitive lands shall comprise wetlands, surface waters, floodplains, sink holes, aquifer recharge areas with high percolation rates, and undisturbed significant vegetative communities, particularly those serving as habitat or refuge for endangered and threatened plants and animals.

Policy 1.8.1: ***Designating Conservation Lands.*** The *Future Land Use Element* shall designate all wetlands and sink holes as Conservation (CON). The City may designate significant high recharge areas, areas within the 100-year floodplain, and undisturbed natural vegetative communities as Conservation (CON) where the environmental sensitivity of the subject area warrants protection from the encroachment of development to protect such areas under this designation. The *Future Land Use Map* Series shall illustrate areas designated as Conservation. The precise delineation of each area must be through specific studies and field determination.

Policy 1.8.2: ***Floodplains and Flood Zones.*** The City shall regulate development in areas identified as natural hazard areas, including floodplains and flood zone areas in order to maintain flood- carrying and flood storage capabilities.

Policy 1.8.3: ***Long-range Protection of Floodplains.*** The City shall ensure the long-range protection of the floodplains through:

a. ***Structures and Impervious Surfaces.*** Positioning structures and impervious surfaces outside the 100-year floodplain to the greatest extent possible. The 100-Year floodplain shall be delineated within the *Future Land Use Map* Series, and its demarcations shall be determined by the most recent Flood Insurance Maps prepared by the Federal Emergency Management Agency.

b. ***Cluster of Residential Units.*** Residential development shall cluster dwelling units on uplands located outside the 100-Year floodplain to the extent feasible.

c. ***Sanitary Sewer Systems.*** Septic tanks, wastewater treatment plants, and spray fields are prohibited within the 100-Year floodplain.

Policy 1.8.4: ***Purchasing Environmentally Sensitive Lands.*** The City shall pursue State and County funds or grants to purchase environmentally sensitive lands designated as Conservation (CON) on the F*uture Land Use Map*.

Policy 1.8.5: ***Incompatible Land Uses.*** The City shall ensure that future land uses that are incompatible with the protection and conservation of wetlands are directed away from wetlands.

Policy 1.8.6: ***Legal Agreement.*** Newly created mitigated areas, preservation or conservation areas as a part of a development shall be identified in a legal agreement which ensures their protection and maintenance in perpetuity. These areas shall be depicted on the *Future Land Use Map* as Conservation lands.

Policy 1.8.7: ***Additional Wetlands Protection.*** The City shall continue to ensure that:

a. Development plans for new development to identify the location and extent of wetlands located on the property;

b. Development plans provide measures to assure that predevelopment flows and quality of water will be provided to maintain wetlands after development; and

c. Where alteration of wetlands is necessary in order to allow reasonable use of property, it should be clearly in the public interest and there is no practical alternative which reduces or avoids impacts to wetlands. Mitigation shall only be a last resort action to be used only after other measures such as reconfiguring of the development to avoid sensitive areas, reduction of density, etc. have been considered and shown not to be feasible. There shall be no net loss of sensitive lands. Any mitigation shall avoid impact to ecologically valuable uplands.

Policy 1.8.8: ***Floodplain Mitigation.*** Development within the 100-Year Floodplain shall provide necessary mitigation to maintain the natural stormwater flow regime. The 100-Year Floodplain Zone shall be delineated within the *Future Land Use Map* Series. The boundary of the 100-Year Floodplain Zone shall be determined by the most recent Flood Insurance Maps prepared by the Federal Emergency Management Agency. Mitigation shall occur through the following activities:

a. ***Prohibited Land Uses and Activities.*** Storing or processing materials that would, in the event of a 100-Year Storm, be buoyant, flammable, explosive, or potentially injurious to human, animal or plant life is prohibited. Material or equipment immune to substantial damage by flooding may be stored if securely anchored to prevent flotation or if readily removable from the area upon receipt of a flood warning. Manufacturing land uses shall be prohibited from encroaching the 100-Year Floodplain Zone.

b. ***Minimum Floor Height Elevation.*** All new construction and substantial improvements of existing construction must have the first-floor elevation for all enclosed areas at eighteen inches above the 100-year flood elevation.

c. ***Construction Materials and Methods.*** All new construction and substantial improvements of existing construction shall be constructed with materials and utility equipment resistant to flood damage, and using methods and practices that will minimize flood damage and prevent

the pollution of surface waters during a 100-year flood event.

d. ***Service Facilities and Utilities.*** Electrical heating, ventilation, plumbing, air conditioning, and other service facilities shall be designed or located to prevent water from entering or accumulating within the components during a base flood. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate both infiltration of flood water into the systems and discharges for the systems into flood waters.

e. ***Residential Subdivision Plans and Design.*** Plans and designs for subdivisions shall minimize potential flood damage by locating recreation and conservation uses, if included in the plans, to areas within the Flood Zone, reserving as much land as possible outside the flood zone for other land uses. Flood zones shall be identified on all final development plans submitted to the City.

f. ***Stormwater Facilities.*** The City shall require development to have drainage facilities in place and functioning concurrent with the impacts of development, as stipulated by deadlines established within the Concurrency Management System. Such drainage facilities shall be designed to comply with the City's established level of service standard. Developers shall be required to install all necessary drainage facilities necessary to maintain the natural flow regime of the 100-year floodplain, consistent with level of service standards. Low Impact Development (LID) techniques shall be employed to the maximum extent feasible to further protect wetland quality.

OBJECTIVE 1.9: ***Management of Hazardous Wastes to Protect Natural Resources.*** Manage the use and disposal of hazardous wastes to protect natural resources and public health and safety.

Policy 1.9.1: ***Commercial or Industrial Uses and Hazardous Wastes.*** The City shall reserve all rights and privileges to deny development of any commercial or industrial activity which may use, store, or sell hazardous wastes which represent a potential threat to the quality of groundwater or to the health and safety of City residents.

Policy 1.9.2: ***Monitoring and Management of Hazardous Wastes.*** The City shall assist Lake County in the monitoring and management of any hazardous waste generators within Groveland. The City shall also notify the Lake County Department of Environmental Utilities of the presence of any disposed, buried, or stored wastes or material for which the volatility and chemical contents thereof are unknown.

Policy 1.9.3: ***Collection and Disposal of Hazardous Wastes.*** The City shall coordinate with the County, State, and Federal government in the collection and disposal of hazardous wastes.

OBJECTIVE 1.10: ***Stormwater Management.*** To provide efficient and economic stormwater management which will protect the public and property from flooding and maintain and improve water resource quality.

Policy 1.10.1: ***Upgrading and Retrofitting Stormwater Facilities.*** The City shall upgrade and retrofit stormwater facilities with roadway construction wherever feasible.

Policy 1.10.2: ***Multiple Use of Stormwater Facilities.*** The City shall allow the multiple use of stormwater management facilities for recreation, conservation, and open space.

Policy 1.10.3: ***Incorporating Best Management Practices.*** Upon completion of the Upper Ocklawaha River Basin Management Action Plan, the City shall amend the Land Development Regulations to incorporate Best Management Practices, non-structural stormwater management strategies, and xeriscaping to manage stormwater and its environmental impacts.

Policy 1.10.4: ***Restoring and Protecting the Water Quality.*** To assist the Florida Department of Environmental Protection, the St. Johns River Water Management District, and the Lake County Water Authority in their efforts to restore and protect the water quality in the Upper Ocklawaha River Basin, the City shall:

- Promote the use of wet retention and dry retention stormwater ponds;
- Promote the use of Low Impact Development (LID) techniques;
- Actively seek funding for stormwater retrofit projects, which include activities ranging from the installation of baffle boxes to the creation of detention ponds; and
- Identify strategies to eliminate or reduce direct discharge to the lakes in the City.

Policy 1.10.5: ***Maintenance of Stormwater Facilities.*** The City shall maintain its stormwater management facilities in such a manner that the impacts to natural systems shall be minimized.

Policy 1.10.6: ***Private Stormwater Management Facilities.*** The City shall require that all private stormwater management facilities be maintained such that the effectiveness for stormwater abatement and water quality improvement are maximized.

OBJECTIVE 1.11: ***Aquifer Recharge Protection***. Protect aquifer recharge areas to maintain suitable groundwater levels and to protect groundwater quality. [9J-5.013(2)(b)(2), F.A.C.]

Policy 1.11.1: ***Post-development Runoff and Prime Recharge Areas.*** The City shall protect is groundwater resources by not allowing increases in post-development runoff volumes in prime groundwater recharge areas (> 12 inches/year).

Policy 1.11.2: ***Prohibiting Land Uses and Recharge Areas.*** The City shall prohibit land uses which have a high potential risk for water contamination in primary recharge areas.

Policy 1.11.3: ***Prohibiting Land Uses and Public Water Supply Wells.*** The City shall continue to prohibit land uses within specific distances from public water supply wells that could have negative impacts on groundwater quality.

Policy 1.11.4: ***Regional Aquifer Recharge Protection.*** The City shall continue to coordinate with Lake County, St Johns River Water Management District, and state and federal agencies to achieve regional aquifer recharge protection objectives.

Policy 1.11.5: ***Groundwater Withdrawals.*** The City shall coordinate with St Johns River Water Management District in its consumptive use permit applications to determine the extent to which groundwater withdrawals can be made without resulting in harm to the water resources and associated natural systems and shall manage its groundwater withdrawals in compliance with the conditions of its consumptive use permits to avoid such harm.

Policy 1.11.6: ***Reclaim Water.*** The City shall maintain its reclaimed water system to provide re-use water for irrigation and to decrease the potable water demand.

Policy 1.11.7 ***Fertilizer Best Management Practices.*** The use of fertilizers and chemicals shall be applied pursuant to the Florida Department of Environmental Protection's (FDEP) Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries in order to reduce pesticide and fertilizer runoff.

OBJECTIVE 1.12: ***Quality of Lakes.*** To preserve the quality of Groveland's lakes, recognizing the importance of lake beauty, cleanliness, and recreational use as a natural asset contributing to the general appeal of Groveland as a residential and business community.

Policy 1.12.1: ***Working with Public and Private Companies.*** The City shall work with private and public companies to implement projects, reduce pollutants, and improve water quality for those lake and river systems wholly and/or partially within the City.

Policy 1.12.2: ***Encouraging Citizen and Neighborhood Involvement.*** The City shall encourage citizen and neighborhood involvement in addressing lake water quality concerns for those lakes wholly and/or partially within the City.

OBJECTIVE 1.13: ***Development within the Green Swamp Area of Critical State Concern.*** Establish criteria for development within the Green Swamp Area of Critical State Concern to conserve and protect its natural and ecological resources.

Policy 1.13.1: ***Development in Floodplains and Wetlands.*** The City shall prohibit any development in floodplains and wetlands within the Green Swamp Area of Critical State Concern (ACSC).

Policy 1.13.2: ***Wastewater Sludge.*** The City shall prohibit any and all placement of wastewater sludge within the Green Swamp ACSC.

Policy 1.13.3: ***Industrial Development and Mining.*** The City shall prohibit all Industrial development, peat and lime rock mining, clay mining and sand mining within the Green Swamp ACSC. This prohibition of industrial development shall specifically include facilities engaged in industrial activities, as defined in the Environmental Protection Agency's National Pollution Discharge and Elimination System for Stormwater Associated with Industrial Activity including:

- Petroleum pipelines;
- Landfills;
- Incinerators;
- Wholesale chemical operations;
- Petroleum related industries and fuel dealers (with the exception of gas stations and truck stops, which may be permitted);
- Dry cleaning plants; and
- Chemical research operations.

Policy 1.13.4: ***Surface Water and Groundwater Recharge.*** Development within the Green Swamp ACSC shall not alter the quantity, quality, and

natural flow regime of surface water, nor the quantity or quality of groundwater recharge.

Policy 1.13.5: ***Natural Flow of Wetlands.*** Within the Green Swamp ACSC, the natural flow of wetland systems shall be maintained by the use of upland buffers, the City complying with the conditions of its consumptive use permits regarding limitations on groundwater withdrawals, and controls on stormwater runoff.

Policy 1.13.6: ***Threatened and Endangered Species.*** A study for threatened and endangered species of special concern is required for all proposed development exceeding 50 acres within the Green Swamp ACSC. If it is determined that listed species are located on the site, a habitat management plan must be prepared using the guidelines and protocols of the Florida Fish and Wildlife Conservation Commission (FFWCC). This plan must be reviewed by FFWCC prior to the issuance of a development order by the City.

Policy 1.13.7: ***Inventory of Vegetative Communities.*** An inventory of the type and extent of all-natural upland vegetative communities is required for all proposed development sites exceeding 50 acres within the Green Swamp ACSC, utilizing the Florida Land Use and Cover Classification System to identify vegetative types. This will include an inventory of identified important wildlife corridors. Identified onsite natural upland habitat shall be incorporated into the 60% open space requirement to the greatest extent possible, taking into account site characteristics and other natural features within the site. Important wildlife corridors and links between ecosystems should also be incorporated into the open space requirement.

Policy 1.13.8: ***Exotic and Nuisance Plants.*** No exotic or nuisance plant species shall be used in landscaping within the Green Swamp ACSC.

Policy 1.13.9: ***Post and Pre Development Recharge.*** Projects located within the Green Swamp ACSC and within the Most Effective Recharge Areas must retain three inches of runoff from directly connected impervious areas within the project. Applicants may instead demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge. Most Effective Recharge Areas are those areas with soils classified by the Soil Conservation Service as Type "A" Hydrologic Soil Group. Directly connected impervious areas are those impervious areas which are connected to the surface water management system by a

drainage improvement such as a ditch, storm sewer, paved channel, or other man-made conveyance. Stormwater that is retained must be infiltrated into the soil or evaporated such that the storage volume is recovered within 14 days following a storm event.

Policy 1.13.10: ***Floodplain Study.*** Within the Green Swamp ACSC, a detailed flood insurance study shall be performed for all subdivision proposals and other proposed development which have five (5) acres or more in the 100-year floodplain. The construction of a single-family residence on a parcel of land containing five (5) or more acres which is not part of a subdivision or which is part of a subdivision in existence on the effective date of this plan amendment is exempt from this requirement. Phases of a larger development, if the larger development meets the five (5) acre criterion, are not exempt from this requirement. If existing subdivisions are proposed for replatting, the replatted portion shall be required to comply with this requirement if the replatted portion meets the five (5) acre criterion. Subdivisions which contain 10 lots or less shall be exempt from these requirements. The study shall be performed in accordance with the Flood Insurance Study Guidelines and Specifications for Flood Contractors.

POLICY 1.13.11: ***Development Conflict in the Green Swamp ACSC.*** When a conflict arises regarding development criteria within the Green Swamp ACSC, the more restrictive policy will be followed.

OBJECTIVE 1.14: ***Intergovernmental Coordination Activities for the Conservation of Natural Resources.*** Manage natural resources and conservation issues transcending the City's jurisdictional area or constituting an issue of regional nature through intergovernmental coordination.

Policy 1.14.1: ***Intergovernmental Coordination.*** The City shall coordinate with neighboring municipalities and Federal, State, and Lake County agencies to manage natural resources and conservation activities and identify and regulate wetland areas, floodplains, environmentally sensitive lands, conservation areas, and unique native habitats in Groveland. Such management activities shall engage, but not be limited to:

- participation in technical review activities;
- ensuring public facilities are readily available to serve proposed developments; or

- attending public meetings regarding environmental issues that will have a direct or adverse impact to the City.

Policy 1.14.2: ***Resolving Conservation Concerns.*** The City shall coordinate with the Florida Department of Environmental Protection, the St. Johns River Water Management District, the Florida Fish and Wildlife Conservation Commission, and other appropriate agencies as deemed necessary to resolve conservation concerns which presently exist or which may emerge.

OBJECTIVE 1.15: ***Reducing Energy Requirements.*** Enhancing conservation and efficiency measures to reduce energy requirements shall be practiced. [9J-5.013(2)(b)(5), F.A.C.]

Policy 1.15.1: ***Energy Conservation Measures.*** The City shall conduct energy audits, monitor energy use, and implement cost-effective energy conservation measures in all public buildings. [Chapter 163.3177(6)(d), F.S.]

Policy 1.15.2: ***Promote the Use of Energy Saving.*** The City shall continue to reduce levels of all air-conditioning, heating and lighting systems during non-business hours, and promote the use of energy saving features in all government buildings. [Chapter 163.3177(6)(d), F.S.]

Policy 1.15.3: ***Energy Efficient Construction and Operation.*** Local codes and ordinances shall be reviewed and revised by December 2020 so as to not handicap implementation of energy efficient construction and operation. [Chapter 163.3177(6)(d), F.S.]

Policy 1.15.4 Photovoltaic solar panels shall be included as a part of the energy supply for all new City structures and retrofitted onto existing City structures as financially feasible.

OBJECTIVE 1.16: ***Redefining Open Spaces.*** To redefine and provide a more specific definition of open spaces and ensure that adequate uplands are preserved for the residents and guests of Groveland to enjoy.

Policy 1.16.1: ***Definition of Open Space.*** The City hereby adopts the following definition for open spaces:

Open Space: Open space is figured on the Gross Land Area. Up to 50% of the open space requirement may be met with wetlands, except in the Green Swamp Area of Critical State Concern where 100% of the open space requirement may be met with wetlands.

Open space may include landscaped buffers and stormwater facilities if they are designed to be a park-like setting with pedestrian amenities and free form ponds. Open space may be passive or active. Open space may include public recreational components of developments. The majority of the open space shall be permeable; however, up to 10% may be impervious (plazas, recreational facilities, etc.). Wet ponds are not counted as part of that 10 percent.

Densities would be determined by the Net Land Area. The Net Land Area is figured by taking the Gross Land Area (total property) less any lakes, wetlands, or water bodies,.

POLICY 1.16.2: ***Purchasing Environmentally Sensitive Lands and Uplands.*** To ensure adequate uplands are preserved for the public to enjoy, the City shall acquire additional open space by purchasing environmentally sensitive lands and lands adjacent to uplands as practical and feasible.

Attachment 2

Ron DeSantis
GOVERNOR

FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY

Meredith Ivey
ACTING SECRETARY

May 12, 2023

The Honorable Evelyn Wilson
Mayor, City of Groveland
Board of County Commissioners
243 South Lake Avenue
Groveland, Florida 34736

Dear Mayor Evelyn Wilson:

The Department of Economic Opportunity ("Department") has completed its review of the proposed comprehensive plan amendment for Groveland (Amendment No. 23-01ACSC), which was received and determined complete on March 14, 2023. We have reviewed the proposed amendment in accordance with the state coordinated review process set forth in Sections 163.3184(2) and (4), Florida Statutes (F.S.), for compliance with Chapter 163, Part II, F.S. The Department does not identify any objections or comments to the proposed amendment and this letter serves as the Objections, Recommendations and Comments Report. Review comments received by the Department from the appropriate reviewing agencies, if any, are enclosed.

The City should act by choosing to adopt, adopt with changes, or not adopt the proposed amendment. For your assistance, we have enclosed the procedures for final adoption and transmittal of the comprehensive plan amendment. **The second public hearing,** which shall be a hearing on whether to adopt one or more comprehensive plan amendments, **must be held within 180 days** of your receipt of the Department's attached report, or the amendment will be deemed withdrawn unless extended by agreement with notice to the Department and any affected party that provided comment on the amendment pursuant to Section 163.3184(4)(e)1., F.S.

If you have any questions related to this review, please contact Adrian Young, Planning Analyst, by telephone at (850) 717-8515 or by email at adrian.young@deo.myflorida.com.

Sincerely,

James D. Stansbury, Chief
Bureau of Community Planning and Growth

BP/ay
Enclosure: Procedures for Adoption
Agency Comments

cc: T.J. Fish, Transportation & Public Work Director, Groveland
Tara McCue, East Central Florida Regional Planning Council, Executive Director

SUBMITTAL OF ADOPTED COMPREHENSIVE PLAN AMENDMENTS

FOR STATE COORDINATED REVIEW

Section 163.3184(4), Florida Statutes

NUMBER OF COPIES TO BE SUBMITTED: Please submit electronically using the Department's electronic amendment submittal portal "**Comprehensive Plan and Amendment Upload**" (*https://floridajobs.secure.force.com/cp/*) **or** submit three complete copies of all comprehensive plan materials, of which one complete paper copy and two complete electronic copies on CD ROM in Portable Document Format (PDF) to the State Land Planning Agency and one copy to each entity below that provided timely comments to the local government: the appropriate Regional Planning Council; Water Management District; Department of Transportation; Department of Environmental Protection; Department of State; the appropriate county (municipal amendments only); the Florida Fish and Wildlife Conservation Commission and the Department of Agriculture and Consumer Services (county plan amendments only); and the Department of Education (amendments relating to public schools); and for certain local governments, the appropriate military installation and any other local government or governmental agency that has filed a written request.

SUBMITTAL LETTER: Please include the following information in the cover letter transmitting the adopted amendment:

_____ Department of Economic Opportunity identification number for adopted amendment package;

_____ Summary description of the adoption package, including any amendments proposed but not adopted;

_____ Ordinance number and adoption date;

_____ Certification that the adopted amendment(s) has been submitted to all parties that provided timely comments to the local government;

_____ Name, title, address, telephone, FAX number and e-mail address of local government contact;

_____ Letter signed by the chief elected official or the person designated by the local government.

ADOPTION AMENDMENT PACKAGE: Please include the following information in the amendment package:

_____ In the case of text amendments, changes should be shown in strike-through/underline format;

_____ In the case of future land use map amendment, an adopted future land use map, **in color format,** clearly depicting the parcel, its existing future land use designation, and its adopted designation;

_____ A copy of any data and analyses the local government deems appropriate.

Note: If the local government is relying on previously submitted data and analysis, no additional data and analysis is required;

_____ Copy of executed ordinance adopting the comprehensive plan amendment(s);

Suggested effective date language for the adoption ordinance for state coordinated review:

> "The effective date of this plan amendment, if the amendment is not timely challenged, shall be the date the state land planning agency posts a notice of intent determining that this amendment is in compliance. If the amendment is timely challenged, or if the state land planning agency issues a notice of intent determining that this amendment is not in compliance, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order determining this adopted amendment to be in compliance."

_____ List of additional changes made in the adopted amendment that the Department of Economic Opportunity did not previously review;

_____ List of findings of the local governing body, if any, that were not included in the ordinance and which provided the basis of the adoption or determination not to adopt the proposed amendment;

_____ Statement indicating the relationship of the additional changes not previously reviewed by the Department of Economic Opportunity to the ORC report from the Department of Economic Opportunity.

From: Steve Fitzgibbons
To: Stansbury, James; DCPexternalagencycomments
Cc: TJ.Fish@groveland-fl.gov
Subject: [EXTERNAL] - City of Groveland proposed comprehensive plan amendment 23-01ACSC (ORD 2023-09)
Date: Friday, April 07, 2023 3:51:46 PM
Attachments: image001.png

Dear Mr. Stansbury,

St. Johns River Water Management District (District) staff have reviewed City of Groveland proposed comprehensive plan amendment 23-01ACSC (ORD 2023-09) in accordance with the provisions of Chapter 163, Florida Statutes. Based on review of the submitted materials, District staff have no comments on the proposed amendment. If you have any questions or need additional information, please contact me.

Please note that all proposed and adopted comprehensive plan amendments can be submitted to the District by email at sfitzgibbons@sjrwmd.com.

Sincerely,
Steve Fitzgibbons

Steven Fitzgibbons, AICP
Intergovernmental Planner
St. Johns River Water Management District
7775 Baymeadows Way, Suite 102
Jacksonville, FL 32256
Office (386) 312-2369
Email: sfitzgib@sjrwmd.com
Website: www.sjrwmd.com
Connect with us: Newsletter, Facebook, Twitter, Instagram, YouTube, Pinterest

www.sjrwmd.com/ePermit

We value your opinion. Please take a few minutes to share your comments on the service you received from the District by clicking this link

From:	Plan Review
To:	Powell, Barbara; DCPexternalagencycomments
Cc:	Plan Review
Subject:	[EXTERNAL] - Groveland 23-01ACSC Proposed
Date:	Wednesday, April 12, 2023 4:52:08 PM
Attachments:	image002.png

To: Barbara Powell, Deputy Bureau Chief, Plan Review and Processing

Re: Groveland 23-01ACSC – State Coordinated Review of Proposed Comprehensive Plan Amendment

The Office of Intergovernmental Programs of the Florida Department of Environmental Protection (Department) has reviewed the above-referenced amendment package under the provisions of Chapter 163, Florida Statutes. The Department conducted a detailed review that focused on potential adverse impacts to important state resources and facilities, specifically: air and water pollution; wetlands and other surface waters of the state; federal and state-owned lands and interest in lands, including state parks, greenways and trails, conservation easements; solid waste; and water and wastewater treatment.

Based on our review of the submitted amendment package, the Department has found no provision that, if adopted, would result in adverse impacts to important state resources subject to the Department's jurisdiction.

Please submit all future amendments by email to Plan.Review@FloridaDEP.gov. If your submittal is too large to send via email or if you need other assistance, contact Lindsay Weaver at (850) 717-9037.

Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 S. Woodland Boulevard
DeLand, Florida 32720

JARED W. PERDUE, P.E.
SECRETARY

March 24th, 2023

T.J. Fish
Transportation & Public Works Director
City of Groveland Public Works Department
156 South Lake Avenue, Groveland, FL 34736

Subject: City of Groveland 23-01ESR
Response Type: ***No Comments***

Dear Mr. Fish,

Pursuant to Section 163.3184(3), Florida Statutes (F.S.), in its role as a reviewing agency as identified in Section 163.3184(1)(c), F.S., the Florida Department of Transportation (FDOT) reviewed the amendment of City of Groveland's Proposed 23-01ESR, as requested in your transmittal letter, dated March 14th, 2023.

This comprehensive plan amendment (Ordinance 2023-09) proposes text revisions to the Future Land Use Element, Public Facilities Element, and Conservation Element. The amendment package proposes updated policies under goals of the Future Land Use Element. The purpose of these policy revisions is to update existing text to be consistent with updated policies from the Florida Department of Environmental Protection in relation to its regulations on wellhead sites. Existing policies in the Comprehensive Plan are considered outdated, resulting in these amendments.

Result:
FDOT has determined the proposed Future Land Use Element amendments have no significant adverse impacts to transportation resources or facilities of state importance. Please transmit a copy of the amendment, along with the supporting data and analysis, to the District upon its adoption. Thank you for coordinating the review of this proposed amendment with FDOT. If you have any questions, you may contact me at 386-943-5457 or by email at james.rodriguez@dot.state.fl.us.

Sincerely,

James Rodriguez
Systems Planning Coordinator

cc: *Emily Johnson, Lake County*
Tara McCue, ECFRPC
D. Ray Eubanks, DEO
Barbara Powell, DEO
Melissa McKinney, FDOT
Tiffany Hill, FDOT
Ben Naselius, FDOT

Attachment 3

LOCALiQ
FLORIDA

Order Confirmation

Not an Invoice

Account Number:	526520
Customer Name:	City Of Groveland
Customer Address:	City Of Groveland 156 S Lake AVE Alecia cecere-powers Groveland FL 34736-2538
Contact Name:	April Allman
Contact Phone:	
Contact Email:	April.Allman@groveland-fl.gov
PO Number:	

Date:	02/20/2023
Order Number:	8479344
Prepayment Amount:	$ 0.00

Column Count:	1.0000
Line Count:	92.0000
Height in Inches:	0.0000

Print

Product	#Insertions	Start - End	Category
LEE Daily Commercial	1	02/22/2023 - 02/22/2023	Govt Public Notices
LEE dailycommercial.com	1	02/22/2023 - 02/22/2023	Govt Public Notices

Total Order Confirmation	**$155.36**

Ad Preview

NOTICE OF PUBLIC HEARING

The City of Groveland proposes to adopt Ordinance 2023-9. The Planning & Zoning Board will hold a public hearing at the E. L. Puryear Building located at 243 S. Lake Avenue, Groveland, Florida on Thursday, March 2, 2023. The Planning & Zoning Board public hearing begins at 3:00 p.m. or as soon thereafter as possible. The City Council will hold a public hearing at the E.L. Puryear Building located at 243 S. Lake Avenue, Groveland, Florida on Monday March 20, 2023 and Monday, April 3, 2023. The City Council public hearings begin at 7:00 p.m. or as soon thereafter as possible. The title of the ordinance is as follows:

ORDINANCE 2023-9

AN ORDINANCE OF THE CITY OF GROVELAND, FLORIDA, AMENDING THE CITY OF GROVELAND'S COMPREHENSIVE PLAN TO INCLUDE WITHIN THE CITY'S FUTURE LAND USE ELEMENT, PUBLIC FACILITIES ELEMENT, AND CONSERVATION ELEMENT, ADDITIONAL PROTECTIONS TO THE CURRENT AND FUTURE WATER SUPPLY BY FURTHER PROHIBITING USES WITHIN VARIOUS DISTANCES FROM A POTABLE WATER WELL, ALSO REFERRED TO AS A WELLFIELD PROTECTION ZONE WHICH ELEMENTS APPLY CITY WIDE, INCLUDING IN THE GREEN SWAMP, AN AREA OF CRITICAL STATE CONCERN DESIGNATED PURSUANT TO S. 380.05, FLORIDA STATUTES; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CITY OF GROVELAND COMPREHENSIVE PLAN; AND PROVIDING FOR APPROVAL AND AN EFFECTIVE DATE.

You may appear at the Planning and Zoning Board and City Council public meetings and be heard with respect to the proposed Ordinance. Persons with disabilities needing assistance to participate in this proceeding should contact the City Clerk at least 48 hours before the meetings at 352-429-2141 ext. 2014.

The Ordinance is available at the Community Development Department located in the Public Safety Complex at 6825 State Road 50, Groveland, Florida, for inspection on Monday through Friday, from 8:00 a.m. to 5:00 p.m.

Persons are advised that if they decide to appeal any decision made at this meeting, they will need a record of the proceeding, and for such purposes, they may need to ensure that a verbatim record of the proceeding is made which includes the testimony and evidence upon which the appeal is based, per Section 286.0105, Florida Statutes.

If you have any questions in advance of the scheduled public hearings, please contact the Community Development Department at 352-534-1751 or planning@groveland-fl.gov.
2/22/2023

LOCALiQ
FLORIDA

Order Confirmation

Not an Invoice

Account Number:	526520
Customer Name:	City Of Groveland
Customer Address:	City Of Groveland 156 S Lake AVE Alecia cecere-powers Groveland FL 34736-2538
Contact Name:	April Allman
Contact Phone:	
Contact Email:	April.Allman@groveland-fl.gov
PO Number:	

Date:	02/24/2023
Order Number:	8502265
Prepayment Amount:	$ 0.00

Column Count:	1.0000
Line Count:	72.0000
Height in Inches:	0.0000

Print

Product	#Insertions	Start - End	Category
LEE Daily Commercial	1	02/28/2023 - 02/28/2023	Govt Public Notices
LEE dailycommercial.com	1	02/28/2023 - 02/28/2023	Govt Public Notices

Total Order Confirmation	**$123.76**

Ad Preview

NOTICE OF PUBLIC HEARING

The City of Groveland proposes to adopt Ordinance 2023-09. The City Council will hold a public hearing to adopt Ordinance 2023-09 by First Reading on Monday, March 6, 2023, in the E.L. Puryear Building located at 243 S. Lake Avenue, Groveland, Florida, at 7:00 p.m. or as soon thereafter. The title of the ordinance is as follows:

ORDINANCE 2023-9

AN ORDINANCE OF THE CITY OF GROVELAND, FLORIDA, AMENDING THE CITY OF GROVELAND'S COMPREHENSIVE PLAN TO INCLUDE WITHIN THE CITY'S FUTURE LAND USE ELEMENT, PUBLIC FACILITIES ELEMENT, AND CONSERVATION ELEMENT, ADDITIONAL PROTECTIONS TO THE CURRENT AND FUTURE WATER SUPPLY BY FURTHER PROHIBITING USES WITHIN VARIOUS DISTANCES FROM A POTABLE WATER WELL, ALSO REFERRED TO AS A WELLFIELD PROTECTION ZONE WHICH ELEMENTS APPLY CITY WIDE, INCLUDING IN THE GREEN SWAMP, AN AREA OF CRITICAL STATE CONCERN DESIGNATED PURSUANT TO S. 380.05, FLORIDA STATUTES; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CITY OF GROVELAND COMPREHENSIVE PLAN; AND PROVIDING FOR APPROVAL AND AN EFFECTIVE DATE.

You may appear at the City Council public meetings and be heard with respect to the proposed ordinance. Persons with disabilities needing assistance to participate in this proceeding should contact the City Clerk at least 48 hours before the meetings at (352)730-9285.

The ordinance is available at the City Clerk's office, Monday through Friday, from 8:00 a.m. to 5:00 p.m. at (352)730-9285 or via email at virginia.wright@groveland-fl.gov.

Persons are advised that if they decide to appeal any decision made at this meeting, they will need a record of the proceeding, and for such purposes, they may need to ensure that a verbatim record of the proceeding is made, which includes the testimony and evidence upon which the appeal is based, per Section 286.0105, Florida Statutes.

If you have any questions in advance of the scheduled public hearings, please contact the Public Works Department at (352)737-3262 or Paola.Vasquez@groveland-fl.gov.

#8502265 2/28/2023

Groveland
FLORIDA
City with Natural Charm

CONSENT AGENDA

MEMORANDUM

TO: HONORABLE MAYOR AND CITY COUNCIL MEMBERS

VIA: MIKE HEIN, CITY MANAGER

FROM: TERRY ECKERT, BUILDING DIVISION MANAGER

SUBJECT: CONSIDERATION OF APPROVAL: ORDINANCE 2023-23
LOCAL ADMINISTRATIVE AMENDMENTS TO FLORIDA BUILDING CODE
(SECOND READING)

DATE: JUNE 5, 2023

GENERAL SUMMARY/BACKGROUND:
Staff requests Council approval of proposed local amendments to the Florida Building Code requiring Plans Review, Inspections and Approval relating to Irrigation and Landscaping for Water Conservation purposes, as well as for Right-of-Way and Engineering.

BUDGET IMPACT:
The Ordinance will not have any Budget Impact.

LEGAL NOTICE:
N/A

STAFF RECOMMENDATION:
Approval of Ordinance 2023-23

ATTACHMENTS:
1. Ordinance 2023-23
2. Daily Commercial Advertisement