TOWN OF EATONVILLE

2018 COMPREHENSIVE PLAN AMENDMENT: DATA INVENTORY AND ANALYSIS BASED ON EVALUATION AND APPRAISAL REPORT

Prepared for:

Town of Eatonville

Prepared by

Solin and Associates, Inc.

FOR REVIEW BY THE EATONVILLE PLANNING BOARD
Followed by Consideration of the
Eatonville Town Council
2018

TABLE OF CONTENTS
2018 COMPREHENSIVE PLAN SUPPORTIVE DATA INVENTORY AND ANALYSIS
BASED ON EVALUATION AND APPRAISAL REPORT
TOWN OF EATONVILLE

DATA INVENTORY AND ANALYSIS ELEMENT

page

LIST OF MAPS

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

The 2018 Comprehensive Plan update implements the Evaluation and Appraisal Report filed with the Department of Economic Opportunity, Division of Community Planning. The 2018 Comprehensive Plan Data Inventory and Analysis lays the groundwork for updating the 2012 Comprehensive Plan. It has been developed over the past five years as the Town has updated the land use data base, assessed infrastructure and capital improvement needs as coordinated strategies for improving planning objectives and policies that have guided the Town's economic development, service delivery systems and quality of life. All the while Eatonville residents have celebrated the Town's heritage as the "Oldest Black Incorporated Municipality in America" and have sought to sustain a deep commitment to cultural enrichment and Eatonville's rich African-American heritage so eloquently characterized by Eatonville's Zora Neale Huston. Eatonville helps us understand our Nation's history through the lenses of black heritage, community planning and development, and the person of Zora Neale Hurston. Map I-1 illustrates the general location and municipal boundaries of the Town of Eatonville within Orange County, Florida. The following section presents an inventory and analysis of land use data for the Town of Eatonville.

Historical Perspective

(From supportive documents included in the Town's Historic District Nomination to the National Register of Historic Places)

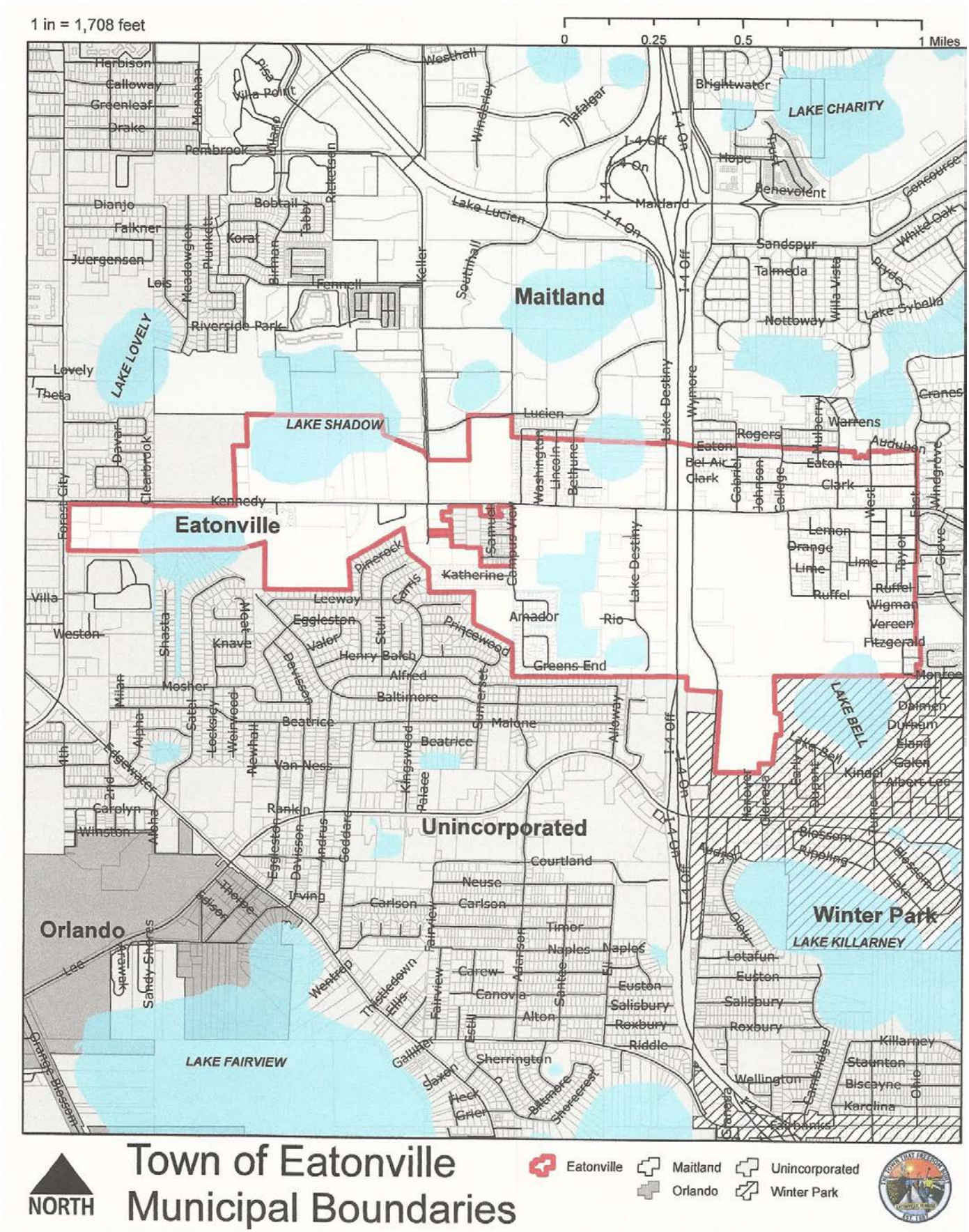
On August 18, 1887, twenty-seven registered voters met in the public hall of the Town of Eatonville in Orange County, Florida to vote on whether their community should be incorporated. The twenty-seven men, all residents of the area within the proposed Town's boundaries, had gathered in response to a legal notice advertised for thirty days previously in the Maitland Courier, a newspaper published in the neighboring Town of Maitland. Their meeting was historically significant because all 27 men were Negroes and the municipality which they unanimously voted to incorporate that day was the first and oldest Black community in the United States. This Black community was an outgrowth of the white municipality of Maitland which had been incorporated three years earlier in 1884. Josiah Eaton, who had helped establish Maitland, offered to sell the Blacks a rather large parcel of land south of Lake Sybelia. The land was bought by Joseph Clarke, who would be the first Mayor of Eatonville. Clarke in turn sold the land within the bounds of Eatonville (which was named after Josiah Eaton) to any Blacks who wished to settle there. It appears that Florida, and the City of Maitland area, unlike other southern states after the Civil War, took a more moderate attitude toward the Blacks who had finally been given equal rights under the 13th and 14th amendments. Against this background, it is not surprising that the population of Eatonville continued to increase throughout the late 1800's and early 1900's.

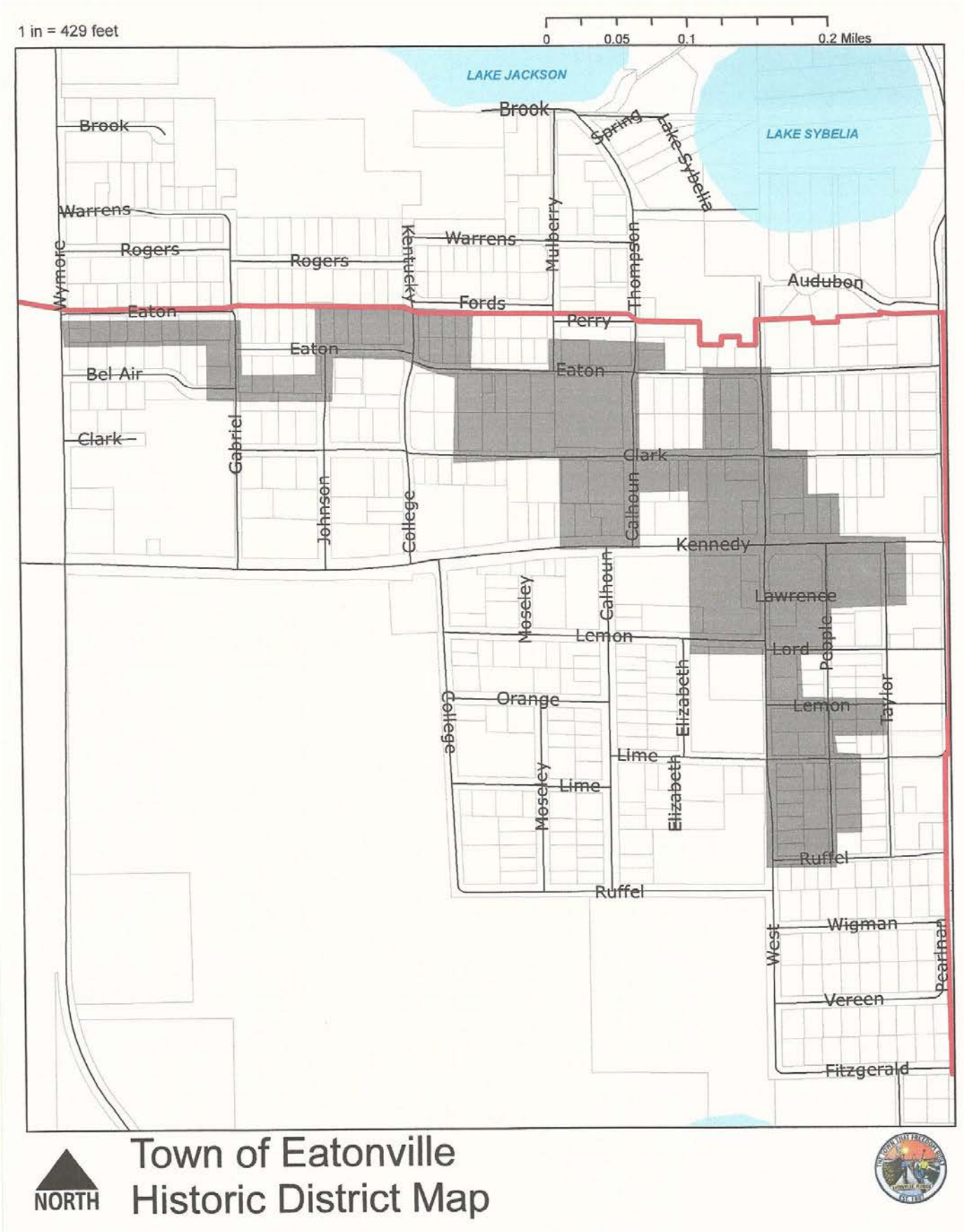
In 1990 the historic buildings of Eatonville were evaluated in terms of age, integrity, and significance by Tina Bucuvalas, Alice Grant, and Carl Shiver, who composed the *National Register List of Historic Places* Nomination. Its cultural and historic area has significant potential to showcase neo-traditional development since many of the principles of were implemented during the late 1800's. For instance, the Town exhibits a grid street pattern which first took form in the approximately 112 acres of land, including three of the Town's originally platted lands -- L. Lawrence's Eatonville Subdivision (c. 1886), Clark's Addition Subdivision (c. 1886), and Holden Brothers Subdivision (c. 1886) -- that were included in the Town's 1887 original incorporation. The subdivisions formed the basis for the Town's grid street pattern -- a primary element of today's "neo-traditional" neighborhood development pattern that has been experiencing a major resurgence nationally for the past three decades. The Town's early planning was a major factor in the federal Department of Interior's decision to place the Eatonville Historic District on the *National Register's List of Historic Places* in 1997.The Future Land Use Element Map of the Historic District as entered in the *National List of Historic Places* in 1997 is on the next page.

The Town of Eatonville is the home of Zora Neale Hurston, a nationally recognized author and folklorist, who described the early life, culture and environment of Eatonville in her writings. Ely Fly documents that:

> *"Zora Neale Hurston's life and literary work was most influenced by Eatonville as it was between 1900 and 1940. The significant coincidence is this was also the period when the town's heritage solidified and gained importance. Most other Black towns began a fatal decline in these decades. But Eatonville maintained itself and insured a place in history."* [Ely Fly Associates, Inc., from "Historical & Architectural & Archaeological Site Survey for the Town of Eatonville, Orange County, Florida, June 26, 1990, page 7].

> *"Many of the places and landscapes in Huston's books still exist in Eatonville. Her family played significant roles in governing and ministering to the community. Mrs. Hurston was a graduate of the Robert Hungerford Normal and Industrial School in Eatonville* [Ely Fly Associates, Inc., from "Eatonville, Florida Historic Resources Outline," May 10, 1993].


1 in = 1,708 feet
0
0.25
0.5
1 Miles
Maitland
Eatonville
Unincorporated
Orlando
Winter Park
LAKE CHARITY
LAKE LOVELY
LAKE SHADOW
LAKE FAIRVIEW
LAKE BELL
LAKE KILLARNEY
Lake Lucien
Riverside Park
Greens End
Town of Eatonville
Municipal Boundaries
NORTH
Eatonville
Maitland
Unincorporated
Orlando
Winter Park


1 in = 429 feet
0
0.05
0.1
0.2 Miles
LAKE JACKSON
LAKE SYBELIA
Brook
Brook
Spring
Lake Sybelia
Warrens
Rogers
Rogers
Kentucky
Warrens
Mulberry
Thompson
Audubon
Wymore
Eaton
Fords
Perry
Eaton
Eaton
Bel Air
Clark
Gabriel
Johnson
College
Clark
Calhoun
Kennedy
Moseley
Calhoun
Lemon
Lawrence
Lord
People
Taylor
Orange
College
Elizabeth
Lemon
Lime
Moseley
Lime
Elizabeth
Ruffel
Ruffel
West
Wigman
Pearlman
Vereen
Fitzgerald
NORTH
Town of Eatonville
Historic District Map

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Eatonville's 2016 population based on the University of Florida Bureau of Economic and Business Research US Census estimate is approximately 2,251 people based on the University of Florida Bureau of Economic and Business Research 2016 Florida Population Report. The Town is bounded on the north and east by the City of Maitland. The dominant land use is predominantly single family residential development to the east and northeast. To the south, east of Lake Wilderness and I-4, the Town abuts the City of Winter Park where the development pattern is primarily single-family residential development. To the south, west of Lake Wilderness and I-4, Eatonville borders unincorporated Orange County where development is commercial west of I-4 and south of the Town's Interstate Industrial Park. On the west Eatonville abuts unincorporated Orange County and development in to the west is predominantly commercial. East and West Kennedy Boulevard comprise the major east-west spine of the Town of Eatonville and connects U.S. 17-92 to the east, U.S. 441 to the west and Interstate-4 which bisects the Town of Eatonville. The I-4 corridor connects the Town of Eatonville with the east and west coast of Central Florida. These transportation facilities provide the Town of Eatonville with excellent access and connects the Town with major regional markets for goods, services and other major thoroughfares connecting the Town with major southeast destinations.

EXISTING LAND USE DATA REQUIREMENTS

This section includes a map series illustrating the existing land use and natural systems characterizing the Town of Eatonville. In addition, a description of land use acreage and relative density and intensity of development within the Town is provided. Population projections are also presented in this section.

Land Use and Conservation Resources Map Series. The following maps denote 2016 land use within the Town of Eatonville. Collectively, the following maps comprise the required land use element map series. The Town has no identifiable commercially valuable minerals except soil and water. Town ordinances provide regulation of soil erosion. A more in-depth discussion of natural resources may be found in the Conservation Elements.

1. Map of Town's general location and municipal boundaries.
2. Map delineating the Town of Eatonville Historic District.
3. Town's future land use map, including recreation areas and conservation resources.
4. Map presenting an inventory of vacant lands five acres or greater in area.
5. Map delineating Town's soil types.
6. Map displaying the FEMA Flood Zones within Eatonville, including the 100-year floodplain.
7. Map of the Town's major streets.
8. Map of the Wekiva River Basin Study Area located within the Town of Eatonville.

Existing Land Use Inventory. Table I-1 presents a profile of existing land use within the Town of Eatonville. Major vacant lands greater than 5 acres are displayed on the "Major Undeveloped Sites Map. Projected future land uses of vacant lands also are presented in Table I-1 and on the Future Land Map. In regulating future land uses, the Town's land development regulations should include qualitative and quantitative performance standards and concurrency management criteria that integrate transportation systems and land use patterns to promote a pedestrian-friendly urban environment. These criteria and standards should ensure that the land use characteristics, including scale, density, intensity, building mass, traffic generating characteristics, and other infrastructure prerequisites are planned for in a manner consistent with the goals, objectives, and policies stated within the Town's comprehensive plan.

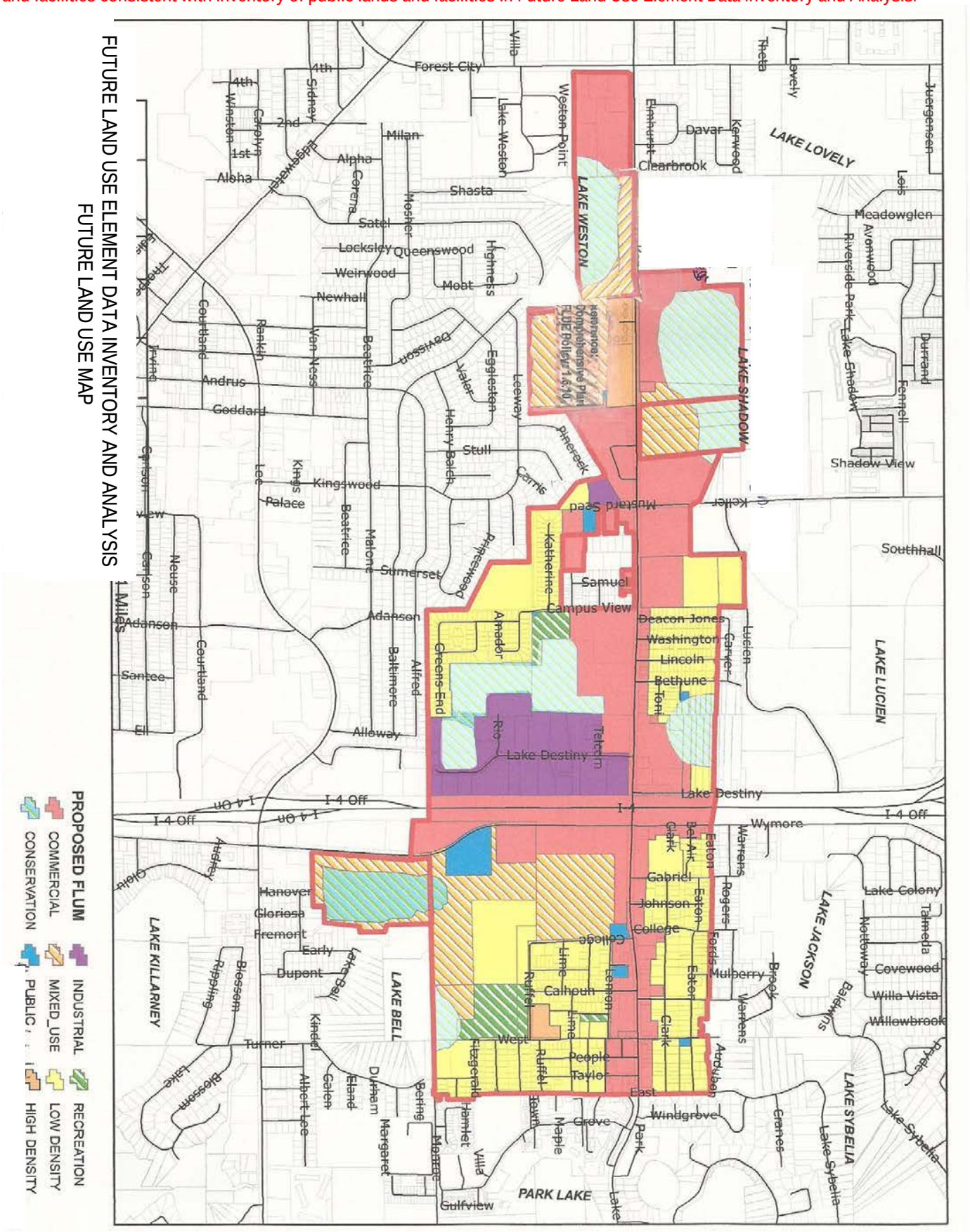
TABLE I-1: TOWN OF EATONVILLE EXISTING LAND USE PROFILE

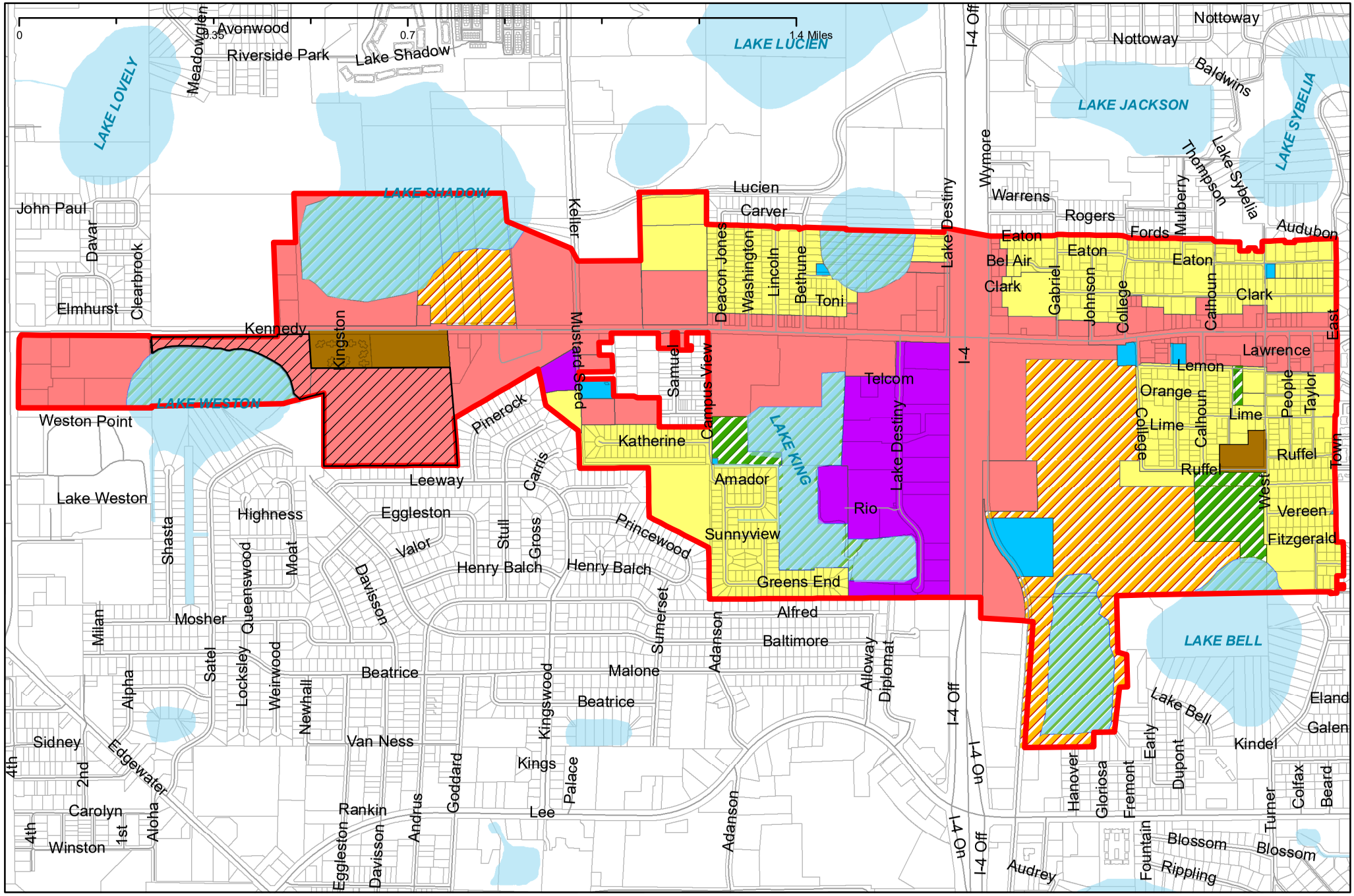
Land Use	Total Acres/Total Occupied Household Units		
Developed Land	Total Number: 471.69		Total Percent 67.00%
Residential	123.58		26.13%
Single Family	100.11 acres	Accommodates 674 Existing Occupied Household Units	NA
Multiple Family	23.47 acres		NA
Commercial	67.53		14.28%
Industrial	46.06		10.00%
Institutional	234.52 [incl. 150.71± ac. civic open space]		49.59%
Undeveloped Uplands	Total Number: 118.09		Total Percent: 16.77%
Undeveloped/Underdeveloped Single Family Lots	147 lots exist in platted S/Ds with no buildings		0.00%
Vacant Single Family Residential Unsubdivided	11.94 acres		8.03%
Undeveloped Commercial	50.19 acres		45.48%
Undeveloped Industrial	39.09 acres		35.43%
Lakes, Wetlands & Wasteland	Total Number: 114.22		Total Percent: 16.23%
Total Acres in Town of Eatonville	Total Number: 704.00		100.00%

Solin recommends correcting Lake Weston designation as shown in rough pasted condition. Also designate all Town owned land and facilities consistent with inventory of public lands and facilities in Future Land Use Element Data Inventory and Analysis.

FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

FUTURE LAND USE MAP





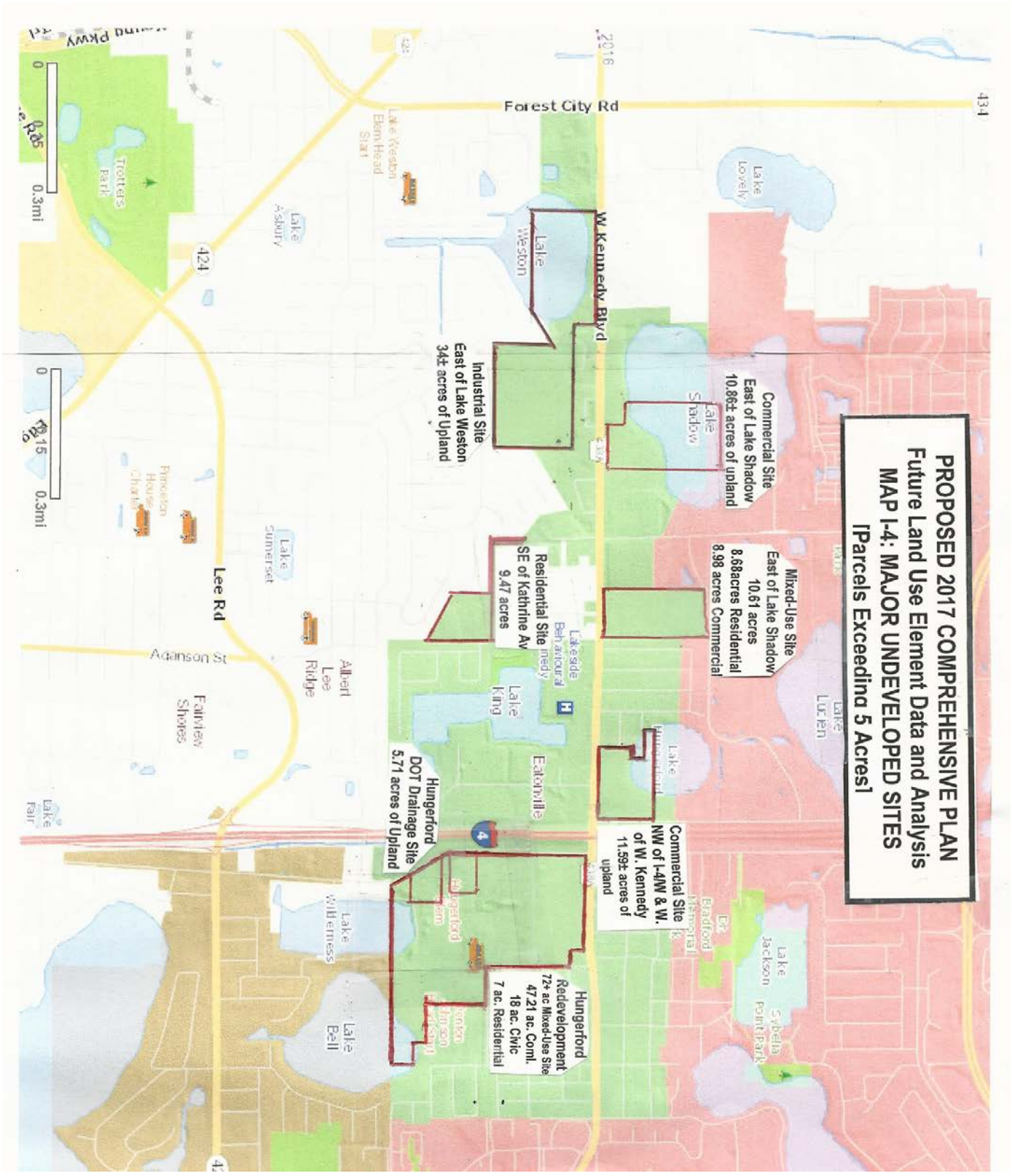
TOWN OF EATONVILLE
FUTURE LAND USE ELEMENT
Future Land Use Map Series:
PROPOSED FUTURE LAND USE MAP

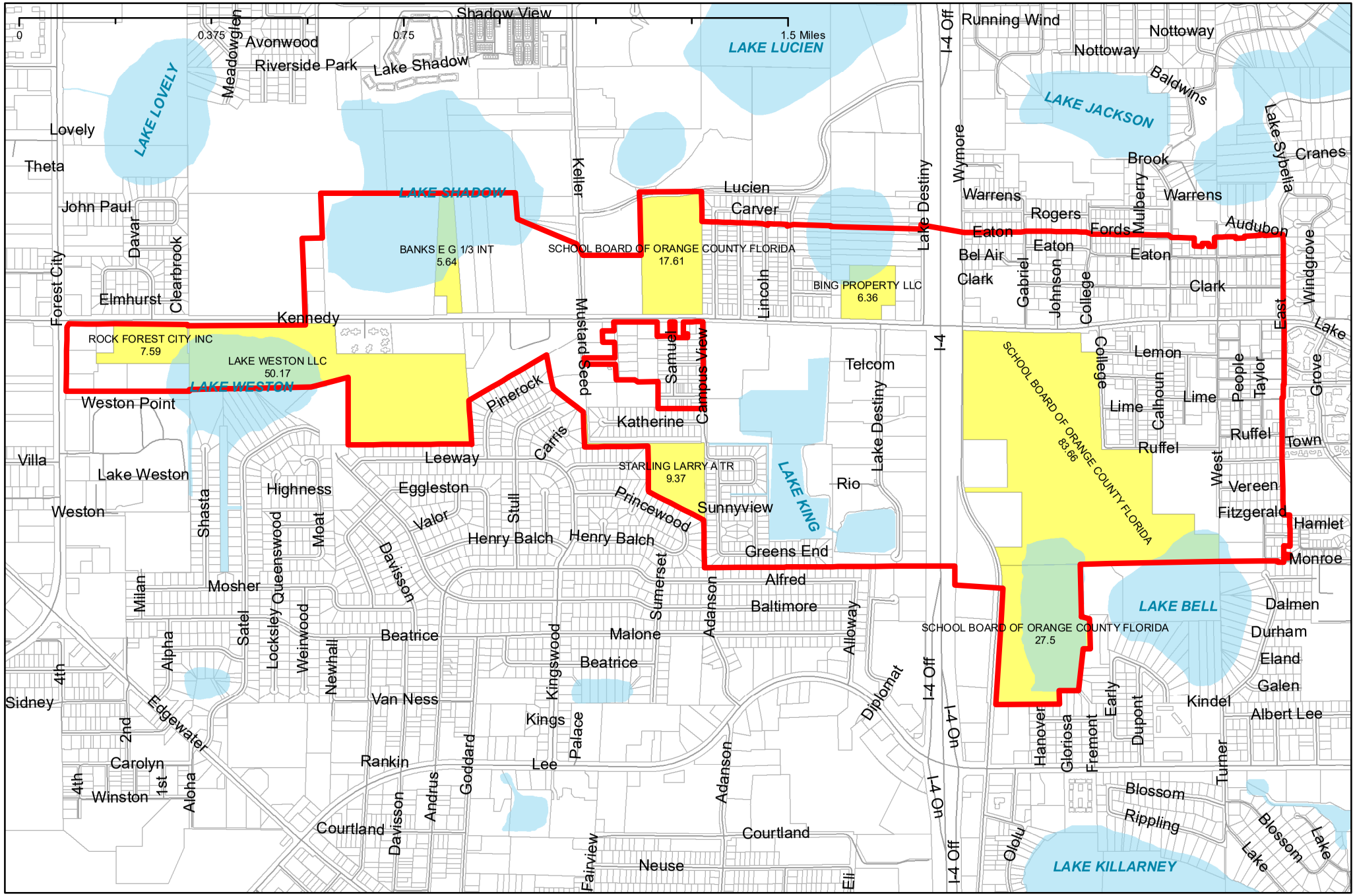
Future Land Use

- COMMERCIAL
- CONSERVATION
- INDUSTRIAL
- MIXED_USE
- PUBLIC
- RECREATION
- LOW DENSITY
- HIGH DENSITY
- LAKE WESTON POLICY

NORTH

1 in = 1,204 feet


PROPOSED 2017 COMPREHENSIVE PLAN
Future Land Use Element Data and Analysis
MAP I-4: MAJOR UNDEVELOPED SITES
[Parcels Exceeding 5 Acres]
Forest City Rd
W. Kennedy Blvd
Lee Rd
Adanson St
Commercial Site
East of Lake Shadow
10.86± acres of upland
Industrial Site
East of Lake Weston
34± acres of Upland
Residential Site
SE of Kathrine Av
9.47 acres
Mixed-Use Site
East of Lake Shadow
10.61 acres Residential
8.98 acres Commercial
Commercial Site
NW of I-4/W & W. Kennedy
11.59± acres of upland
Hungerford
Redevelopment
72+ ac Mixed-Use Site
47.21 ac. Comm.
18 ac. Civic
7 ac. Residential
Hungerford
DOT Drainage Site
5.71 acres of Upland
Lake Weston
Lake Lovely
Lake Shadow
Lake Lucien
Lake Jackson
Lake Asbury
Lake Summerset
Lake King
Lake Wilderness
Lake Bell
Lake Fair
Eatonville
Trotters Park
Cybella Point Park
Fairview Shores
Albert Lee Ridge
Princeton House Chateau
0 0.3mi
0 0.3mi



TOWN OF EATONVILLE
MAJOR UNDEVELOPED SITES
5+ ACRES

Undeveloped

Eatonville

Hydrology

Streets

Parcels

NORTH

1 in = 1,305 feet

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Definition of Existing Land Use Terms. This section defines the general land use types shown on Map 1-2, Existing Land Uses:

Residential Development. The 2010 US Census documented 811 single-family dwellings, including 674 occupied Household Units and 137 unoccupied household units, a vacancy rate of 16.9%.

Single Family Residential Development: Single-family residential development includes conventional single family housing units and accessory uses to single family units with a maximum density of 5 dwelling units per acre for R-1 zoned properties and 8 dwelling units per acre for R-2 zoned properties. Low density single family residences shall have a maximum height of 35 feet. The town has approximately 100.11 acres of existing single family platted residential lots.

Multi-Family Residential Development: Multiple family development includes residential condominiums, apartments and townhouses, and may include accessory uses. Such uses shall have a maximum density of 17 units per acre and a maximum height of 40 feet. The town has approximately 23.47 acres of existing multiple-family residential development.

Commercial Development. Commercial development typically includes business and professional offices, financial institutions, retail sales and services, personal services, health and fitness centers, medical clinics, restaurants and hotels and motels. Commercial development also includes trades and services such as automotive repair shops, tire sales, minor household appliance sales, furniture or mechanical repair not otherwise classified as industrial uses. Finally, commercial development also includes accessory uses. Table I-2 presents a profile of the Town's existing commercial development and provides an estimate of vacant commercial land. The vacant commercial land total includes a 17.61-acre site abutting the northside of W. Kennedy Boulevard that is owned by the Orange County School Board. The Town and the County School Board have executed a contract for the sale of the 10.61-acre site to the Town for redevelopment. Development of the 10.61-acre site is anticipated to include an 8.68±-acre commercial project fronting on a newly expanded W. Kennedy Boulevard--a major collector street improvement included in the Orange County capital improvement program scheduled for completion before 2020. The 8.93±north end of the forested site is planned for residential development. In addition, the town has two other large sites on W. Kennedy Boulevard that anticipated to develop following completion of the widening of W. Kennedy corridor, the major east-west gateway to regional markets. The sites are described in the analysis of undeveloped land and related tabular data.

TABLE I-2: TOWN OF EATONVILLE COMMERCIAL LAND USE PROFILE

Existing Commercial Land Uses	Acres
Retail Goods and Services	21.82
Business and Professional Offices	20.58
Commercial Trades and Related Services	19.45
Restaurants and Catering	2.88
Hotels	1.33
Miscellaneous	1.47
Total Existing Commercial Land Uses	67.53
Total Vacant Commercial Land	50.19
Total Existing and Vacant Commercial Land	117.72

The intensity of existing commercial development is presented below:

	Zoning District	Maximum Intensity
Commercial Development	Planned Commercial District (C-1)	Up to 40 feet
	Planned Office (C-2)	Up to 60 feet
	General Commercial (C-3)	Up to 48 feet

Mixed-Use: Mixed-Use development includes a mix of residential, commercial, and office land uses located on the same property as indicated on the Orange County Property Appraiser's mapped property files for incorporated and unincorporated Orange County. Although this designation appears on the Future Land Use Map, no mixed-use development currently exists on properties currently designated Mixed-Use southeast of Lake Shadow.

However, a contract for the sale of the 83.66-acre Hungerford Property currently owned by the Orange County School Board, has been executed with the Town of Eatonville. The site includes 72.65 acres of upland and 11.01 acres comprising a portion of lake property. The contract includes a phased schedule for the sale of the site for a mixed-use redevelopment. The site has a proposed Mixed-Use designation on the proposed 2018 Comprehensive Plan Future Land Use Map.

The Town has issued a Request for Proposals (RFP) for the sale and redevelopment of the 72.65-acres Hungerford uplands by a developer in partnership which the Town of Eatonville. The RFP envisions a Hungerford Mixed-Use Redevelopment that will serve as the southwest anchor of the Town Center. The proposed redevelopment is addressed herein under the topic "Proposed Hungerford Planned Mix-Use Redevelopment." Table I-3 states recommended mixed use density and intensity of the proposed Hungerford Mixed Use designation].

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

TABLE I-3: RECOMMENDED DENSITY AND INTENSITY FOR HUNGERFORD MIXED-USE DEVELOPMENT

RESIDENTIAL LAND USE	MINIMUM SITE SIZE	MAXIMUM DENSITY (Units/Acre)	MAXIMUM INTENSITY (Height in (feet)
Low Density Single Family Residential: Detached or Attached	The minimum lot size and dimension shall be negotiated during the preliminary subdivision plat and site plan approval process as part of the terms of a duly executed H-PRD development agreement.	5 u/a	35 feet
Medium Density Single Family Residential: Detached Dwellings/Attached Town Houses Zero Lot Line Home		8 u/a	35 feet
High Density Multi-Family Residential or Attached Single Family Town Homes		17 u/a	40 feet
NON-RESIDENTIAL LAND USES		Intensity (Height)	
E. Kennedy Commercial Retail		40 ft.	
Hungerford West Central Office [Are reconsiderations needed such as Commercial Retail and Office]		40 ft.	
Public/Semi Public		48 ft.	
Civic or Medical		48 ft.	
Wymore Office South	2 acres [Likely should be same as above]	110 ft. Potential bonus up to 115 ft.[1]	
Wymore Office Central [Are reconsiderations needed such as Commercial Retail and Office]	1 acre [Likely should be same as above]	40 ft. Potential bonus up to 70 ft.[1]	

[1] Bonus height may be permitted for building in the Wymore Office South and the Wymore Office Central Sector of the Hungerford-Planned Redevelopment Future Land Use Map Designated Area. The height shall be measured from the weighted average of approved finished ground elevation of the property to the peak of the roof. Through a negotiated Hungerford-Planned Redevelopment Development Agreement an increase in height may be negotiated to achieve an additional height up to 115 feet in the Wymore Office South Segment and up to 70 feet in the Wymore Office Central Segment as delineated on the zoning map if the applicant desires to negotiate an investment in storm water management, roadways, wastewater/potable water systems, mass transit system, fiber optics cable District system expansion to site, or other off-site or on-site community improvements within the Hungerford Planned Redevelopment District that is not a requirement pursuant to Town of Eatonville regulatory powers. The objective is for applicant and Town to achieve mutually proportionate benefits through terms of a negotiated Development Agreement through the development review process. The Town Council and the Applicant/Owner, and any successor in title, would be bound by the terms of a duly negotiated Development --. Solin Comment: The highlighted text in the above table will likely need to be revised since it is based on anticipated office development fronting Wymore Road previously approved by Council as part of the Hungerford Planned Redevelopment District.

Industrial Development. Light manufacturing, wholesale and warehousing, automobile dealers with full service automotive repair, repair requiring large sites for storage of vehicles. Table I-4 presents a profile of the Town's existing industrial development and provides an estimate of vacant commercial land. All such uses must comply with nuisance abatement standards of the Land Development Code and shall not include bulk storage of fuel or toxic or flammable chemicals.

TABLE I-4: TOWN OF EATONVILLE EXISTING INDUSTRIAL LAND USE PROFILE

Existing Industrial Land Uses	Acres	Industrial Vacant Land	Acres
12 Mustard Seed	2.39	E of Lake Weston	34.17
Tesla	2.57	Interstate Park W. Kennedy Entrance	2.87
Land Rover	3.37	PWJR LLC	0.81
Sprint	3.81	Orlando Executive Park Vacant Tract	1.24
T-Mobile	0.75	Total Vacant Industrial	39.09
Flooring Center	1.09		
PWJR	1.38		
Fields Motor Car Pkg for Mini Cooper	1.94		
Orlando Mini Cooper	2.40		
Level 3	2.53		
Verizon WorldCom Network Services	3.04		
LRA Ins.	1.76		
Deker Green Up: MESAR LLC	3.53		
Dietel Parking for Puff n Stuff Pkg	2.90		
Puff n Stuff	2.49		
Diocesan Publications	1.52		
Central FL Contract Industries	1.29		
Parker Marinemax	3.75		
Holding Company LLC Offices	0.94		
Ferrari of Central FL	1.09		
Millenia Fine Arts	0.97		
Freemont Properties LLC Pkg Lot	0.55		
Total Existing Industrial Acres	46.06		
TOTAL EXISTING AND VACANT INDUSTRIAL ACRES:			85.15

Source: Prepared by Solin and Associates, Inc. based on Orange Co. Property Appraiser website data, 2016

\Public Land and Private Institutional Land Use: Table I-5 provides a profile of Town owned public facilities as well as private institutional facilities, including estimated acreage for each type facility and also vacant land owned held by institutions.

TABLE I-5: TOWN OF EATONVILLE PROFILE OF EXISTING PUBLIC AND PRIVATE INSTITUTIONAL LAND USE

TOWN OF EATONVILLE PUBLIC LAND USE PROFILE		Acres
Eatonville Administrative Facilities and County Library:		
Eatonville Town Hall:	1.04 acres	3.03
Eatonville Police Department:	1.01 acres	
Eatonville Community Redevelopment Agency	0.06 acres	
Eatonville Community Post Office	0.06 acres	
Eatonville Branch Library of Orange County:	0.86 acres	
Eatonville Parks and Recreation Facilities:		
Denton Johnson Community Center & Boys and Girls Club:	11.16acres	17.99
Eatonville Recreation Center and Facilities:	1.58 acres	
Catalina Park:	4.72 acres	
Hungerford Lake Recreation Area:	0.53 acres	
Hungerford County School Board Property Buildings and Open Space:		
Hungerford School & Gymnasium/Multipurpose Civic Facility	20.18 acres	72.65
Hungerford Civic Open Space:	52.47 acres	
Orange County School Board Commercial Vacant Land North of W. Kennedy:		17.61
Eatonville Major Water, Sewer and Garage Facilities:		
East Town Water Tower and Multi-Purpose Garage:	0.57 acres	2.16
Major Lift Station & Transfer Point for Waste Water Re-use:	0.23 acres	
West Town Water Tower & Communication Equipment Site:	1.36 acres	
State and County Storm Drainage:		
DOT I-4 Storm Drainage Facility:	5.71 acres	18.83
DOT Forest City Rd. Storm Retention Drainage:	6.24 acres	
Orange County Storm Retention Drainage for W. Kennedy Blvd:	6.88 acres	
Utilities and Rights-of-Way		79.41
Public Land Total Acres		211.68

MAJOR PRIVATE INSTITUTIONAL USES	Acres
Health Facilities	8.85
Zora Neal Hurston Museum	0.14
Houses of Worship	13.26
Day Care Facilities	0.59
Total Acres of Major Private Institutional Uses	22.84
Total Acres of Public & Private Institutional:	234.52

Source: Prepared by Solin and Associates, Inc. based on Orange Co. Property Appraiser website data, 2016.

Vacant Lands. Vacant lands include unimproved developable parcels.

Recreation. Recreation land uses include The Denton Community Center, Catalina Park and Boat Dock, the Hungerford Lake Access site, and the Town Recreation Center and outdoor recreation facilities. comprising 17.99 acres of land. The Future Land Use Map identifies public recreation areas and tables show park acreage and recreation facilities within parks.

Eatonville Parks and Recreation Facilities:	Acres
Denton Johnson Community Center & Boys and Girls Club:	11.16 acres
Eatonville Recreation Center and Facilities:	1.58 acres
Catalina Park:	4.72 acres
Hungerford Lake Recreation Area:	0.53 acres
Total Recreation Acres	17.99

Open Space: Open space includes green permeable surfaces that do not include impermeable ground cover other than necessary access facilities located and designed not to impede the physical and biological functions of natural systems, including wetlands.

Conservation. Natural resources, including lakes; wetlands surrounding lake shorelines; threatened and endangered vegetative communities and wildlife habitats or species of special concern are designated environmentally sensitive lands that should be preserved as conservation areas. Cross-reference the comprehensive documentation concerning the character of the Town's Wekiva River Basin Study Area, including the natural resources map and narrative description of these resources in this element and in the Conservation Element.

Town Center Redevelopment. The Eatonville Town Center currently traverses the narrow East Kennedy Boulevard corridor and includes the Town Hall, the Zora Neale Hurston Museum, the Hungerford schools, a library, several churches, a small commercial strip center, and mom pop restaurants featuring soul food, and a couple of local taverns. During 2006-2015 the Town completed a major streetscape initiative funded through a Community Development Block Grant as well as potable water, storm sewer, and wastewater improvements. The major Town community redevelopment project currently is targeting the redevelopment of the Hungerford property as below described.

The Hungerford was formerly the site of the Hungerford Preparatory High School and is still the site of the Hungerford Elementary School, owned by the Orange County School Board (OCSB). The Orange County School Board (OCSB) and the Town of Eatonville have entered a contract which conveys the 72.65 upland acres and 11.01 acres of water comprising Part of Lake Bell and Lake Wilderness. The OCSB sold two other Hungerford properties that are part of the Hungerford Redevelopment--OCSB sold a 5-acre Hungerford site to Innovation Place Land LLC for the development of a high-tech IT cloud storage facility; and 2) OCSB sold a 10.71-acre site to the Florida Department of Transportation to accommodate a storm retention pond. The total upland redeveloped site will be 67.65 acres, including a 0.66-acre existing right-of-way.

Hungerford Property

A contract for the sale of the 83.66-acre Hungerford Property has been executed by the Orange County School Board and the Town of Eatonville. The contract includes a phased schedule for the sale of the site for a mixed-use redevelopment. The proposed 2018 Comprehensive Plan Future Land Use Map designates the site for Mixed-Use development. The Town convened a competitive request for proposals (RFP) to purchase and development of the subject School Board properties. Currently the Town is negotiating with the selected developer to redevelop the site pursuant to a plan to be prepared by the developer in partnership with the Town of Eatonville. The Town and the selected developer will also develop the10.61-acre purchased from the OCSB which is located west of I-4 on the north side of W. Kennedy Boulevard. The latter site is designated for commercial and residential development. The intent is that the selected developer and the Town partner in achieving an innovative expansion that will serve as the southwest anchor of the Town Center.

The Town's Community Redevelopment Agency Plan has consistently promoted these initiatives and promotes the establishment a multi-modal transportation corridor along East and West Kennedy Boulevard and ensures that the design, specifications, and pedestrian scale of the East Kennedy corridor improvements retain their planned function and form over the long-term horizon (2030) and beyond. The Orange County capital improvement program contains funding to complete the right-of-way acquisition and construction of the 4-lane widening of the West Kennedy Boulevard corridor from Forest City Road to Wymore Road by 2019. The site includes mixed use along the East Kennedy and Wymore Gateway corridors. The interior of the site should be re-designated Mixed Use upon adoption of an update redevelopment plan.

Land Use Adjacent to Eatonville Corporate Limits

The Town of Eatonville is located adjacent to the City of Maitland to the east and northeast. The dominant land use within these adjacent areas is residential development, including predominantly single family development. Winter Park is located less than a quarter of a mile to the southeast and development to the southeast is also predominantly single family residential. Unincorporated residential development primarily abuts the Town to the south. Map 1-1 illustrates the general location of the Town of Eatonville, Town Limits and the location of abutting incorporated municipalities of Winter Park and Maitland and unincorporated Orange County.

Area of Critical State Concern

No areas of the Town of Eatonville are located within a designated Area of Critical State Concern.

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Population Estimates and Projections

Introduction. Population is a primary determinant of land use requirements, housing supply and demand and is an indicator of public facility needs and services. Existing and future population estimates apply only to areas within the Town limits and do not take into consideration future voluntary annexation of unincorporated lands. The current and projected population estimates considered permanent and seasonal population. The definition for each category is described as follows:

Permanent population represents persons who live in the Town year-round. Residents qualifying as permanent population would declare Eatonville as their permanent place of residence with the U.S. Census. The Future

Seasonal population represents persons who typically reside in the Town for less than six months a year as well as tourists lodging at hotels, motels, or campgrounds. These persons list another place as their permanent residence in the U.S. Census. Eatonville has historically contained a negligible seasonal population. The 2010 U.S. Census Table DP-1: Profile of General Demographic Characteristics reported only a single residential dwelling was for seasonal, recreational, or occasional use. In addition, the referenced U.S. Census Table DP-1 reported that the average population for a renter-occupied housing unit is 1.94 persons per unit. The U.S. Census did not report a yearly seasonal population estimate. The Town has only one hotel and data on seasonal population is not available for the hotel.

Past Population Trends

Table I-6 presents past population trends as reported by the U.S. Census in 2000 and 2010 and subsequent population estimates were published by the University of Florida Bureau of Economic and Business Research (BEBR). These estimates present sharp declines in the Town's population since 2000. The U.S. Census published a 2010 estimated 674 total occupied household units and a population of 2,159. BEBR published an estimated 2016 population of 2,274 for the Town of Eatonville. The existing number of "Occupied Household Units" in 2016 was 740 which was determined by straight line projection using the 2010 U.S. Census "Occupied Household Units" estimate and the Shimberg Center's Florida Housing Data Clearinghouse data for the 2015 "Occupied Household Units" estimate.

TABLE I-6: PAST POPULATION TRENDS: 2000 TO 2016

Year	Household Units (OHHU)			Estimated Population	Source of Estimate
	Total	Occupied	Source		
2000	858	761	2000 U.S. Census	2,432	U.S. Census Bureau, 2000 Decennial Census.
2010	811	674	2010 U.S. Census	2,159	U.S. Census Bureau, 2010 Decennial Census.
2011	824	685	Solin Projected Build Out and Used Straight-Line Projection using above 2010 U.S. Census OHHU Estimate and the 2015 Shimberg FHDCH OHHU estimate.	2,198	Bureau of Economic and Business Research, Univ. of FL.
2012	837	696		2,232	Bureau of Economic and Business Research, Univ. of FL.
2013	850	707		2,230	Bureau of Economic and Business Research, Univ. of FL.
2014	863	718		2,233	Bureau of Economic and Business Research, Univ. of FL.
2015	850	732	FL Housing Data Clearing House	2,246	Bureau of Economic and Business Research, Univ. of FL.
2016	890	740	Straight-Line Projection	2,251	Bureau of Economic and Business Research, Univ. of FL.

Table prepared by Prepared by Solin and Associates, 2016

However, since 2005 the Town and the Orange County School Board have been negotiating a sale of two large tracts of property comprising over 72 acres of upland property and 10.61 acres for mixed use development. Both sites front on County maintained collector streets and are planned for mixed-use development. The larger Hungerford tract has long been planned for a mixed-use development that will become the southwest anchor of the Town Center. Development of the 10.61-acre site is anticipated to include an 8.68±-acre commercial project fronting on a newly expanded W. Kennedy Boulevard a major collector street improvement included in the Orange County capital improvement program scheduled for completion before 2020. The 8.93±north end of that heavily forested site is planned for residential development. In addition, the town has two other large sites on W. Kennedy Boulevard that anticipated to develop following completion of the widening of W. Kennedy corridor, the major east-west gateway to regional markets. These and other planned developments and improved infrastructure demonstrate that increases population and potable water demands will occur in the future within the Town of Eatonville.

Population Projections

Tables 1-7 through I-9 display Eatonville population projections for the first five-year period following 2016, the next ten-year period (2017-2021) and the population from 2022 to 2040 and to Build Out, respectively. In determining population projections, Solin and Associates, Inc. (SAI) analyzed the Future Land Use Map, including land use patterns, considered available infrastructure, designated land use classification of each parcel, and location, magnitude, character and ownership patterns of the remaining 42.27 acres undeveloped and underdeveloped designated residential parcels. SAI used the Orange County Property Appraiser's website data base, including aerial photos to determine parcel acreage, including acreage of uplands versus wetlands and water bodies to estimate developable upland acreage. SAI applied the very conservative 2010 U.S. Census estimated household occupancy figure of 83.11% when calculating the number of "Occupied Household Units." SAI used the 2010 US Census estimated 2.92 average persons per occupied dwelling when calculating population generated by each new "Occupied Household Unit."

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Solin and Associates, Inc. (SAI) used the current density (5,000 square feet) when projecting total dwelling units to be accommodated on platted undeveloped or underdeveloped single family residential lots. An overall average lot size of 7,500 square feet was applied in projecting total detached and attached residential units to be developed on unplatted undeveloped upland. The 2010 U.S. Census estimated household occupancy figure of 83.11% was applied to determine the total annual "Occupied Household Units." The annual estimation of total of "Occupied Household Units" is quite important in determining a reasonable assessment of potable water demand annually to build out. Tables I-9 through 1-11 provide assessments of potable water demands generated by: 1) Existing development; 2) Future major developments on properties exceeding 5-acres; and 3) by infill development on parcels less than 5 acres. In all cases, the development and potable water demand is predicated on the Comprehensive Plan Future Land Use Map designation assigned to each parcel.

TABLE I-7: FIRST FIVE-YEAR POPULATIION PROJECTION: 2017 TO 2021

Year	Occupied Household Units		Estimated Population
	Total	Occupied	
2017	897	746	2,178
2018	904	752	2,196
2019	912	758	2,213
2020	919	764	2,231
2021	926	770	2,248

Table I-8 prepared by prepared by Solin and Associates, Inc., 2017 based on Straight line projections present on page 9 of this Comprehensive Plan Future Land Use Element Data Inventory and Analysis.

TABLE I-8: NEXT TEN YEAR POPULATIION PROJECTION: 2022 TO 2031

Year	Household Units		Estimated Population
	Total	Occupied	
2022	933	776	2,266
2023	941	782	2,283
2024	948	788	2,301
2025	955	804	2,348
2026	975	810	2,365
2027	982	816	2,383
2028	989	822	2,400
2029	996	828	2,418
2030	1003	834	2,435
2031	1011	840	2,452

Table I-8 prepared by prepared by Solin and Associates, Inc., 2017 based on Straight line projections present on page 9 of this Comprehensive Plan Future Land Use Element Data Inventory and Analysis.

TABLE I-9: NEXT TEN YEAR POPULATIION PROJECTION: 2032 TO 2040 and Build Out

Year	Household Units		Estimated Population
	Total	Occupied	
2032	1018	846	2,470
2033	1025	852	2,488
2034	1032	858	2,505
2035	1040	864	2,523
2036	1047	870	2,540
2037	1054	876	2,558
2038	1061	882	2,575
2039	1068	888	2,593
2040	1075	894	2,510
Build Out	1182	982	2,867

Table I-8 prepared by prepared by Solin and Associates, Inc., 2017 based on Straight line projections present on page 9 of this Comprehensive Plan Future Land Use Element Data Inventory and Analysis.

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

LAND USE ANALYSIS

This section includes an analysis of: 1) undeveloped lands; 2) soil, topography, and commercial minerals; 3) availability of public facilities and services; 4) description of natural resources and historic resources; 5) future land use needs; 6) redevelopment needs; and 7) flood prone areas.

Availability of Public Facilities and Services to Service Undeveloped Lands

Growth and development requires availability of adequate services, facilities and resources as emphasized in Chapter 163, Pt, II, Florida Statutes. The corresponding elements of this plan will provide detailed analysis on the necessary services. This element will only summarize the necessary services.

Water Treatment. In most areas growth in population and employment throughout the planning period will require an increase in demand for potable water treatment service. The present average daily demand is estimated at .465 million gallons per day. Table VII-7 in the Potable Water Data Inventory and Analysis provides the projected potable water demand and methodology in a series of tabular analysis based on land use analysis, including existing and projected development. Projected development is consistent with the Future Land Use Map. A straight-line projection methodology was applied. The straight-line projections used data on occupied household units, population, and average occupied household unit population based on 2010 US Census and data from University of Florida Bureau of Economic and Business Research for estimated population from 2011 through 2016. Standard "rule of thumb" coefficients for potable water generated by occupied household units and nonresidential acreage were provided by the Town of Eatonville Public Works Director.

The Town has accomplished the following improvements to the potable water system:

1. New improvement and maintenance to water storage and other facilities.
2. The installation of water meters Townwide.
3. Repair of private water lines and other equipment.

The Town has installed in-line flow meters to monitor water use prior to use consistent with SJRWMD Rules and consumptive use permit requirements. The Obsolete Well #1 at GRS Station #12657 and obsolete Well #2 at GRS Station #12658 have been taken off-line, capped and decommissioned. The obsolete wells had 8 inch-diameter casings and well depths of 336 and 341 feet, respectively. The new Well #3 and #4 have doubled the Town's pumping capacity. Well #3 (GRS Station #104917) and Well #4 (GRS Station #104918) each have 12-inch diameter casings and each have a well depth of 500 feet. The new wells have a pumping capacity of 500 gallons per minute (gpm) as opposed the former 250 gpm pumping capacity of Wells #1 and #2, respectively. In addition, since the 1990 Comprehensive Plan was prepared the Town has significantly improved its water storage and maintenance thereof; installed water meters Townwide; and repaired water distribution lines. The Town's water Service Delivery System shall be prioritized per the following conditions:

1. Infill development of vacant areas to capitalize on existing service line;
2. Provide services to property in the Town located near water mains;
3. Consider location of services to area recommended for future annexation; and
4. Property outside the Town Limits desiring services.

Table I-10 shows potable water projects in the FY 2016-17 through 2020-21 Capital Improvement Program:

TABLE 1-10: POTABLE WATER SYSTEM FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Master Water Utility Plan	$ 53,000	0.00	0.00		
West Side Water Improvement Project	2,600,000	0.00	0.00		
Water Main Replacement				$150,000	
Water Distribution System-wide Upgrade & Improvement					2,045,000
Meter Replacement Program					100,000
Totals:	$2,653,000	0.00	0.00	$150,000	$2,145,000

Currently the potable water system is being telemetered as the preliminary step in preparing the scheduled Master Water Service utility plan. The implementation of the above factors, aided by a pay for what you use attitude will help to reduce the demand for water treatment in the future. Presently the Town has the capacity to meet future average day demand. Concurrency will be enforced by requiring the purchase of central water treatment capacity at levels of service of 350 gallons per day per equivalent residential units and allowing connections only where the capacity is available.

Wastewater Disposal. Wastewater disposal in Eatonville is provided by central sewer. The only permitted septic tanks are owned and operated by J and J Moving & Storage. Although all land uses are required to hookup to the central sewer systems, reports indicated the several units are not hooked into the system. The Town should locate these units and make them comply with this requirement. All developments must purchase capacity at a level of service of 300 gallons per day per equivalent residential units and connections shall only be allowed where the capacity is available to ensure Concurrency. Since 2015 the Katherine Avenue lift station has been taken out of service and the Campus View station was relocated to 200 Campus View Drive. New sewer mains and laterals have also been installed in the Catalina Park neighborhood. Currently the wastewater system is being telemetered as part of a wastewater and potable water engineering assessment of the systems. The Sanitary Sewer Element Data Inventory and analysis presents an evaluation of this system.

Table I-11 shows wastewater projects in the FY 2016-17 through 2020-21 Capital Improvement Program:

TABLE I-11: WASTEWATER SYSTEM FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Engineering Report: Improvement to Park Place Lift Station	$ 25,000				
Vereen Lift Station: Prevent Inflow and Infiltration	2,600,000				
Wastewater System-wide Upgrade and Improvement					$1,020,000
Bethune Lift Station Replacement					350,000
Totals:	$2,625,000	0.00	0.00	0.00	$1,370,000

Roads and Transit. The Town must work with Orange County, the State and other surrounding areas to not only enforce levels of service standards, but also to provide for the proper signage and maintenance of area roadways. The Town must promote alternative strategies to increase pedestrian and transit uses. The Orange County School Board has sold the Town the 86.67-acre Hungerford property. The redeveloped site will become the mixed- use southwest anchor of the Town Center and the Town has finalized the competitive selection of the developer to redevelop the site in partnership with the Town. The mixed use mixed-use redeveloped site will promote more viable mass transit ridership on the East and West Kennedy and Wymore corridor routes. The Table I-12 below: "MetroPlan Orlando MetroPlan Orlando FY 2021-2022 through 2039-2040 Prioritized Project List" presents the MetroPlan Orlando prioritized schedule for roadway projects within the Town of Eatonville adopted by the MetroPlan Board on September 14, 2016. Table TCE-3 indicates that the right-of-way acquisition and construction for the 4-lane widening of W. Kennedy from Forest City Road east to Wymore Road is scheduled to be completed by 2019. The improvements are also included in the Orange County Five-Year Capital Improvements Program.

TABLE 1-12: METROPLAN ORLANDO: FY 2021-2022 through 2039-2040 PRIORITIZED PROJECT LIST
W. Kennedy Blvd R/W Acquisition and Construction Program:
Candidate Projects for Transportation Regional Incentive Program (TRIP) Funds

Collector Roadways	Segment		Improvement	Distance	Project Phases	Fiscal Yr.	Estimated Cost Present Day	TRIP Funds Requested	Total Matching Funds To be Provided
	From	To							
W. Kennedy Bld.	Forest City Rd.	Wymore Rd.	Widen to 4 Lanes	1.8 miles	R/W	2015-16	$12,000,000	$6,000,000	$6,000,000
					Construction	2018-2019	$15,000,000	$7,500,000	$7,500,000
					Total		$27,000,000	$13,500,000	$13,500,000

Source: Orlando Urban Area FY 2021-22 through 2030-40 Prioritized Project List, Adopted by MetroPlan Orlando Board September 14, 2016; MetroPlan Orlando "A Regional Transportation Partnership", page 25. The TRIP matching fund request does not represent commitment to funds. However, this segment of W Kennedy from Forest City Road to Wymore is included in the Orange County Five-Year Capital Improvements Program.

Stormwater Management. The Stormwater Management Element is based on an engineered stormwater management Master Plan. The Land Development Code (LDC) requires continued monitoring and evaluation of the stormwater system, including implementation of concurrency management, ensuring that drainage is adequately accommodated in future development. The LDC provides standards for drainage facilities and ensures that the peak post-development run-off shall not exceed pre-development conditions. Table I-13 shows stormwater projects in the FY 2016-17 through 2020-21 Capital Improvement Program:

TABLE 1-13: STORMWATER SYSTEM FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Stormwater System-wide Upgrade and Improvement	$ 25,000				
Park Place Stormwater Outfall Repair					$100,000
Totals:	$25,000	0.00	0.00	0.00	$100,000

Solid Waste Disposal. The County is required by law to provide solid waste disposal facilities for local units of governments. The County has acquired over 3,000 acres adjacent to the existing site. The County estimates that this will increase the life of this facility by 20 years and provide the adequate acreage to meet the future needs of the County. The Town of Eatonville is presently working with the County to increase the life expectancy of land fill facilities through recycling and other programs.

Recreation. The Town of Eatonville is scheduling capital outlay for the refurbishing of boat ramps at Catalina Park and Denton Johnson Park. The Town has scheduled improvements in facilities at Catalina Park and Denton Johnson Park using Community Block Grant assistance. The Town's17.99 acres dedicated to parks compares favorably with the national and State standard on 2.5 acres per one thousand residents. However, the Town is attempting to attract additional funding to improve and maintain existing facilities.

Eatonville Parks and Recreation Facilities:	Acres
Denton Johnson Community Center & Boys and Girls Club:	11.16 acres
Eatonville Recreation Center and Facilities:	1.58 acres
Catalina Park:	4.72 acres
Hungerford Lake Recreation Area:	0.53 acres
Total Recreation Acres	17.99 acres

Table I-14 shows wastewater projects in the FY 2016-17 through 2020-21 Capital Improvement Program:

TABLE 1-14: RECREATION SYSTEM IMPROVEMENTS INCLUDED IN THE FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Elizabeth Park Improvements	$50,000				
LLP Pavilion Landscaping		$50,000			
Frances Jerry Park Fishing Pier Renovation		$50,000			
Frances Jerry Park Playground Expansion		$50,000			
Denton Johnson Fishing Pier Renovation		$50,000			
Denton Johnson Playground Expansion		$50,000			
Totals:	$50,000	$150,000	0.00	0.00	0.00

Analysis of Major Undeveloped Lands

Undeveloped Lands. In this section, Table I-15 provides an inventory existing development, including the potable water usage generated by existing development. as well as undeveloped and underdeveloped sites described in the tables. The land use profiles identify the general location, acreage, and land use classifications based on Comprehensive Plan Future Land Use Map designations. Table I-15 shows the number of total households and the number of occupied households based on the 2010 U.S. Census for "Total Occupied Household Units." Table I-15 also shows the numbers of acres in commercial, industrial and institutional land use in 2016 based on Solin and Associates, Inc. parcel by parcel analysis of the Town's land use using the Orange County Property Appraiser's website data base to identify upland parcel acreage for each parcel. Potable water generation was determined by applying the following potable water coefficients for potable water generation: Residential unit potable water coefficient = 350 gallons per day (gpd); Non-residential potable water coefficient = 1,500 gallons per day per non-residential acre.

Source: Estimated acreage and projections based on Solin and Associates, Inc. (SAI) analysis of Eatonville land use by parcel and SAI use of the Orange County Property Appraiser Data Base, to calculate acreage by parcel, 2016-17. Household unit projections were based on a straight-line projection methodology as explained on page 9. The potable water coefficient used are standard "rule of thumb" coefficients provided the by the Town of Eatonville Public Works Director.

TABLE 1-15: EXISTING LAND USE PROFILE WITH GENERATION OF POTABLE WATER

Developed Land Use	Future Land Use Map	Acres	Calculate Water Use	x1500 gpd for non-res'l
Residential	Compliant	123.58	890 total Household Units (HHU), 890 x 0.8311% of occupied HH unit = 740 occupied HH units x 350/gpd) =	259,000
Commercial	Compliant	67.53	67.53 ac. X 1,500=	101,295
Industrial	Compliant	46.06	46.06 x 1,500=	69,090
Institutional	Compliant	23.84	23.84 x 1,500=	35,760
Total Potable Water Demand Generated by Existing Development				465,145

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Table I-16 portrays the planned development and redevelopment of large parcels exceeding 5 acres within the Town of Eatonville, including the projected generation of future potable water demand based on potable water demand coefficients presented in the previous paragraph. The projected land use is consistent with the Comprehensive Plan Future Land Use Map herein. This table includes the longstanding proposed redevelopment of the Hungerford Town Center occasioned by the sale of the Orange County School Board's Hungerford Property to the Town of Eatonville. The Hungerford property is planned to become the southwest anchor of the Town Center. In addition, the table includes Orange County School Board's 10.61- acre site located at 525 West Kennedy which is planned for redevelopment. The site will accommodate a mixed-use development consisting of approximately 8.68 acres of commercial development fronting on W. Kennedy Boulevard with a planned 8.93-acre residential development to the north. The map following Table VII-6 identifies the large undeveloped site.

TABLE I-16: FUTURE PROJECTED POTABLE WATER DEMAND TO BE GENERATED BASED ON FUTURE LAND USE MAP DESIGNATIONS ASSIGNED TO PARCELS EXCEEDING 5 ACRES
[Includes Proposed Redevelopment of Orange County School Board Property--see Map I-5]]

Identity of Parcels	Future Land Use Map Designation	Upland Acreage/Units	Formula to Calculate Potable Water Demand	x1500 gpd for non-res'l Res'l Unit = x 350 gpd
E of Lake Weston	Industrial on Adopted FLUM	34.17 ac.	34.17 ac. x 1,500 gpd=	51,255
E of Lake Shadow	Commercial on Adopted FLUM	10.85 ac.	10.85 ac. x 1,500 gpd=	16,275
NW of I-4	Commercial on Adopted FLUM	11.59 ac.	11.59 ac. x 1,500 gpd=	17,385
Hungerford Site [OCSB selling site Eatonville for redevelopment]	Res'l: 7ac. X 43,560 ÷ 7,500=	40 units x 83.11%=	33 occupied HH unitsx350 gpd=	11,550
	Commercial	47.65 ac.	47.65 ac. x 1,500=	71,475
	Institutional	18.00 ac.	18.00 ac. x 1,500=	27,000
Hungerford Host-Dime Site	Commercial on Adopted FLUM	5.00 ac.	5.00 ac. x 1,500=	7,500
525 W Kennedy [OCSB selling site to Eatonville for redevelopment]	Commercial on Adopted FLUM	8.68 ac.	8.68 ac. x 1,500=	13,020
	Res'l: 8.93 ac x 43,560/7,500=	51 units x 83.11%=.	42 occupied HH Units x 350 gpd =	14,700
Starling Trust Res'l: Not S/D	Res'l: 9.47 ac x 43,560/7,500=	55 units x 83.11%=	45 occupied HH units x 350 gpd=	15,750
Undeveloped Large Parcel Acreage		161.34 ac.	*NA*	NA
Total Potable Water Demand for Major Undeveloped Properties Over 5 Acres				245,910 gpd

Source: Estimated acreage and projections based on Solin and Associates, Inc. (SAI) analysis of Eatonville land use by parcel and SAI use of the Orange County Property Appraiser Data Base, to calculate acreage by parcel, 2016-17. The potable water coefficient used are standard "rule of thumb" coefficients provided the by the Town of Eatonville Public Works Director.

Table I-17 presents the amount of projected development by land use on smaller undeveloped and underdeveloped infill parcels. Table I-17 also reveals the impact of such infill development on future potable water demand. Together Tables I-16 and I-17 demonstrate the future pent-up demand for potable water that will be generated by future development of strategically located large scale undeveloped upland parcels as well as the potable water demand generated by undeveloped and underdeveloped upland infill sites. Pressures for development of these lands is forthcoming by 2019 or 2021 as longstanding needs for roadway improvements are finally realized.

TABLE I-17 FUTURE PROJECTED POTABLE WATER DEMAND TO BE GENERATED BY OTHER UNDEVELOPED PARCELS BASED ON ADOPTED FUTURE LAND USE MAP DESIGNATIONS [EXCLUDES ABOVE LARGE PARCELS]

Type of Undeveloped Land	Future Land Use Map Designation	Acreage/Units		Formula to Calculate Potable Water Demand	x1500 gpd for non-res'l
Res'l Lots Undeveloped or Underdeveloped	Res'l: 16.87± ac. X 43,560/7,500=	16.87± acres	147 units x 83.11%=	122 occupied HH units x 350 gpd=	42,700 gpd
Commercial	Commercial on Adopted FLUM	41.21 ac.		41.21 ac. x 1,500=	61,815 gpd
Industrial	Industrial on Adopted FLUM	4.92 ac.		4.92 x 1,500=	7,380 gpd
Total Potable Water Demand for Other Undeveloped Properties [Not including Parcels Over 5 Acres]					111,895 gpd
Total Additional Potable Water Demand Generated by All Undeveloped Parcels					357,805 gpd
Total Potable Water Demand generated by Existing and Future Development					822,950gpd

Source: Estimated acreage and projections based on Solin and Associates, Inc. (SAI) analysis of Eatonville land use by parcel and SAI use of the Orange County Property Appraiser Data Base, to calculate acreage by parcel, 2016-17. The potable water coefficient used are standard "rule of thumb" coefficients provided the by the Town of Eatonville Public Works Director.

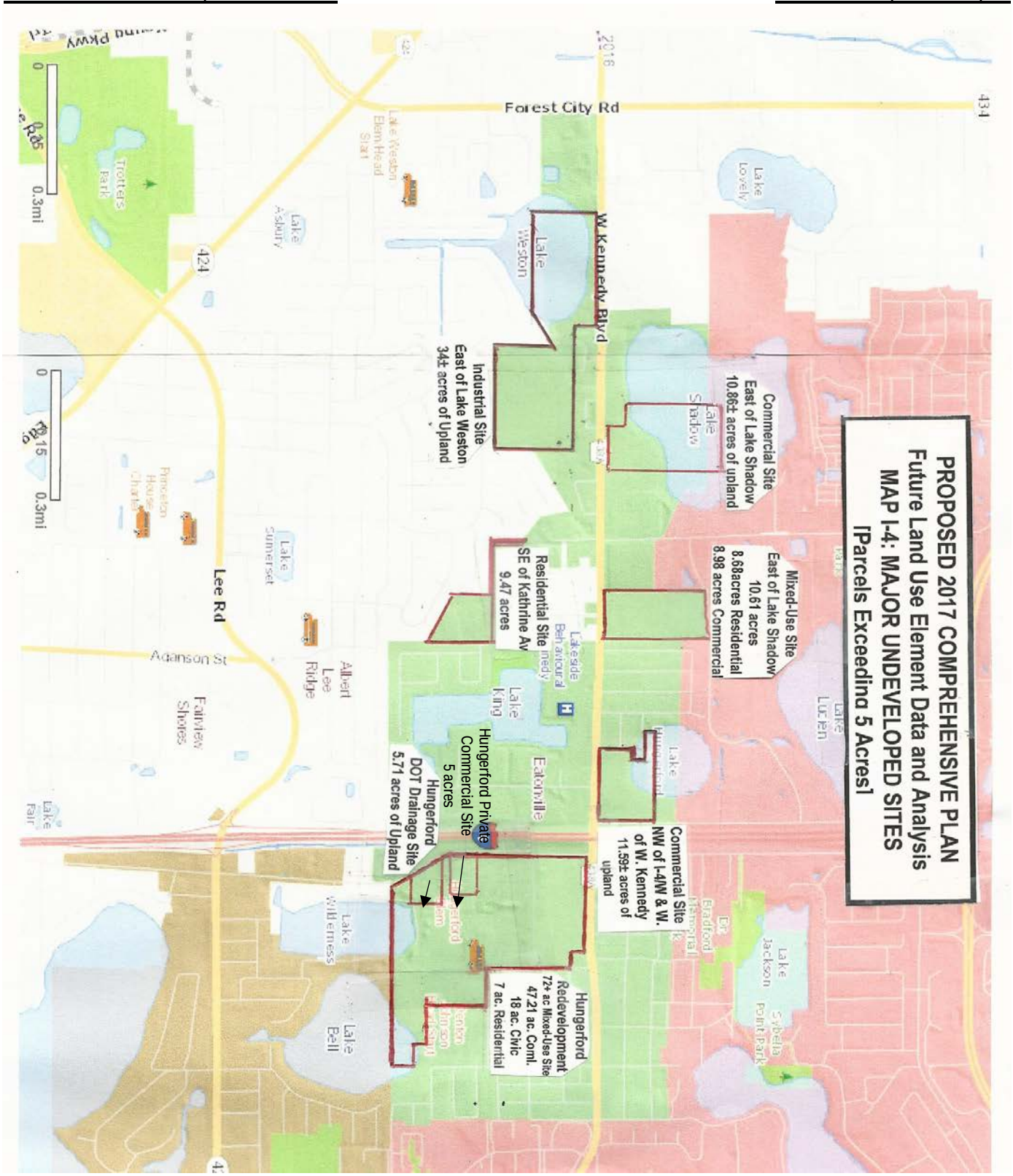

PROPOSED 2017 COMPREHENSIVE PLAN
Future Land Use Element Data and Analysis
MAP I-4: MAJOR UNDEVELOPED SITES
[Parcels Exceeding 5 Acres]
Forest City Rd
W Kennedy Blvd
Lee Rd
Adanson St
Commercial Site
East of Lake Shadow
10.86± acres of upland
Mixed-Use Site
East of Lake Shadow
10.61 acres
8.68acres Residential
8.98 acres Commercial
Industrial Site
East of Lake Weston
34± acres of Upland
Residential Site
SE of Kathrine Av
9.47 acres
Commercial Site
NW of I-4/W & W.
of W. Kennedy
11.59± acres of
upland
Hungerford Private
Commercial Site
5 acres
Hungerford
DOT Drainage Site
5.71 acres of Upland
Hungerford
Redevelopment
72+ ac Mixed-Use Site
47.21 ac. Coml.
18 ac. Civic
7 ac. Residential
Lake Weston
Lake Lovely
Lake Asbury
Lake Shadow
Lake Lucien
Lake Jackson
Lake Sybella
Lake King
Lake Wilderness
Lake Bell
Lake Fair
Lake Somerset
Eatonville
Trotters Park
Princeton House Charter
Allen Lee Ridge
Fairview Shores
Lakeside Behavioural
Bradford Memorial Dr
0
0.3mi
0
0.3mi

Table 1-18 shows the existing land use profile and resulting impacts on potable water demand. Projected future development is broken down by each land use classification instead of the cumulative impact of large-scale vs. small scale infill development. In this manner, the impact of residential commercial, industrial and institutional development, respectively, can be viewed, including the total acreage, total household units and potable water demand occasioned by each major land use classification.

TABLE I-18: EXISTING AND PROJECTED LAND USE GENERATING EXISTING POTABLE WATER DEMAND			
EXISTING DEVELOPMENT GENERATING CURRENT POTABLE WATER DEMAND	ACRES / UNITS	FORMULA FOR CALCULATING POTABLE WATER USE [IN GALLONS PER DAY (GPD)	POTABLE WATER USE (GPD)
Residential	Acreage: 123.58 ac. Population: 2,274 Total HHU 890 Occupied HHU 740	740 Occupied HHU x 350=	259,000
Commercial	67.53 ac.	67.53 ac. X 1,500=	101,295
Industrial	46.06 ac.	46.06 x 1,500=	69,090
Institutional	23.84 ac.	23.84 x 1,500=	35,760
Total Potable Water Demand Generated by Existing Development			465,145
TABLE I-10: FUTURE DEVELOPMENT BASED ON FUTURE LAND USE MAP & POTABLE WATER DEMAND GENERATED			
PLANNED FUTURE DEVELOPMENT BY DESIGNATED LAND USE	ACRES / UNITS	FORMULA FOR CALCULATING POTABLE WATER USE [IN GALLONS PER DAY (GPD)	POTABLE WATER USE (GPD)
FUTURE RESIDENTIAL DEVELOPMENT			
Existing Undeveloped or Underdeveloped Small Parcels	16.87± ac. 147 units x 83.11%=	122 occupied HH units x 350 gpd=	42,700 gpd
Hungerford Res'l	7 ac./40 units x 83.11%=	33 occupied HH units x 350 gpd=	11,550
525 W Kennedy OCSB Res'l	8.93 ac./51 units x 83.11%=.	42 occupied HH Units x 350 gpd =	14,700
Starling Trust Res'l: Not S/D	9.47 ac./55 units x 83.11%=	45 occupied HH units x 350 gpd=	15,750
Total Residential		242 Occupied HH units x 350=	84,700
FUTURE COMMERCIAL DEVELOPMENT			
E of Lake Shadow	10.85 ac.	10.85 ac. x 1,500 gpd=	16,275
NW of I-4	11.59 ac.	11.59 ac. x 1,500 gpd=	17,385
Hungerford Commercial	47.65 ac.	47.65 ac. x 1,500=	71,475
Hungerford Host-Dime Site	5.00 ac.	5.00 ac. x 1,500=	7,500
525 W Kennedy OCSB Commercial	8.68 ac.	8.68 ac. x 1,500=	13,020
Small Undeveloped Commercial Parcels [less than 5 ac.	41.21 ac.	41.21 ac. x 1500=	61,815 gpd
Total Commercial		124.98 acres x 1,500=	187,470
FUTURE INDUSTRIAL DEVELOPMENT			
Small Undeveloped Industrial Lots	4.92 ac.	4.92 x 1,500=	7,380 gpd
E of Lake Weston	34.17 ac.	34.17 ac. x 1,500 gpd=	51,255
Total Industrial		39.09 acres x 1,500=	58,635
FUTURE INSTITUTIONAL DEVELOPMENT			
Hungerford Institutional	18.00 ac.	18.00 ac. x 1,500=	27,000
Total Institutional		18 acres x 1,500=	27,000
TOTAL ADDITIONAL POTABLE WATER DEMAND GENERATED BY PLANNED DEVELOPMENT PER LAND USE PLAN			357,805
TOTAL POTABLE WATER DEMAND GENERATED BY EXISTING AND FUTURE DEVELOPMENT			822,950

Source: Estimated acreage and projections based on Solin and Associates, Inc. (SAI) analysis of Eatonville land use by parcel and SAI use of the Orange County Property Appraiser Data Base, to calculate acreage by parcel, 2016-17. The potable water coefficient used are standard "rule of thumb" coefficients provided the by the Town of Eatonville Public Works Director.

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS

Soils. The Orange County Soils Survey, prepared by the Soils Conservation Service of the United States Department of Agriculture, identifies 16 soil types present within the Town of Eatonville as characterized below in Table I-12 and delineated on Map I-5: Delineation of Eatonville Area Soil Types. Table I-19 generally classifies soil types by their basic character, slope, capacity to drain, associated runoff, flooding frequency, and ponding frequency. Soil is a limited resource that requires protection. The Town and County should continue to work with the U.S. Soil Conservation Service to rate and classify soils and minimize erosion. No information was discovered that indicated any current soil erosion problems in the Town.

TABLE I-19: CHARACTERISTICS OF SOIL TYPES: TOWN OF EATONVILLE

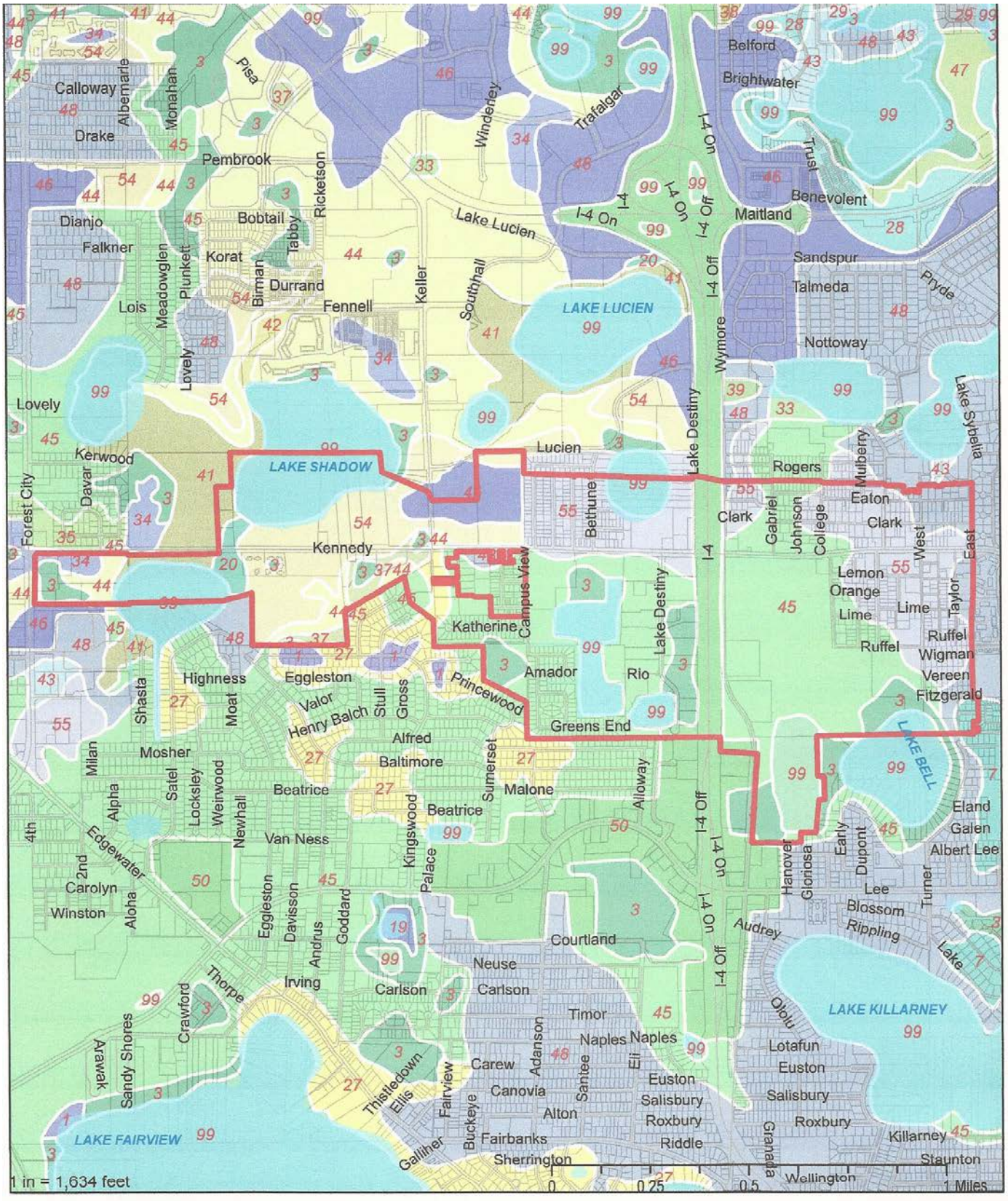
Map ID#	Soil Types	Base Character	% Slope	Drainage Class	Runoff Class	Flooding Frequency	Ponding Frequency
1	Arents	Nearly Level	0-2	Poorly Drained	Negligible	None	None
3	Basinger	Fine Sand	0-1	Hydric Very Poorly Drained	Negligible	None	Frequent
7	Candler	Urban Complex	0-5	Excessively Drained	Very Low	None	None
20	Immokalee	Fine Sand	0-2	Poorly Drained	Very High	None	None
27	Ona	Urban Complex	0-2	Poorly Drained	Very High	None	None
33	Pomello	Fine Sand	0-5	Moderately Well Drained	Negligible	None	None
34	Pomello	Urban Complex	0-5	Moderately Well Drained	Negligible	None	None
37	St. Johns	Fine Sand	0-2	Poorly Drained	Very High	None	None
41	Samsula-Hontoon-Basinger	Depressional	0-1	Hydric Very Poorly Drained	Negligible	None	Frequent
44	Smyrna-Smyrna	Wet, Fine Sand	0-2	Poorly Drained	High	None	None
45	Smyrna	Urban Complex	0-2	Poorly Drained	Very High	None	None
46	Tavares	Fine Sand	0-5	Moderately Well Drained	Negligible	None	None
48	Tavares	Urban Complex	0-5	Moderately Well Drained	Very Low	None	None
50	Urban Land	Urban	NA	NA	NA	NA	NA
54	Zolfo	Fine Sand	0-2	Somewhat Poorly Drained	Negligible	None	None
55	Zolfo	Urban Complex	0-2	Somewhat Poorly Drained	Very Low	None	None
99	Water	NA	NA	NA	NA	NA	NA

Source: "Custom Soil Resource Report for Orange County Florida," Natural Resource Conservation Service, United States Department of Agriculture

MAP I-5: DELINEATION OF EATONVILLE AREA SOIL TYPES

The U.S. Soil Conservation Service has determined that soils which are a part of Type "A" Hydrologic Soils Group are most characteristically associated with the "most effective recharge areas." This fact is also reflected in Rule 40C-41.063(3), F.A.C. The Future Land Use Element Data Inventory and Analysis Soils Map on the following page delineates Basinger hydric soils identified by Map Key #3. The map delineates three small sites of one-acre or less. The only sizable site is primarily situated on a large undeveloped parcel owned by the Orange County as a storm drainage retention pond which abuts the northeast portion of the Maitland Reserve Office Center west of Keller Road and north of W. Kennedy Boulevard.

As the soil map indicates, much of the vacant land in Eatonville is composed of either Blanton, Lakeland, or Leon Soils. Because, Blanton and Lakeland soils are loose and open, they allow water to penetrate easily and present only slight limitations for any type of urban development. On the other hand, Leon Soils are poorly drained and water may stand during rainy days. Special drainage analysis is needed and potential constraints may be imposed on development of this land.



NORTH

Town of Eatonville
Delineation of Area Soils Map

Natural Resources and Development Constraints-- Wekiva River Basin Implication

All land west of I-4 within the Town of Eatonville is located within the Wekiva River Basin Study Area but no land within the Town limits is located within the Wekiva River Protection Area. Table I-13 lists the natural resources required to be identified pursuant to the Wekiva River Basin Protection Program. The table includes resources throughout the entire Town limits.

A map titled "Natural Features of the Wekiva Study Area in the Town of Eatonville Florida" shows the location of these resources and identifies the five key lakes within the Town: Lake Bell, Lake Hungerford, Lake King, Lake Shadow, and Lake Weston. The Town is not within an area impacted by the Wekiva Parkway and no interchange locations exist in the Town limits.

TABLE I-13: NATURAL FEATURES OF WEKIVA RIVER STUDY AREA
TOWN OF EATONVILLE

Natural Resource	Location	Acres
Habitat	None	
Scrub		
• Site One	West of Lake Weston	0.35
• Site Two	East of Lake Bell	0.56
Long Leaf Pine	None	0.00
Sand Pine	None	0.00
Xeric Oak	None	0.00
Karst		
• Site One	South of Kennedy Blvd. E of Kinston Dr.	0.08
• Site Two	Along shoreline of Lake Bell	1.56
Most Effective Recharge Area		
• NONE	NOT APPLICABLE	0.00

Prepared by Solin and Associates, Inc.
Source: Geographical Information Systems of Orange County, East Central Florida Regional Planning Council, St. Johns River Water Management District, and the Florida Department of Environmental Protection.

Land Use Strategies for Protecting Natural Resources.

The major goal in protecting natural resources should be to protect their physical and biological functions. The major natural resources within the Town of Eatonville are water related—protection of the lake, lakeshore habitat, karst areas and "most effective" recharge areas.

1. Natural Resources Overlay Protection District. The Town should establish a natural resource protection area which should include the areas identified on the map titled "Natural Features of the Wekiva Study Area in the Town of Eatonville Florida" and all wetlands delineated in new development plans as jurisdictional wetlands. The overlay district should envelop policies identified in the Goals, Objectives, and Policies related to protection of natural resources within the Future Land Use, Public Facilities, Conservation, and Intergovernmental Coordination Elements. Related issues are analyzed herein.
2. Need to Restrict or Prohibit Certain Land Use Activities in the Town's Natural Resources Overlay Protection District while Preserving Private Property Rights. The Town should adopt policies that limit new land use activities within the Natural Resources Overlay Protection District as well as other areas delineated in future development plans as jurisdictional wetlands. The Town should restrict land use and development that have potential to adversely impact ground water and surface water quality and should prohibit activities such as mining, landfills, sprayfields, heavy industrial, intense animal operations and on-site septic systems for wastewater treatment. The land use strategies recommended should include appropriate regulatory flexibility that preserves private property rights.

3. Application of Best Management Practices and Development Standards. Where avoidance of impacts through the limitation of land use activities is not feasible, the Town should implement best management practices and development standards, such as buffering, setbacks and open space standards, to minimize the impact of land use and development on the identified natural resources.

4. Recommended Analytical Procedures for Development Plans within the Natural Resource Overlay Protection District. The following surveys and analysis should be required as part of all new subdivision plans, site plans, or the functional equivalent. The surveys and analysis should evaluate the location and characteristics of each of the natural resources identified on the map herein titled "Natural Features of the Wekiva Study Area in the Town of Eatonville Florida" as well as all water bodies, soils and should include all jurisdictional wetlands delineated as part of the site analysis.

   a. Identification and Analysis of Soils. An analysis of soils, by a qualified professional, to determine the location of any "most effective recharge areas" as the term is used in Rule 40C-41.063(3), F.A.C. or soils determined by the U.S. Soil Conservation Service to be Type "A" Hydrologic Soils Group which are considered the most effective recharge areas. The survey should also verify the 100 year flood plain.

   b. Identification and Analysis of Sinkholes and Other Karst Features. A site analysis by a licensed professional geologist, to determine the location and nature of sinkholes and other karst features on-site, such as stream-to-sink and other direct connections to the aquifer including analysis determining the depth of the water table, location of the Floridan Aquifer relative to ground surface and thickness and extent of the bedrock or other confining layers over the aquifer. The analysis may include use of geophysical surveys, such as microgravity and ground penetrating radar surveys, and may be supplemented with documented locations of sinkholes, light detection and ranging surveys and aerial photographs.

   c. Identification and Analysis of Sensitive Natural Habitats. An analysis of the site, by a qualified biologist, to determine the location of sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. This analysis should be coordinated with the Florida Fish and Wildlife Conservation Commission and the Florida Department of Environmental Protection. The map herein titled "Natural Features of the Wekiva Study Area in the Town of Eatonville Florida" was based on geographic information system analysis employing the data base of Orange County, East Central Florida Regional Planning Council, St. Johns River Water Management District Geographical Information System, and Florida Department of Environmental Protection, including all shape files forwarded by the Florida Department of Community Affairs.

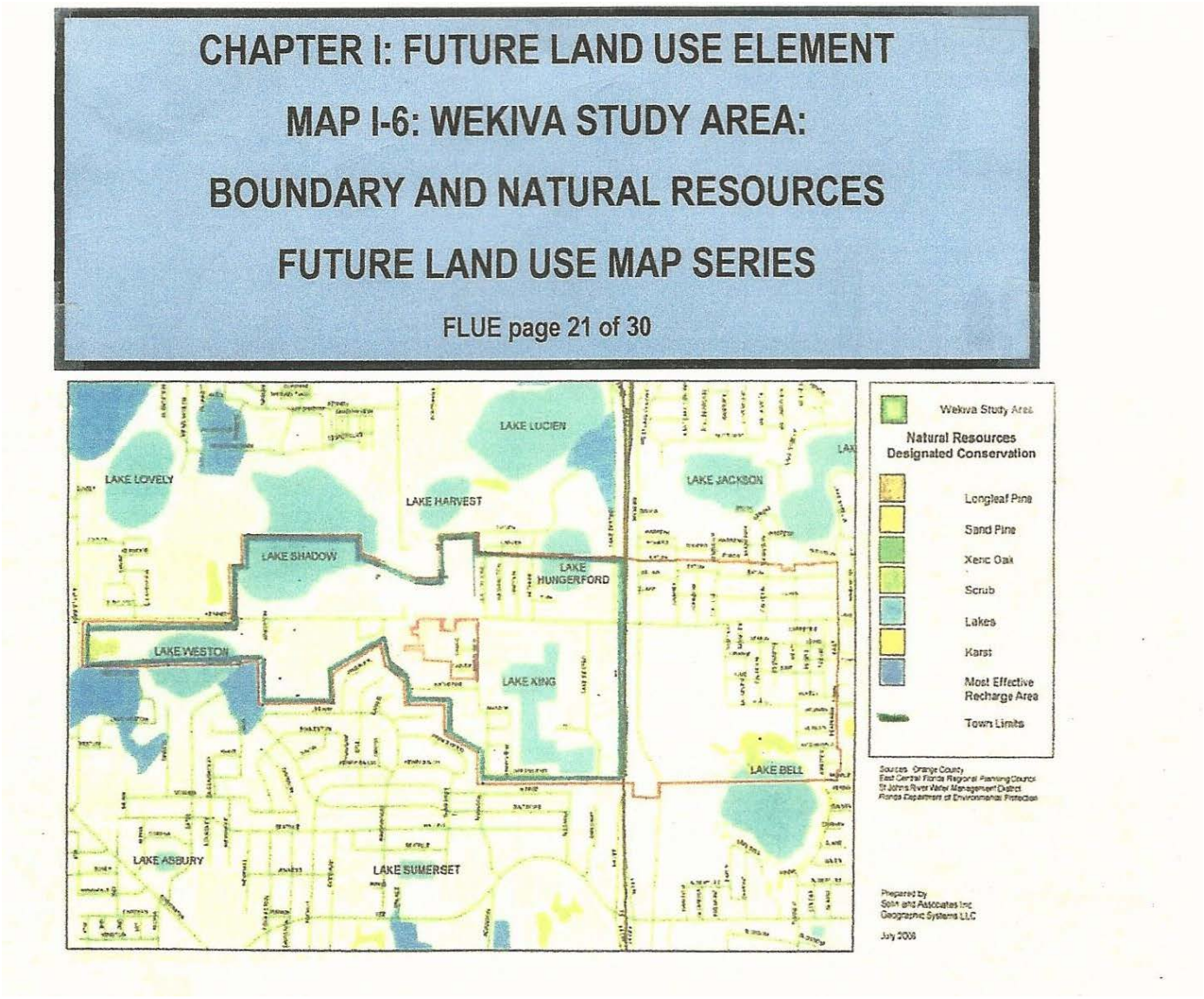
      The inventory revealed no presence of Longleaf Pine or Sand Hill habitats. The only habitat identified was defined as "Scrub" habitat. However, all new subdivision plans, site plans, or the functional equivalent for undeveloped sites of over two acres that are heavily vegetated should be required to undertake a field survey by a competent biologist or limnologist to delineate any Longleaf Pine, Sand Hill, Sand Pine or Xeric Oak Scrub prevalent on-site.

   d. Identify Measures to Protect Natural Resources with Direct Connection to Aquifer and Stream-to-Sink Features. The analysis required above should be used to characterize on-site soils and determine locations of geologic features including sinkholes, solution pipes, depressions, and depth of soil to lime rock, including karst features like sinkholes with a direct connection to the aquifer and stream-to-sink features that require protection.

5 Recommend Preservation and Dedication of Open Space Conservation Easement for Natural Resource System Components. All new development should be required to delineate all open space enveloping any highly effective recharge areas, karst features and sensitive natural habitats, including Longleaf Pine, Sand Hill, Sand Pine, and Xeric Oak Scrub as delineated on the map Future Land Use Map, as well as other such areas as may be identified in the required field survey cited in paragraph "c" including jurisdictional wetlands. All such natural resource areas should be delineated on development plan and the Town should require that such areas be preserved by requiring dedication of a conservation easement on the plat or other recordable instrument.

   a. Recommended Minimum Open Space Requirements. On sites that include natural resources identified on the Future Land Use Map, all such natural resource areas shall be conserved and a system of upland buffers having an average width of 30 feet and a minimum width of 20 feet shall be maintained as open space. All open space shall be contiguous with protected open space on adjacent parcels to the maximum extent feasible. In addition, the developed portions of residential sites shall preserve at least 35% of the site as pervious open space; and the developed portions of mixed use or nonresidential sites shall preserve at least 25% of the site as pervious open space.

CHAPTER 1: FUTURE LAND USE ELEMENT DATA INVENTORY AND ANALYSIS



b. Open Space Defined. Open space is defined as pervious green space that remains undeveloped or minimally developed, with boardwalks and trails as part of a natural resource preserve or passive recreation area, and shall include land preserved for conservation purposes. Open space excludes impervious surfaces, street rights of way, parking lots, and impervious recreation areas. Open space areas may include stormwater management areas that follow recommended "best management practices" (BMPs). A maximum of 25% of a site's wetland acreage may be credited toward the open space requirement. There are no open space preserves in Eatonville.

6. Conservation Design Standards. All new residential and non-residential development proposals for site plan or subdivision plan or its functional equivalent on undisturbed sites that support sensitive habitats, jurisdictional wetlands and/or 100 year flood plain comprising two acres or more should apply cluster design standards and open space preservation techniques as described above. Clustering of development units should be required and open space should be connected, to the greatest extent possible, to adjacent open space to create habitat and corridors of larger areas. The following principles should be applied:
   a. Clustering of units on uplands lying outside of the natural resource protection district.
   b. Establishment of open space, consistent with paragraphs 5, 5(a) and 5(b) above, which shall be connected whenever possible, in recordable easements, plat, or other recordable instrument;
   c. Development should be served by central water and sewer treatment facilities; and
   d. Development should not disturb areas within the natural resource protection district.

7. Protect Other Significant Natural Resources. Other significant resources, such as wetlands and floodplains and other sensitive natural habitats, within the Town of Eatonville should be protected consistent with the other comprehensive plan's objectives and policies requiring their protection.

8. Recommended Conservation Design Standards to Protect Natural Features Cite on the FLUM. The following are recommended regulatory techniques to protect Wekiva River Basin Protection Study Area resources.
   a. Setbacks from Karst Features. Table I-14 presents recommended setbacks from karst features. All development should be setback from sinkholes and other karst features as shown below. There are no identified springs in the Town limits. However, if field studies identify such resources the setbacks below stated should apply. The setback should consist of a buffer that excludes development and retains all natural vegetation within the setback area. The Town has no caves or spring heads.

      Where an existing lot of record is too small to accommodate the minimum amount of development necessary for the recommended setbacks and open space standards in paragraph 5 herein, the allowable use may be established provided that the building and associated paved areas are located the maximum distance possible from the karst features, and further provided that a swale and berm are located between the development and the karst feature with a direct connection to the aquifer. The swale and berm should be designed to direct drainage away from the karst feature.

TABLE I-14: RECOMMENDED MINIMUM SETBACKS FROM KARST FEATURES

Feature	Minimum setback (feet)
Springs	300
Spring runs	100
Sinkholes, with a direct connection to the aquifer	200, measured from drainage divide
Other sinkholes	100, measured from drainage divide
Other karst features with direct connection to aquifer (swallet or stream to sink)	200, measured from drainage divide

   b. Joint or Shared Access and Stormwater Facilities to Minimize Impervious Surface. Development should use joint or shared access and stormwater facilities to the maximum extent feasible in order to minimize impervious surfaces.

   c. Non-Residential Development Strategies to Minimize Impervious Surfaces. Non-residential development located adjacent to a natural resource identified on the Future Land Use Map should use shared parking to the maximum extent feasible in order to minimize impervious surfaces. Any such parking lot with 100 or more parking spaces should be designed with a minimum of twenty (20) percent of the parking spaces with a commercially marketed porous pavement material approved by the Town engineer.

d. Design Criteria for Impervious Surfaces. Design of parking lots, sidewalks, buildings, and other impervious surfaces located adjacent to natural resources designated on the Future Land Use Map should minimize connections between impervious surfaces through techniques shown on a site plan such as:
   i. Directing flows from roof drains to vegetated areas or rain barrels/cisterns for reuse of water;
   ii. Directing flows from paved areas to vegetated areas;
   iii. Locating impervious surfaces so that they drain to vegetated buffers or natural areas; and
   iv. Breaking up flow directions from large paved surfaces.

e. Use of Alternative Materials for Impervious Surfaces. Porous pavement materials, pervious concrete, and pervious asphalt should be used to minimize the amount of impervious surface within new development and redevelopment.

f. Design Criteria for Roads and Drainage Systems. Drainage for streets and roads within new development immediately adjacent to a natural resource designated on the Future Land Use Map shall be through roadside swales and berms. Curb and gutter design should not be approved, except where safety issues exist. Infill and redevelopment within existing urban areas with existing curb and gutter are exempt from these requirements. Where curb and gutter is approved and to the extent feasible, the curb and gutter shall be designed to provide adequate curb cuts to allow run-off to be directed to roadside landscaped swales for infiltration and treatment prior to discharge.

g. Design Criteria for Reducing Site Disturbance. Development on sites adjacent to natural features designated on the Future Land Use Map should be designed to minimize site disturbance by limiting clearing to the minimum area necessary to accomplish development through the following:.
   i. Avoid or minimize the removal of existing trees and vegetation;
   ii. Minimize soil compaction by delineating the smallest disturbance area feasible; and
   iii. Maximize disconnection of impervious surfaces to reduce water runoff flows and increase opportunities for infiltration.

h. Use of Landscaping BMPs. The following landscaping best management practices (BMPs) should be instituted to reduce nitrate loading:
   i. Planted turf grass and landscaping within residential lots should be restricted wherever feasible to minimize the use of fertilization and water for irrigation;
   ii. Drought tolerant and native landscaping should be required wherever feasible; and
   iii. All development should require best management practices as dictated by the principles and practices of the Florida Yards and Neighborhood Program.

i. Wildfire minimization. Habitats supporting threatened, endangered, and special listed species identified on the map titled "Natural Features of the Wekiva Study Area in the Town of Eatonville Florida" should be protected from wildfires through wildfire protection regulations and firewise landscaping. Future land use policies should require a wildfire protection zone averaging no less than thirty feet in width be placed along the perimeter of a planned development or residential subdivision that is exposed to potential wildfire impacts. The minimum width of the wildfire protection zone should be twenty feet (20') while preserving the minimum average width. The future land use policies should require that land development regulations be amended to include appropriate access for emergency vehicles, generally a path of at least fourteen (14) feet.

   The regulatory measures should require firewise landscaping designed to ensure that tree plantings are at least fifteen (15) feet from the wildfire protection zone. Plants and trees planted within thirty feet (30') of the protection zone should be fire-resistant species. The Town with the fire marshal should have the authority to waive or reduce requirements in firewise areas based on the current or expected characteristics of the site, local area fire history, site location/overall terrain, prevailing winds/seasonal weather conditions, the vegetative communities present on adjacent property, or insufficient parcel size.

9. Future Land Use Map Amendments. Amendments to the Future Land Use Map (FLUM) adjacent to a natural resource designated on the Future Land Use Map should meet the criteria in the following policies:

   a. Least Intensive Land Use Proposed to Meet Demonstrated Need. Support the plan amendment with data and analysis demonstrating that the proposed land use category is the least intensive category that will meet a demonstrated need of the use; and

b. Demonstrate Consistency with Groundwater and Surface Water and Natural Resources Protection Policies. A major environmental protection priority in Eatonville should be protecting water quality. For example, the Town's recent Stormwater Master Plan prepared by Spectra Engineering & Research, Inc. (2005) concluded that, at the time of the water quality analysis, all five of the Town lakes (i.e., Lake Bell, Lake Hungerford, Lake King, Lake Shadow, and Lake Weston) were receiving untreated stormwater runoff. The latter issue heightened the Town's interest in pursuing measures to improve the quality of the Town's surface water and groundwater resources. Therefore, any Future Land Use Map amendment impacting an area adjacent to a lake or other natural resource identified on the Future Land Use Map should be supported by data and analysis recommended in paragraphs 4 (a-d) herein previously demonstrate that the development is consistent with protection of groundwater and surface water and natural resources.

c. Nitrate/Nitrogen Loading Analysis to Compare Existing Land Use and Proposed Development at Build-Out. Any Future Land Use Map amendment impacting an area adjacent to a lake or other natural resource identified on the Future Land Use Map should be supported with a nitrate/nitrogen loading analysis prepared by a licensed professional geologist using professionally accepted methods that compares the existing land use activity to the proposed future land use activity at build-out. The analysis may take into account specific on-site BMPs and compensatory treatment for nitrate/nitrogen reduction, both on-site and off-site, including through the expansion and connection to central sanitary sewer. The analysis should demonstrate that the proposed development will not yield an increase in nitrate/nitrogen loading to groundwater and surface water.

Development in Flood Prone Areas

The National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA) has determined areas within Eatonville that are located within the 100 Year Floodplain. The FEMA Flood Zones Map for the Town of Eatonville is presented on the following page. The Public Facilities Element describes in more detail the Town's drainage system. In Compliance with the Federal Flood Insurance Program, the Town has adopted an ordinance which prohibits development in the 100 year Flood Plain unless flood-proof measures are undertaken. Four specific areas are affected:

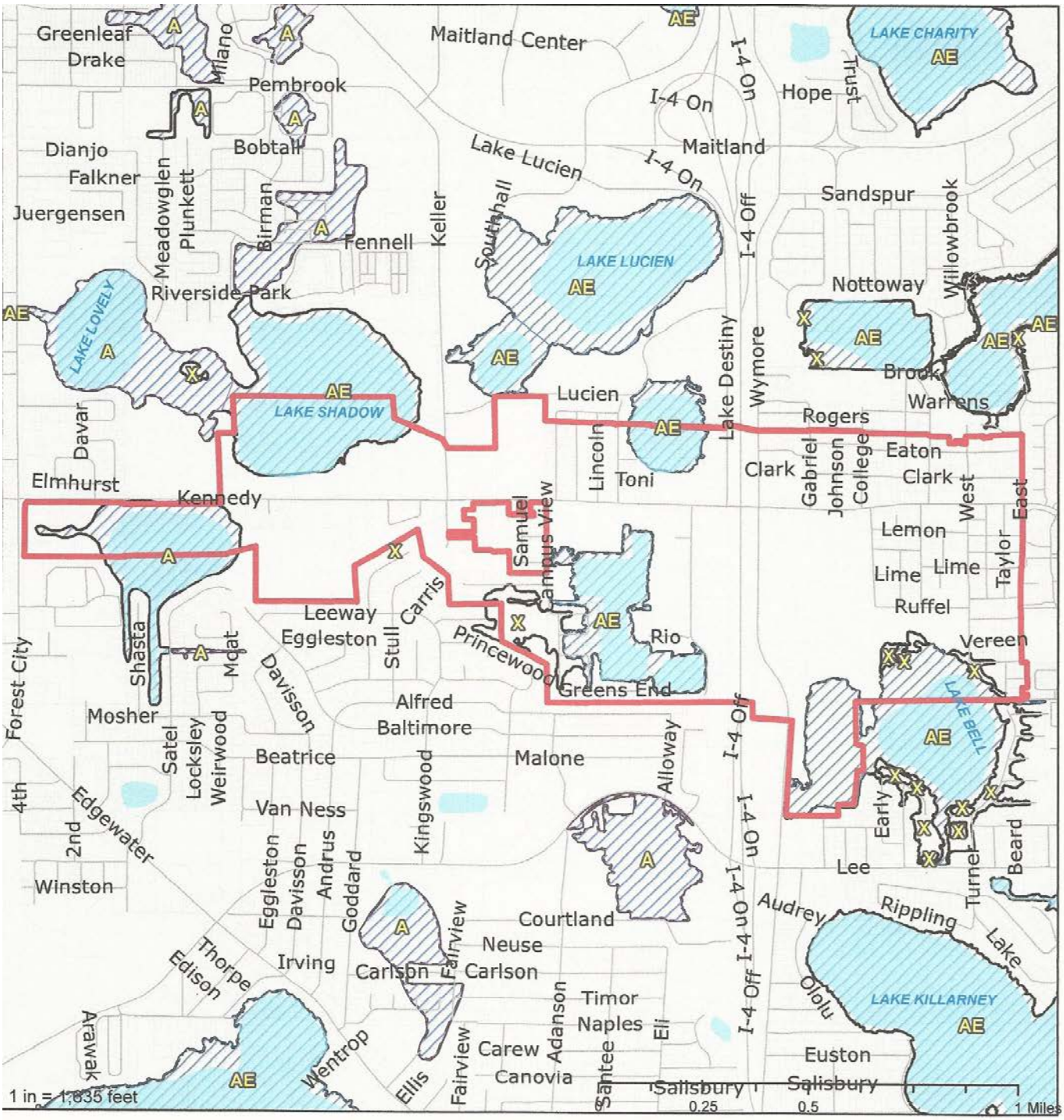
1. Industrial and Commercial development proposed on the large tract of land south of Kennedy Avenue and west of 1-4 will require flood-proofing. Because Lake King is not a natural lake, but rather a borrow pit, no negative environmental impacts should occur from filling in this area. Finished floor and Street elevations for this area should be established.
2. The area just north of Lake Bell is planned for recreation. This is ideal land use for a flood prone area as no permanent structures are proposed.
3. There is sufficient land area outside the flood plain for the planned commercial and office uses south of Lake Hungerford and Lake Shadow. Local land use controls should be enforced to prevent structures within the flood prone area unless flood-proofing is used and setbacks are established.
4. The area north of Lake Weston is only approximated as being flood-prone because no detailed methods were used. However, residential development planned for this area should be prohibited unless flood-proofing measures are used for a more detailed study redefines the flood plain.

The only areas in the Town that are considered as flood prone according to the Federal Flood Insurance Rate Map are those areas surrounding the local lakes. The Town has adopted an ordinance which prohibits development in these areas, according to guidelines of the Federal Flood Insurance Program, unless flood-proof measures are undertaken. The Town Land Development Code also establishes finished floor and Street elevations for all areas in the Town.

Significant Floodplain Functions and Development Constraints. This section summarizes floodplain functions in the hydrologic cycle and explains discusses need for regulation of development in the floodplain.

Floodplains serve the following important functions in the hydrologic cycle:

1. Floodplains provide natural storage and conveyance of flood waters;
2. Temporary storage of waters on floodplains regulates flood elevations and the timing, velocity and rate of discharge; and
3. Natural floodplains export detritus and other food sources to open waterbodies and are vital habitat for fish, birds, and wildlife and native plant communities.



NORTH

Town of Eatonville
FEMA Flood Zone Map

Flood Zones A AE X

Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone Moderate flood hazard areas, labeled 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. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded).

Regulation of development within flood plains is necessary in order to accomplish the following objectives:

1. Minimizes the potential for property damage and personal injury from flooding;
2. Restricts adverse interference with the normal movement of surface waters;
3. Maintains the optimum storage capacity of watersheds;
4. Maintains desirable water quality;
5. Maintains the natural hydrological and ecological functions of wetlands and other flood prone lands;
6. Prevents increased erosion and sedimentation;
7. Protects the public from the economic and social disruption of flood damage;
8. Protects the public from the costs of flood relief; and
9. Avoids the need to construct costly and environmentally disruptive flood management structures.

The Conservation Element identifies and discusses the following in greater detail:

1. Surface water resources, including water quality and quantity;
2. Air resources and quality;
3. Vegetative communities and aquatic habitats;
4. Floodplains;
5. Wetlands;
6. Aquatic resources

Historic Resources

The Florida Master Site File, maintained by the Florida Department of State, Bureau of Historic Preservation is the database where known, recorded archaeological or historic sites and structures are held as a public record. Also, a list of archeological finds has been recorded with the State Division of Archeological Resources. In 1990 the historic buildings of Eatonville were evaluated in terms of age, integrity, and significance by Tina Bucuvalas, Alice Grant, and Carl Shiver, who composed the *National Register List of Historic Places* Nomination. Its cultural and historic area has significant potential to showcase neo-traditional development since many of the principles of were implemented during the late 1800's. For instance, the Town exhibits a grid street pattern which first took form in the approximately 112 acres of land, including three of the Town's originally platted lands -- L. Lawrence's Eatonville Subdivision (c. 1886), Clark's Addition Subdivision (c. 1886), and Holden Brothers Subdivision (c. 1886) -- that were included in the Town's 1887 original incorporation. The subdivisions formed the basis for the Town's grid street pattern -- a primary element of today's "neo-traditional" neighborhood development pattern that has been experiencing a major resurgence nationally for the past three decades. The Town's early planning was a major factor in the federal Department of Interior's decision to place the Eatonville Historic District on the *National Register's List of Historic Places* in 1997. Map I-3 Table 1-15 lists the sites appearing in the Florida Master Site File and locations are identified within Map 1-6.

TABLE I-15: EATONVILLE HISTORIC RESOURCES INVENTORY: Sites Listed in the Florida Master Site File, page 1 of 2

FL Site ID #	Site Name	Location/Address	OCPA Parcel ID #	Name of Owner	Date Built	Uses	Comments
OR00382	E.L. Hungerford House	S College Ave			c.1915	Res/Apt	
OR05886	Robert F Hungerford Prep HS	100 E Kennedy Blvd	35-21-29-0000-00-090	OC BPI	c.1945	School	Earliest bldg 1945, then 1953-4, 1964-5, 1978, 1983, 1999
OR08537	Anne Levitt Residence	175 Wymore Rd	35-21-29-0000-00-147	JBC LLC	c.1945	Vacant	Gone; Lot Cleared
OR08539	L. Jones Residence	6 Eaton St	35-21-29-0000-00-167	Lewis, Norman	c.1940	Res	Town dates bldg c.1930
OR09017	Bryant Residence	50 Eaton St	35-21-29-0000-00-110	Bryant, Sarah	c.1935	Res	OCPA dates bldg 1930
OR09018	Telfair Boarding House	70 Eaton St	35-21-29-0000-00-148	Sealy, Frances	c.1930	Res/Bd Hse	OCPA dates bldg 1925, 2nd SF DU built 1947
OR09019	48 Eaton Street	48 Eaton St	OCPA Has No Listing	OCPA Has No Listing	c.1925	Res/Gar	Gone
OR09020	Telfair Residence	124 Gabriel St	35-21-29-0000-00-104	Sealy, Frances	c.1935	Res	OCPA dates bldg 1931/Town c.1930, 2nd SF DU built 1999
OR09021	Telfair Garage and Workshop	122 Gabriel St	Lot Merged with Above	Sealy, Frances	c.1935	Gar	Gone; ; Lot merge into Telfair Residence listed above.
OR09022	Pearson Residence	206 Gabriel St	35-21-29-0000-00-119	Blue, Fedow	c.1930	Res	Address formerly 106 Gabriel Avenue
OR09023	200 Johnson Avenue	200 Johnson Ave	35-21-29-5420-00-430	Allen, Cecil	c.1940	Res	OCPA dates bldg 1939, ill. P.25 HDDG*
OR09024	Harold Residence	137 Eaton St	35-21-29-5420-00-310	Larrier, Carlton	c.1942	Res	OCPA dates bldg 1928
OR09025	Thomas Residence	131 Eaton St	35-21-29-5420-00-300	Thomas, Willie D. Estate	c.1926	Res	OCPA dates bldg 1928
OR09026	Watts Residence	316 Fords St	35-21-29-2828-02-070	Watts/Bergman	c.1928	Res	OCPA dates bldg 1928
OR09027	Mitchell Residence	254 Eaton St	No Listing	No Listing	c.1930	Res	Gone, ill. p 24 HDDG* on same parcel 315 Eaton St res built 2005
OR09028	Robertson Residence	360 Eaton St	35-21-29-0000-00-152	Cecil B Allen Trust	c.1935	Res	OCPA dates bldg 1935
OR09029	345 Eaton Street	345 Eaton St	35-21-29-0000-00-090	Pickney, Marion	c.1935	Res	OCPA dates bldg 1935
OR09030	215 Calhoun Avenue	215 N Calhoun Ave	35-21-29-0000-00-030	Larue, Kyle and April	c.1935	Res	Gone; New home built 2005
OR09031	Jones Residence	251 Clark St	35-21-29-0000-00-038	Ndiforchu Cassandra Jones	c.1946	Dupl	OCPA dates bldg 1948
OR09050	Boyer Residence	337 Clark St	35-21-29-0000-00-130	Boyer, Minnie Woodruff	c.1935	Dupl	ill. p 10 HDDG*
OR09051	Montgomery Residence	339 Clark St	35-21-29-0000-00-039	Bailey/Governor	c.1940	Res	OCPA dates bldg 1950
OR09052	Spencer Residence	355 E Kennedy Blvd	35-21-29-0000-00-050	Spence, Alvin	c.1946	Res	OCPA dates bldg 1937
OR09053	24 Calhoun Street	24 N Calhoun Ave	35-21-29-0000-00-048	MMBC**	c.1928	Res	Gone; C-3 vacant land approved for MMBC parking lot
OR09054	Crooms Residence	30 N Calhoun St	35-21-29-0000-00-049	Crooms, Gertrude	c.1927	Res	ill. P.79 HDDG*
OR09055	37 Calhoun Avenue	37 N Calhoun St	35-21-29-1716-00-060	Hodoh, Louis	c.1935	Res	OCPA dates bldg 1927
OR09057	416 Clark Street	416 Clark St	35-21-29-1716-00-051	MMBC	c.1945	Res	Gone/replaced by 1963 SF
OR09058	428 Eaton Street	428 Eaton St	No Listing	No Listing	c.1935	Res	Gone
OR09059	498 Clark Street	498 Clark St	35-21-29-7754-00-080	Roundtree, Rudolph	c.1945	Res	Gone/OCPA dates replacement SF 1963

TABLE I-13: EATONVILLE HISTORIC RESOURCES INVENTORY: Sites Listed in the Florida Master Site File, page 2 of 2

FL Site ID #	Site Name	Location/Address	OCPA Parcel ID #	Name of Owner	Date Built	Uses	Comments
OR09062	Manning Residence	494 Clark St	35-21-29-7754-00-100	Thomas, Angela	c.1945	Res	Gone/OCPA dates replacement SF 1965
OR09067	7 West Avenue	7 N West Ave	36-21-29-2376-02-212	Golden Rule Housing & Community Dvlpt. Corp.	c.1935	Res/vacant	Gone/C-3 vacant lot
OR09068	526 Clark Street	526 Clark St	36-21-29-2376-02-200	Eatonville Capital LLC	c.1935	Res/vacant	Gone/vacant lot
OR09069	501 Kennedy Boulevard	501 E Kennedy Blvd	36-21-29-2376-02-231	MRECDC***	c.1946	Commercial	OCPA dates bldg 1938, ill. P.6 DG*
OR09084	Old AME Church/L. White Res	550 E Kennedy Blvd	36-21-29-1352-01-050	Elois White; Thomas Estate	c.1882	Commercial/Res	OCPA dates bldg 1901
OR09086	Robert Mosely House	11 Taylor Ave	36-21-29-1352-01-040	Zeta Educational Thespian Association Inc.	c.1888	Commercial/Res	OCPA dates bldg 1910, ill. p 78 HDDG*
OR09087	418 Kennedy Boulevard	418 E Kennedy Blvd	35-21-29-0000-00-070	MMBC**	c.1946	Res	Gone; C-3 vacant land approved for parking & church expansion
OR09101	Eatonville Historic District	See Map I- of Town of Eatonville Historic District which in Listed on the Federal Register of Historic Places					
OR09188	439 Lemon Street	439 Lemon St	Merged w/ Church Lot	MMBC**	c.1946	Res	Gone
OR09189	Richardson House	433 Lemon St	Merged w/ Church Lot	MMBC**	c.1953	Res	Gone
OR09190	437 Lemon Street	437 Lemon St	Merged w/ Church Lot	MMBC**	c.1953	Res	Gone
OR09191	102 Taylor Avenue	102 Taylor St	Parcel Not Listed	MMBC**	c.1935	Res	Gone, ill. p 57 in HDDG*
OR09192	124 Taylor Avenue	124 Taylor St	36-21-29-1352-05-020	Primas Altagracia	c.1935	Res	OCPA dates bldg 1945
OR09193	B. Royal Residence	139 People St	36-21-29-1128-01-130	Green, Herbert Jr.	c.1932	Res	OCPA dates bldg 1935
OR09194	Eunice Smith Residence	155 People St	36-21-29-1128-01-110	Trust with Multiple Shareowners	c.1953	Res	OCPA dates bldg 1951
OR09195	Wright Residence	192 People St	36-21-29-1128-01-100	Davis, Tammy	c.1946	Res	OCPA dates bldg 1948
OR09196	Washington Residence	509 S Ruffel St	36-21-29-1128-02-060	Washington, Billy Sr.	c.1946	Res	OCPA dates bldg 1952
OR09197	Johnson Residence	177 West Ave	36-21-29-1128-02-090	Johnson, Ladonna et al.	c.1947	Res	OCPA dates bldg 1945
OR09198	155A and 155B West Avenue	155 West Ave	No Listing	No Listing	c.1935	Duplex	Gone
OR09199	149 West Avenue	149 S West Ave	36-21-29-1128-02-120	Rogers, Ronald	c.1935	Res	OCPA dates bldg 1956
OR09200	F. Stewart Residence	147 S West Ave	36-21-29-1128-01-130	Leroy Carlos Phillips	c.1945	Res	OCPA dates bldg 1945
OR09201	137 West Avenue	137 S West Ave	36-21-29-1128-01-140	Green, Herbert Jr.	c.1935	Res	OCPA dates bldg 1940
OR09202	Howard Residence	125 S West Ave	36-21-29-1352-12-030	Hahne, Hans-Joachim	c.1925	Res	OCPA dates bldg 1926

* Eatonville Historic District Design Guidelines
** Macedonia Missionary Baptist Church
*** Macedonia Real Estate Community Development Corp

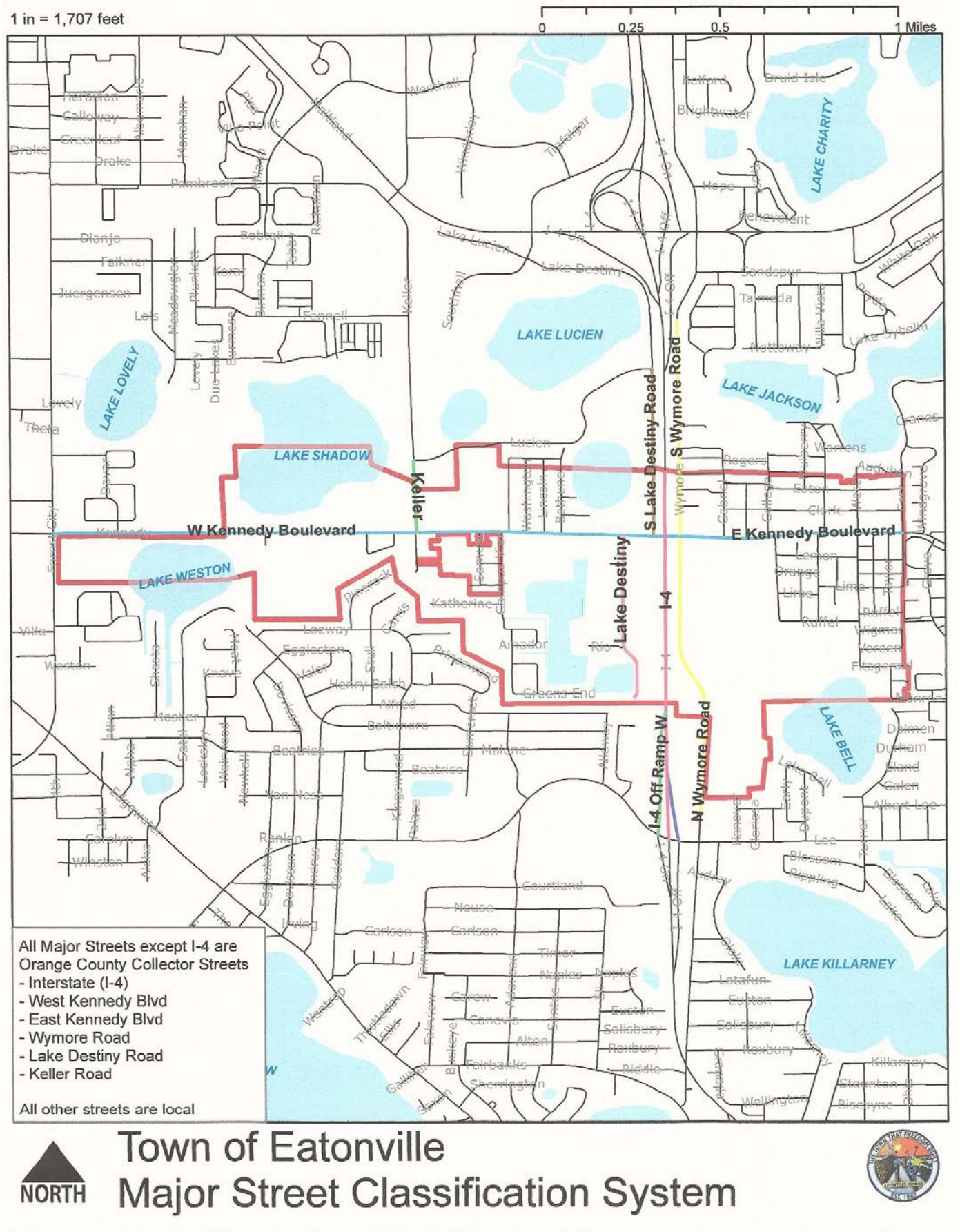
Other Land Use Management Issues

Land Use and Transportation Integration. Scarce land resources and historical development patterns make expansion of regional and local transportation corridors impractical without experiencing expensive allocation of public funds and/or adverse impacts to existing land uses and existing community character. Improved land use and transportation planning should generate improved mobility while preserving the Eatonville's image and character. The Town's Major Street Classification System Map is presented on the following page. A balance between land use and transportation is achievable by establishing urban design criteria and transportation systems that embrace the following recommended actions:

1. Establish a pedestrian- and bicycle-friendly environment that is attractive and entertaining. Pedestrian and bicycle route should connect residential areas with destinations, including shopping and employment centers, community facilities, especially schools, day care, parks and recreation facilities and other gathering areas and places of spiritual inspiration.
2. Development densities should be concentrated in a pattern that promotes economical operation of a transit system for residents and visitors.
3. Design, locate and construct a gateway entry program for the Town Center area using major intersections along the Town's collector streets: East and West Kennedy Boulevard, Wymore Road, Keller Road and South Lake Destiny Drive.
4. Continue to maintain and improve streetscape programs in areas scheduled for redevelopment based on approved streetscape plans.
5. Develop a "grid system" street network in the potential redevelopment area on within the planned Hungerford Redevelopment which is to become the southwest anchor of Town Center.
6. Work with Orange County and the local Metropolitan Planning Organization to coordinate economic development initiatives on the Hungerford property and on private land abutting the scheduled widening of the West Kennedy Boulevard corridor. Reinvestment in commercial and industrial land use initiatives are anticipated to accelerate with the completion of the corridor improvements and the addition of significant roadway capacity. However, the design of land improvements must incorporate streetscape amenities similar to those implemented along the East Kennedy gateway corridor.
7. Require bike facilities, including boulevards, bike lanes, bike ways, multi-use paths wherever feasible.
8 "Adopt Complete Streets" programs approach to support walking and biking infrastructure or incorporated design specifications into your rules and standards that make streets safe for users of all abilities and ages. Prioritize the support and maintenance of a network of walking trails or routes. Consider establishing a program to identify and fill connection gaps and make repairs in the system of sidewalks.
9. Support and maintain bicycling routes that are connected and lead to destinations such as shopping and employment centers, community facilities, especially schools, day care, parks and recreation facilities and other gathering areas and places of spiritual inspiration. Consider adopting a program to identify and remedy potholes and other hazards and repave bike lanes as necessary.
10. Continue to maintain and improve the Town's parks and continue to scheduling timely capital improvements to repair and upgrade existing parks. Implement planned facilities to accommodate field sports as part of the Hungerford redevelopment initiative and consider other areas that can accommodate such field sports facilities based on accommodating unmet demands.
11. Enhance access to public transportation. Coordinate with the Links transit program that has plans to improve service routes within the Town, especially considering the planned improvements to gateway corridors. Ensure that the Hungerford redevelopment accommodates needed bus stops and shelters and establish continuing efforts to initiate such transit support facilities to meet anticipated future demands as gateway improvements come online.
12. Coordinate with Orange County to ensure that appropriate street signage is installed and maintained on the Town's major collector streets and ensure that appropriate roadway, bikeway, and sidewalk improvements are generated to help maintain speed controls and design enhancements to promote safe travel and healthy life styles for motorists, bicyclists, and pedestrians.
13. Maintain efforts to conceive successful strategies for implementing enhanced personal safety at special events and other gathering places where law enforcement surveillance is a standard measure of safety. Also, continue to promote:
    - Neighborhood Crime Watch;
    - People-Scale Street Lights in gathering areas where night-time activity is prevalent.

Land Use Considerations in Healthy Living and Health Lifestyles. The Town has been involved in programs to promote healthy living and healthy lifestyle, including combating obesity. The following activities are recommended programs and activities to promote healthy living and healthy lifestyles.

1. Continue to support increased access to physical activity by implementing a system of "Complete Streets," to promote increased walking, pedestrian and bicyclists safety, and reduced conflict between pedestrians, bicyclists and motorized vehicles.
2. Coordinate with Orange County School Board through "Shared Use Agreements" that ensure that school sites and recreation facilities are co-located and promote educational and physical activities.


1 in = 1,707 feet
0
0.25
0.5
1 Miles
LAKE CHARITY
LAKE LUCIEN
LAKE LOVELY
LAKE JACKSON
LAKE SHADOW
LAKE WESTON
LAKE BELL
LAKE KILLARNEY
Keller
S Lake Destiny Road
S Wymore Road
W Kennedy Boulevard
E Kennedy Boulevard
Lake Destiny
I-4
I-4 Off Ramp W
N Wymore Road
All Major Streets except I-4 are Orange County Collector Streets
- Interstate (I-4)
- West Kennedy Blvd
- East Kennedy Blvd
- Wymore Road
- Lake Destiny Road
- Keller Road
All other streets are local
NORTH
Town of Eatonville
Major Street Classification System

3. Consider generating incentives to attract a supermarket/grocery store, fresh food retailers to the Hungerford redevelopment to reduce travel needs to facilities outside of the Town limits.
4. Attract a farmer's market that sell farm-fresh fruits and vegetables to locate in strategically located underserved areas.
5. Consider opportunities to accommodate incubator (start-up) businesses in strategically located underserved areas, with special attention to businesses that can create venues for serving healthy foods.
6. Continue the Town's programs that promote healthy living and lifestyles. Support programs that engage the community in preventing health inequities in planning development and transportation projects, including:
   - Protocols for Assessing Community Excellence in Environmental Health (PACE EH); or
   - Health Impact Assessments (HIA)
7. Consider participating in programs such as the following that promote incorporating healthy lifestyles in municipal civic affairs:
   - School Health Advisory Committee (SHAC)
   - Community Health Improvement Plan
   - Mobilizing Action Through Planning Partnerships (MAPP)
   - Mayor's Fitness Challenge
   - Adoption of a proclamation related to Healthy Weight Community Champions
8. Consider adopting a Healthy Living Element for Comprehensive Plan
9. Participation in any other health planning related to increased physical activity and improved nutrition

Community Appearance. The Town's built environment affects the quality of life for year-round residents and impacts the Town's image and market attraction. Urban design guidelines that incorporate best management principles and practices for achieving compatibility and enhanced community appearance should be integrated into the Land Development Code to ensure an improve Town image and market attraction along the West Kennedy Boulevard gateway corridor. These guidelines should include the following principles: New development and redevelopment shall be planned to achieve a general appearance and scale consistent and compatible with the best management principles and practices of planning and design. Landscaping and buffering requirements that reinforces an overall design theme that preserves functional open space and incorporates high quality principles of landscaping for vehicular and non-vehicular areas, pedestrian walkways, the internal circulation system, and building entryways and facades;

1. New development and redevelopment shall be planned to achieve a general appearance and scale consistent and compatible with the best management principles and practices of planning and design.
2. Landscaping and buffering requirements that reinforces an overall design theme that preserves functional open space and incorporates high quality principles of landscaping for vehicular and non-vehicular areas, pedestrian walkways, the internal circulation system, and building entryways and facades;
3. An overall design that fosters pedestrian connectivity as well as a design that demonstrates harmony in the relationships of buildings within the project and compatibility with the land uses, scale of development, and design of the surrounding environs;
4. Site plans should address specific design principles that result in a compatible and harmonious scale of development and massing of buildings, use of high quality building materials, and shall include building facade elevations, rooflines and fenestration (i.e., character and interrelationships of facade design components including windows, dormers, doors, and roof design), intensity/density, height, setbacks, and an open space system that successfully demonstrates how the above criterion 3 shall be met.
5. Site plans for signage should prevent incompatible signage in terms of style, size and location negatively impacts the West Kennedy gateway. The update of the Land Development Code should include recommended revisions to the existing sign regulations, including a review process that considers urban design criteria. The Land Development Code should also address appropriate review and approval mechanisms for accommodating the implementation of design guidelines.

Protect and Conserve Natural Resources. Quality of water within the Town is a major concern as stated in the 2005 Stormwater Master Plan. Future development and redevelopment must avoid adverse impacts to natural resources and provide adequate mitigation where state agencies having jurisdiction approve regulatory encroachment. Development should be designed and constructed to retain the natural environment. Scenic vistas of lake shoreline areas and waterways should be considered in the design of buildings and incorporated into site design. To protect lake shoreline areas and natural resources from adverse impacts generated by new development or redevelopment, buffers should be established to create horizontal separation between natural and build environments. Shoreline erosion must be prevented by applying best management principles and practices.

Redevelopment Issues

The ambiance of Eatonville is rooted in a rich Black cultural heritage, a historic development pattern that fosters a traditional neighborhood grid, and a redeveloping town center, including a new Town Hall and the expanding Zora Neale Hurston Museum. The Eatonville Town Center currently traverses the narrow East Kennedy Boulevard corridor and includes the Town Hall, the Zora Neale Hurston Museum, the Hungerford Elementary School, the Eatonville library, several churches, a small commercial strip center, restaurants, and couple of local taverns. In 2016 the Town completed a major streetscape initiative funded through a Community Development Block Grant. East Kennedy Blvd. is and shall remain a two-lane pedestrian oriented complete street.

Proposed Hungerford Planned Mix-Use Redevelopment. Mixed-Use development includes a mix of residential, commercial, and office land uses located on the same property as indicated on the Orange County Property Appraiser's mapped property files for incorporated and unincorporated Orange County. Although this designation appears on the Future Land Use Map, no mixed-use development currently exists on properties currently designated Mixed-Use southeast of Lake Shadow.

However, a contract for the sale of the 83.66-acre Hungerford Property currently owned by the Orange County School Board, has been executed with the Town of Eatonville. The site includes 72.65 acres of upland and 11.01 acres comprising a portion of lake property. The contract includes a phased schedule for the sale of the site for a mixed-use redevelopment. The site has a proposed Mixed-Use designation on the proposed 2018 Comprehensive Plan Future Land Use Map.

The Town has issued a Request for Proposals (RFP) for the sale and redevelopment of the 72.65-acres Hungerford uplands by a developer in partnership which the Town of Eatonville. The RFP envisions a Hungerford Mixed-Use Redevelopment that will serve as the southwest anchor of the Town Center. The proposed redevelopment is addressed herein under the topic "Proposed Hungerford Planned Mix-Use Redevelopment." Table I-3 states recommended mixed use density and intensity of the proposed Hungerford Mixed Use designation].

The Hungerford Elementary School located on the property south west of the intersection of the intersection of S. College Avenue and Ruffel Street will be relocated to south of Ruffel Street near the Denton Johnson Community Center and the Boys and Girls Center a couple of blocks east of the current location. The proposed redevelopment site has been designated for mixed-use development on the proposed 2018 Comprehensive Plan Future Land Use Map. The redevelopment will be guided by the terms of the proposed objectives and policies of the Comprehensive Plan Future Land Use Element and regulatory measures of a proposed Hungerford Planned Redevelopment District (H-PRD) to be included in the Land Development Code. A proposed H-PRD district shall provide a flexible management framework for achieving objectives for Hungerford redevelopment consistent with the Town of Eatonville Comprehensive Plan for the redevelopment for mixed use development in the historic downtown Hungerford property. For instance, the H-PRD district provides for negotiating private sector redevelopment objectives that reinforce and advance public sector goals, objectives and policies for mixed use redevelopment and resource conservation. The purpose of the H-PRD district is to:

1. Create a quality sense of place, character and image with high performance infrastructure.
2. Require mixed use redevelopment within the Hungerford Town Center as well as commercial, residential, public and semi-public land uses that exemplify best planning and management principles and practices of economic development, urban design, and amenities that foster economic development, healthy living and working environments and cultural enrichment.
3. Achieve unified design and function of the various uses comprising the Hungerford-Planned Redevelopment District.
4. Encourage a more productive use of land consistent with the public objectives and standards for accessibility, land use compatibility and effective connectivity among activity centers in the Hungerford Planned Redevelopment District and to other portions of the Town Center on East Kennedy Boulevard.
5. Promote efficient use of land by facilitating cost effective infrastructure by ensuring implementation of master plans for drainage and stormwater management; transportation improvements, and expansion of upgraded water and wastewater systems.
6. Stimulate opportunities for economic development and varied housing opportunities and an attractive business climate.
7. Conserve and protect the natural environment including wetlands, flood prone lands, natural habitat, flood prone lands, and other environmentally sensitive lands; and
8. Ensure suitably located open space, recreational opportunities, waterfront amenities, an expansive pedestrian system that links pedestrians with civic amenities, working and living areas, consumer markets, communication venues, and places for gathering, cultural enrichment, education, and healthy life pursuits.
9. Achieve low impact designed "green streets" and sidewalks, and promote environmentally designed parking facilities throughout the district.
10. Effectuate CRA cost sharing policies for infrastructure improvements and coordinate infrastructure sharing with the proposed new elementary school.

Town Center Redevelopment. The Eatonville Town Center traverses the narrow East Kennedy Boulevard corridor and includes the Town Hall, the Zora Neale Hurston Museum, the Hungerford schools, a library, several churches, a small commercial strip center, mom and pop restaurants featuring soul food, and a couple of local taverns. During 2006 the Town completed a major streetscape initiative funded through a Community Development Block Grant. In order to preserve the function, form, scale and character of the historic district the Town has maintained the two-lane Main Street (East Kennedy Boulevard) that preserves the pedestrian scale, includes landscaped walkways—equipped with street furniture, unified design of street lighting, and transit shelters to accommodate an improved system of transit. The Wekiva plan amendments included design attributes to nurture a revitalized and expanded Town Center that advances this objective and promotes urban design initiatives consistent with retaining the scale and characteristics of pedestrian oriented Town Centers.

Hungerford Property

The Town's Community Redevelopment Agency Plan has consistently promoted these initiatives and promotes the establishment a multi-modal transportation corridor along East and West Kennedy Boulevard and ensures that the design, specifications, and pedestrian scale of the East Kennedy corridor improvements retain their planned function and form over the long-term horizon (2030) and beyond. The Orange County capital improvement program contains funding to complete the right-of-way acquisition and construction of the 4-lane widening of the West Kennedy Boulevard corridor from Forest City Road to Wymore Road by 2019. The site includes mixed use along the East Kennedy and Wymore Gateway corridors. The interior of the site should be re-designated Mixed Use upon adoption of an update redevelopment plan.

Industrial. Developed industrial land 46.06 acres constitutes 10% of the Town's developed land. The Town's industrial base is concentrated along the South Lake Destiny corridor west of I-4 and south of West Kennedy Boulevard. The Town has a vibrant industrial base including high value automobile sales and full service, building trades, and boat sales. The area has expansion potential. The major catalyst to achieving the industrial expansion potential rests with the extension and connection of the South Lake Destiny corridor with Lee Road, a major east-west corridor that has direct linkage to I-4 at the Lee Road interchange located less than a quarter of mile southeast of the South Lake Destiny southern terminus.

The Town is coordinating with Orange County to achieve improvements that will directly link the Lake Destiny South corridor to Lee Road. These improvements would substantially improve accessibility and significantly extend market penetration. Approximately 39.09 acres of undeveloped industrially designated land is located north and east of Lake Weston. The deteriorating level of service on West Kennedy Boulevard has adversely impacted the development of this parcel.

Institutional. The Town contains approximately 234.52 acres of land in institutional land use, including 150.71± acres of civic open space), including the following: Town Hall, Hungerford Prep High School and Elementary School, places of worship, good will operations, Audubon Society, family and day care facilities, nursing homes, and similar life support facilities. Locations for such uses occur where the size and scope of activity remain compatible with surrounding uses.

NONCONFORMING USES

The Town will continue to implement the following policies to reduce or eliminate all existing land uses which do not conform to with the land use designations on the Future Land Use Map. The policies are implemented through the nonconforming regulatory provisions within the Land Development Code.

- Any use, building, or structure lawfully in existence before December 1, 1991 became a nonconforming use with the adoption of the December 1, 1991 Land Development Regulations.
- Any use, building, or structure is a nonconforming use if its use, structure, or any physical characteristics are not in full compliance with the use provisions in the Future Land Use Map and the use as well as the bulk regulations and other substantive provisions of the Town's adopted Land Development Code.
- No nonconforming use shall be enlarged, extended, reconstructed, substituted or structurally altered unless it is for normal maintenance, repair, or incidental alteration which does not increase an existing nonconformity and is determined to improve the preexisting nonconformance.
- A nonconforming use not used for a period of six (6) months, shall be considered as abandoned. Such nonconforming use shall not be revived.
- When fifty (50) percent or more of the existing floor area of a nonconforming structure is destroyed by fire or natural disaster, and as a result becomes unsafe or unusable, the use of this structure shall be terminated.

CHAPTER 2: TRAFFIC CIRCULATION ELEMENT DATA INVENTORY AND ANALYSIS

The Town of Eatonville's 2016 population base on the University of Florida Bureau of Economic and Business Research US Census estimate is approximately 2,299 people. The Town is located adjacent to the City of Maitland to the east and northeast. The dominant land use within these adjacent areas is residential development, including predominantly single-family development to the east and a mix of single-family and multiple-family to the northeast. The Town is bounded on the north and east by Maitland. On the west Eatonville abuts unincorporated Orange County and development in to the west is predominantly commercial. To the south, east of Lake Wilderness and I-4, the Town abuts the City of Winter Park where the development pattern is primarily single-family residential development. To the south, west of Lake Wilderness and I-4, Eatonville borders unincorporated Orange County where development is commercial west of I-4 and south of the Town's Interstate Industrial Park. However, southwest of the Interstate Industrial Park, Lake King, and south of the southwest Town limits, unincorporated Orange County single-family residential development is the dominant land use. East and West Kennedy Boulevard is the major east-west spine of the Town of Eatonville and connects U.S. 17-92 to the east, U.S. 441 to the west and Interstate-4 which bisects the Town of Eatonville. The I-4 corridor connects the Town of Eatonville with the east and west coast of Central Florida. These transportation facilities provide the Town of Eatonville with excellent access and connects the Town with major regional markets for goods, services and other major thoroughfares connecting the Town with nationwide destinations.

Characteristics of Eatonville Major Roadways. The Town has on two major roadways—Kennedy Boulevard and Wymore Road--both of which are Orange County maintained collector roads. The segment of Keller Road from W. Kennedy Boulevard north to the Town Limits is also a County maintained collector road. The Orange County adopted level of service standard for collector roads is LOS E. Interstate-4 segment from the south Town limits to the north Town limits is a Federal Interstate Highway. All other roadways in the Town are local roads. The I-4 facility has no interchanges within Eatonville. Table TCE-1: "Generalized Peak Hour Level of Service (LOS) Standards and Supporting Data" describes all planned improvements to Orange County maintained collector streets located in Eatonville. The following page presents the Town's Major Street Classification System.

TABLE II-1: GENERALIZED PEAK HOUR LEVEL OF SERVICE (LOS) STANDARDS:
WITH SUPPORTIING DATA FOR COUNTY ROADWAYS IN EATONVILLE
Including Available Capacity of Orange County's Network of Major Roadways within the Town of Eatonville [1]

Collector Roadways	Roadway Segment		Functional Classificat'n	Existing # Lanes	Capacity	Peak	Encumbered Reserved Trips	Available Capacity	Urban County Maintained LOS	
	From	To							Exist'g[3]	2030
Keller Rd	W. Kennedy Bld.	Maitland Limit	Collector	2	880	410	0	470	B	E
W Kennedy Bld.[2]	Forest City Rd.	Keller Rd.	Collector	2	860	980	15	0	F	E
W Kennedy Bld.[2]	Keller Rd.	Wymore Rd.	Collector	2	860	980	1	152	D	E
W Kennedy Bld.	Wymore Rd.	Lake Av.	Collector	2	860	707	0	219	C	E
Wymore Rd.	Lee Rd.	W Kennedy Bld.	Collector	2	880	564	0	316	C	E
Wymore Rd.	W. Kennedy Bld.	Maitland Bld.	Collector	2	880	551	0	329	C	E

Source: Orange County 2030 Long Range Transportation Plan: Description of Roadways in Transportation Element Data and Analysis.

1 The County Collector Street segments identified above are the only major roadways within the Town of Eatonville.

2 The W. Kennedy Boulevard segment from Forest City Road to Keller Road is the only deficient link on the Town's network of major roadways. This facility is programmed for completion in 1019. See Table TCE-3. The W. Kennedy Boulevard.

Table TCE-2: "MetroPlan Orlando Cost Feasible Projects: Year 2040 Long Range Transportation Plan" describes planned funding for roadways located in the town of Eatonville. Each of these facilities are collector roadways maintained by Orange County.

TABLE II-2: METROPLAN ORLANDO COST FEASIBLE PROJECTS: YEAR 2040 LONG RANGE TRANSPORTATION PLAN
Orange County Project Costs ($000's) by Plan Year

Collector Roadways	Segment		Improvement	Distance	2013	2020	2025	2030	2040
	From	To							
Wymore Rd.	Lee Rd.	E. Kennedy Blvd.	Widen to 4 Lanes	0.89 mile	$6,000	$7,200	$8,100	$9,540	$12,180
W. Kennedy Blvd.	Forest City Rd.	Keller Rd.	Widen to 4 Lanes	1.02 miles	$6,800	$8,228	$9,180	$10,812	$13,804
W. Kennedy Blvd.	Keller Rd.	Wymore Rd.	Widen 4 Lanes	0.74 mile	$5,000	$6,050	$6,750	$7,950	$10,150

Source: Technical Report 3: Plan Development & Cost Feasible Projects: Adopted—January 2016; Updated August 2016, MetroPlan Orlando "A Regional Transportation Partnership"

W. Kennedy Blvd Improvement Program in MetroPlan Orlando Prioritized TRIP Funding List. --Candidate Projects for Transportation Regional Incentive Program (TRIP) Funds. Table TCE-3: "MetroPlan Orlando MetroPlan Orlando FY 2021-2022 through 2039-2040 Prioritized Project List" presents the MetroPlan Orlando prioritized schedule for roadway projects within the Town of Eatonville adopted by the MetroPlan Board on September 14, 2016. Table TCE-3 indicates that the right-of-way acquisition and construction for the 4-lane widening of W. Kennedy from Forest City Road east to Wymore Road is scheduled to be completed by 2019.The improvements are also included in the Orange County Five-Year Capital Improvements Program.

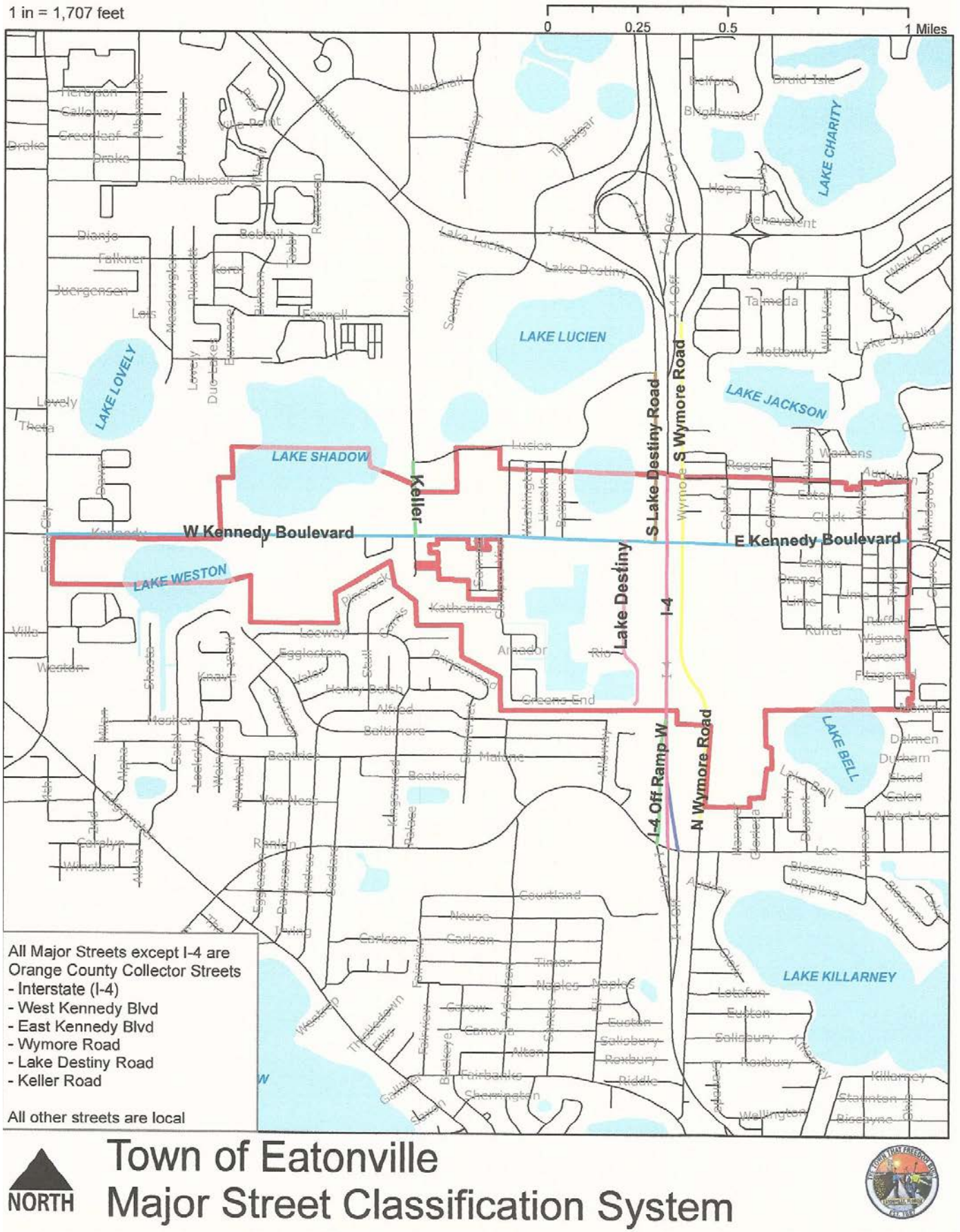

1 in = 1,707 feet
0
0.25
0.5
1 Miles
LAKE CHARITY
LAKE LUCIEN
LAKE LOVELY
LAKE SHADOW
LAKE JACKSON
LAKE WESTON
LAKE BELL
LAKE KILLARNEY
W Kennedy Boulevard
E Kennedy Boulevard
Keller
S Lake Destiny Road
S Wymore Road
Lake Destiny
I-4
I-4 Off Ramp W
N Wymore Road
All Major Streets except I-4 are Orange County Collector Streets
- Interstate (I-4)
- West Kennedy Blvd
- East Kennedy Blvd
- Wymore Road
- Lake Destiny Road
- Keller Road
All other streets are local
NORTH
Town of Eatonville
Major Street Classification System

TABLE II-3: METROPLAN ORLANDO: FY 2021-2022 through 2039-2040 PRIORITIZED PROJECT LIST
W. Kennedy Blvd R/W Acquisition and Construction Program:
Candidate Projects for Transportation Regional Incentive Program (TRIP) Funds

Collector Roadways	Segment		Improvement	Distance	Project Phases	Fiscal Yr.	Estimated Cost Present Day	TRIP Funds Requested	Total Matching Funds To be Provided
	From	To							
W. Kennedy Bld.	Forest City Rd.	Wymore Rd.	Widen to 4 Lanes	1.8 miles	R/W	2015-16	$12,000,000	$6,000,000	$6,000,000
					Construction	2018-2019	$15,000,000	$7,500,000	$7,500,000
					Total		$27,000,000	$13,500,000	$13,500,000

Source: Orlando Urban Area FY 2021-22 through 2030-40 Prioritized Project List, Adopted by MetroPlan Orlando Board September 14, 2016; MetroPlan Orlando "A Regional Transportation Partnership", page 25. The TRIP matching fund request does not represent commitment to funds. However, this segment of W Kennedy from Forest City Road to Wymore is included in the Orange County Five-Year Capital Improvements Program.

Historical Significance of E. Kennedy Boulevard. East Kennedy Boulevard extending from Wymore Road to the east Town limit (also City of Maitland municipal limit) is the main spine of the Town Center and the Eatonville Historic District. The Eatonville Town Center traverses the narrow East Kennedy Boulevard corridor and includes the Town Hall, the Zora Neale Hurston Museum, the Hungerford Elementary School, a library, several churches, a small commercial strip center, mom and pop restaurants featuring soul food, and a couple of local taverns. The Eatonville Historic District is listed on the National Registry of Historic Places of the federal Department of Interior. In fact, the major rationales for the listing on the National Registry as reported in nomination documents was to preserve the traditional planning and development character of the "Nation's Oldest Black Incorporated Municipality in America" and to preserve the cultural heritage of Eatonville as characterized in the 1996-7 successful nomination package supporting the listing of the Town of Eatonville Historic District into the National Registry of Historic Places.

To preserve the function, form, scale and character of the historic district the Town has maintained E. Kennedy Boulevard as a traditional two-lane designed main street with physical attributes including a pedestrian scale, landscaped walkways, street furniture, uniformly designed street lighting, and transit shelters to accommodate an improved system of transit. The Town plans to extend these improvements along W. Kennedy Boulevard. The Community Redevelopment Agency Plan and the Town Council have consistently promoted these initiatives and promote the establishment a multi-modal transportation corridor along East and West Kennedy Boulevard consistent with the MetroPlan Orlando flexible bus 2040 Transit Blueprint initially adopted in the 2030 Long Range Transportation Plan as the Transit Vision Concept Plan. These initiatives ensure that the design, specifications, and pedestrian scale of the East Kennedy corridor improvements retain their planned function and form over the long-term horizon (2030) and beyond. The Orange County capital improvement program contains funding to complete the right-of-way acquisition and construction of the 4-lane widening of the West Kennedy Boulevard corridor from Forest City Road to Wymore Road by 2019. The Town has applied these planning practices in planning for the redevelopment of the Hungerford property as herein described.

East Kennedy Blvd.

Hungerford Property

Hungerford Planned Mix-Use Redevelopment. The Hungerford Preparatory High School and Elementary School site, owned by the Orange County School Board, comprises 99± acres, including 86.67± acres of uplands and the 12.33 acres of lakes and wetlands. As illustrated on the picture to the right of this paragraph, the location of the Hungerford property abuts the East Kennedy Boulevard to the north, Wymore Road to the west, S. Calhoun Avenue extended to the Town limit to the east, and the Town limit to the south. The Orange County School Board and the Town of Eatonville have entered a contract which conveys subject Hungerford property to the Town for the mixed-use redevelopment of the property. The Town Council has published and distributed a Request for Proposals for a private development firm to purchase, plan and redevelop the Hungerford property. The Town Council and The Orange County School Board have agreed that the Hungerford Elementary School located on the property south west of the intersection of the intersection of S. College Avenue and Ruffel Street will be relocated to south of Ruffel Street near the Denton Johnson Community Center and the Boys and Girls Center a couple of blocks east of the current location. The proposed redevelopment site has been designated for mixed-use development on the proposed 2018 Comprehensive Plan Future Land Use Map.

Plan for an Additional Street to Connect Wymore Road with US Highway 17-92. The redevelopment project is planned as a mixed-use extension of town center and will become the western anchor of the Town Center and the redeveloped Hungerford property will become the west anchor of an expanded Town Center. Redevelopment plans include a new east-west roadway that will connect Wymore Road to Monroe Street which forms a due east connection to US Highway 17-92. This facility will assist in maintaining the adopted level of service on East Kennedy Boulevard. The Town of Eatonville has a development agreement with a developer to purchase and redevelop the Hungerford property.

The Town Council is forming a public-private partnership with the developer to redevelop the Hungerford property. The private sector firm will be involved in funding a proposed east-west roadway on the Hungerford property that will connect Wymore Road to Monroe Street which forms a due east connection to US Highway 17-92.

Coordination with MetroPlan Orlando, Orange County, the State, the City of Maitland, and the FL-DOT. The Town of Eatonville must work with MetroPlan Orlando, Orange County, the State and the City of Maitland to not only enforce levels of service standards, but also to provide for the proper signage and maintenance of area roadways.

The Town will coordinate with these entities to promote alternative strategies to increase pedestrian and transit and to plan a proposed east-west roadway on the Hungerford property that will connect Wymore Road to Monroe Street which forms a due east connection to US Highway 17-92. The Town of Eatonville routinely coordinates with the Florida DOT, Orange County, MetroPlan Orlando, and the City of Maitland in addressing traffic circulation issues. In 2016, the Town Council and the FL-DOT agreed upon a property swap to enable the DOT to construct a drainage facility to site delineated on the above Hungerford property illustration.

Local Roadways. The following page includes Table TCE-4 "Town of Eatonville Locally Maintained Local Streets". The streets are not part of the major thoroughfare system and principally serve residential single- family development.

Table II-4: Town of Eatonville Maintained Local Residential Streets

Street Name	Lineal Roadway Feet	Roadway Area in Square Yards
Bethune Avenue	950	2,536.50
Deacon Jones Boulevard	950	2,536.50
Lincoln Avenue	950	2,536.50
Park Place	375	1,001.25
Toni Street	375	1,001.25
Washington Street	950	2,536.50
Belair Street	600	1,602.00
Clark Street	2,007	5,358.69
East Street	1,875	5,006.25
Eaton Street	1,957	5,225.19
Ford Street	600	1,602.00
Gabriel Avenue	1,300	3,471.00
Johnson Street	750	2,002.50
Mulberry Street	250	667.50
College Avenue	2,250	6.007.50
West Street	2,900	7,743.00
Amador Circle	1,100	2,937.00
Campus View Drive	7,200	19,224.00
Greens End Street	700	1,869.00
Kathrine Street	1,200	3,204.00
Lake Destiny Drive	1,100	2,937.00
Sunny View Circle	1,250	3,337.50
Berthmann Lane	250	667.50
Calhoun Street	2,150	5,740.50
Elizabeth Street	700	1,869.00
Fitzgerald Street	688	1.836.96
Jonotey Drive	500	1,335.00
Lemon Street	1,850	4,939.50
Lime Street	1,775	4,739.25
Mosley Street	1,150	3,070.50
Orange Avenue	550	1,468.50
People Street	1,135	3,030.45
Ruffel Street	1,813	4,840.71
Taylor Street	1,250	3,337.50
Vereen Drive	688	1,836.96
Wigman Drive	688	1,836.96
Perlman Court	250	667.50
Totals: 47,026 linear feet = 8.90 miles		116,948.67 sq. yards

Source: Town of Eatonville Street Survey, 2010. No extensions or new local streets have occurred since survey was completed in 2010.

CHAPTER 3: HOUSING ELEMENT COMPREHENSIIIE PLAN DATA INVENTORY AND ANALYSIS

INTRODUCTION

This section identifies the required components of the Comprehensive Plan Housing Element based on the Florida Community Planning Act enacted June 2, 2011.

Housing Element Part I: Data Inventory and Analysis. Part I of the Housing Element as explained in this section addresses 1) Data and Analysis Requirements; and 2) Planning issues that must be addressed in meeting existing and projected housing needs.

Housing Element Part II: Goals, Objectives and Policies. Part II of the Housing Element states the Town of Eatonville adopted Comprehensive Plan Housing Element Goals, Objectives, and Policies which include principles, guidelines, standards, strategies, and programs to meet housing needs.

Housing Element and Florida Community Planning Act (CPA). The Florida Community Planning Act (CPA) in s.163.3177(6)(f) FS, requires the preparation of a housing element that includes the following data taken from the latest decennial US Census or more recent estimates [ref: s. 163.3177(6)(f2), FS]:

- Number and distribution of dwelling units by:
  - √ Type
  - √ Tenure
  - √ Age
  - √ Rent
  - √ Value
  - √ Monthly cost of owner-occupied units
  - √ Rent or cost to income ratio
- Number of substandard dwelling units
- Analysis of Current and Projected Housing Needs. The Community Planning Act (CPA) in s.163.3177(6)(f)(2), requires the data be analyzed to quantify estimates of the current and projected housing needs of the Town. The analysis must include the following:
  - √ Methodology used to estimate the condition of housing
  - √ Projection of the anticipated number of households by size, income range and age derived from the population projections
  - √ Minimum housing need of current and projected future Town residents.
- Objectives and Policies to Meet Housing Needs. The Florida CPA in ss. 163.3177(6)(f)(3), FS, requires that the Housing Element express objectives and policies that includes strategies and programs to meet housing needs, including the following:
  - √ Creation and preservation of affordable housing for all current and anticipated future residents of the jurisdiction;
  - √ Elimination of substandard housing conditions;
  - √ Adequate sites and distribution of housing for a range of incomes and types, including mobile and manufactured homes.
  - √ Provide programs/actions to meet housing needs with private & nonprofit sector partners.
  - √ Streamline the permitting process, and minimize costs and delays for affordable housing;
  - √ Establishment of standards to address the quality of housing, stabilization of neighborhoods, and identification and improvement of historically significant housing.
- Other Objectives and Policies. Additionally, the CPA in ss. 163.3177(6)(f)(1) FS, requires that the housing element include goals, objectives, and policies addressing:
  - √ Provision of housing for all current and anticipated future residents of the Town.
  - √ Elimination of substandard dwelling conditions.
  - √ Structural and aesthetic improvement of existing housing.
  - √ Adequate sites for future housing, including: affordable workforce housing; housing for low-income, very low-income, and moderate-income families; mobile homes; and group home facilities and foster care facilities, with supporting infrastructure and public facilities.
  - √ Provision for relocation housing
  - √ Identification of historically significant and other housing for purposes of conservation, rehabilitation, or replacement.
  - √ Formulation of housing implementation programs.
  - √ Create or preserve affordable housing to minimize need for additional local services and avoid affordable housing units concentrated only in specific areas of the Town [s163.3177(6)(f)(1)].

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

This EAR-based update of the Town of Eatonville Comprehensive Plan Housing Element includes the data and analysis requirements documented herein. The estimates of current and projected population and housing characteristics and housing needs serves as the basis for quantifying estimates of housing needs that have been used in preparing housing goals, objectives and policies addressing strategies, programs, and actions needed to meet housing needs now and in the future.

INVENTORY OF POPULATION HOUSEHOLD AND HOUSING CHARACTERISTICS.

This section of the Housing Element presents population and housing characteristics for the Town of Eatonville as required by the Florida Community Planning Act (CPA). The Town of Eatonville data and information are derived from numerous sources, including the 2000 and 2010 US Census data files and the Shimberg Center for Affordable Housing Data Clearinghouse located at the University of Florida in Gainesville as recommended in the State Consolidated Plan 2011-2015.

The Town of Eatonville Comprehensive Plan Housing Element update has been prepared to advance the Town of Eatonville linkage with the consolidated planning process and provides a data base, estimates and projections of the Town's housing needs, and local goals, objectives and policies for meeting the existing and projected housing needs. The consolidated planning process is used by the State of Florida and Orange County to identify, prioritize, and allocate federal program funding for housing assistance, related services and public facility improvements available through the Department of Housing and Urban Development (HUD). This section presents data regarding population, household and housing characteristics, including, housing type; tenure; age of housing; housing value; monthly cost of owner-and renter occupied units, and housing condition.

Housing Structure Type. The table demonstrates continued prevalence of single family homes and very limited availability of multiple family homes.

Housing Structure Type. Table III-1 demonstrates continued prevalence of single family homes and very limited availability of multiple family homes.

TABLE III-1: HOUSING STOCK BY TYPE 2000 AND 2010--EATONVILLE, FLORIDA

HOUSING TYPE	UNITS 2000		UNITS 2010		CHANGE IN UNITS 2000--2010		
	Total	Percent	Total	Percent	In Total #	By % of Structure Type	By % of Total Units
Family & Duplexes	545	65.80	627	77.31	82	15.04	9.89
Multi-Family	284	34.26	184	22.69	(-100)	(-35.21)	(-12.06)
Mobile Home	0	0.00	-0-	-0- Single	0	0	0
TOTAL	829	100.00	811	100.00	(-18)	(-2.17)	(-2.17)

Source: 2000 and 2010 US Census and Orange County Property Appraiser website data for 2010 multi-family housing.

Population, Dwelling Units, Housing Tenure, and Household Size. Table III-2 presents the Town's 2010 population, household tenure, and housing occupancy/vacancy data. The 2010 US Census reported a 2010 population of 2,159--a 11.22% decline from the reported 2000 US Census population of 2,432. The 2010 Census reported a total housing stock of 811 units--a decrease of 5.47% from the 858 units reported by the 2000 Census. In 2010, the Town had 674 occupied dwelling units—a decrease of 11.43% from 761 occupied dwelling units reported in the 2000 US Census. In 2010 owner occupied dwelling units (363 units) comprised 53.86% of the occupied housing stock, compared to a rental occupied housing stock of 311 units or 46.14% of the occupied housing stock. The housing vacancy rate reported in the 2010 US Census was 16.9%; whereas, the 2000 US Census housing vacancy rate 11.30%. The average household size for owner-occupied housing is 3.19 compared to 4.02 for renter occupied units. The Town overall average housing vacancy rate was 2.92 in 2010.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

TABLE III-2: 2000 & 2010 HOUSING PROFILE WITH % CHANGE 2000-2010
TOWN OF EATONVILLE

Type Housing Unit	2000 US Census		2010 US Census		% Change 2000-2010
	#	%	#	%	
Total Population	2,432	100.00	2,159	100.00	(-273)
In households	2,221	91.3	1965	91.00	(-256)
In group quarters [All are non-institutionalized]	211	8.7	194	9.00	(-17)
Institutional Population	117	4.8	0	0.0	(-117)
Non- Institutional Population	94	3.9	194	9.0	100
Total Housing Units—Occupancy/Vacancy	858	100.00	811	100.00	(-47)
Occupied Housing Units	761	88.70	674	83.10	(-87)
Vacant Housing Units	97	11.30	137	16.90	40
For Rent	NA	NA	75	9.2	NA
Rented, Not Occupied	NA	NA	4	0.5	NA
For Sale Only	NA	NA	13	1.6	NA
Sold, Not Occupied	NA	NA	2	0.3	NA
For Seasonal, Recreational or Occasional Use	5	5.15	1	0.1	(-4)
All Other Vacant Units	NA	NA	42	5.2	NA
Homeowner Vacancy Rate (1)	2.1		3.4		1.3
Rental Vacancy Rate (2)	4.9		19.2		14.3
Housing Tenure					
Occupied Housing Units	761	100.00	674	100.00	(-87)
Owner-Occupied Housing Units	372	48.90	363	53.86	- 0.88
Renter-Occupied Housing Units	389	51.10	311	46.14	3.45
Average Household Size of Owner-Occupied Housing Units	2.87		2.90		0.03
Average Household Size of Renter-Occupied Housing Units	2.97		2.94		(-0.3)

Source: 2000 & 2010 Census.

(1) The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant “for sale.” It is computed by dividing the total number of vacant units “for sale only” by the sum of owner-occupied units, Vacant units includes those that are “for sale only” and vacant units that have been sold but not yet occupied. Then multiply the quotient by 100.

(2) The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of vacant renter-occupied units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

Age of Housing. Table III-3 provides a summary of the age of the existing housing stock. The Town's housing stock is relatively old with 74.14% of the existing housing being over 30 years old compared with a Countywide housing stock having only 55.26% total units over 30 years old. With the slow development of new housing in the community, this data suggests that there should be some concern over the condition of the housing stock as it exists now and the performance of these housing units in the years to come. The current units should continue to be serviceable for long periods of time if they are properly maintained.

TABLE III-3: AGE OF HOUSING IN YR 2010
Town of Eatonville and Orange County, FL

Year Housing Units Built	Town of Eatonville		Orange County	
	#	%	#	%
Built 2005 or later	47	5.50	33,607	7.08
2000 to 2004	65	7.60	78,691	16.58
1990 to 1999	109	12.75	100,101	21.09
1980 to 1989	186	21.75	103,042	21.70
1970 to 1979	100	11.70	63,801	13.44
1960 to 1969	207	24.21	39,425	8.30
1950 to 1959	71	8.30	37,951	7.99
1940 to 1949	36	4.21	8,937	1.88
1939 or earlier	34	3.98	9,202	1.94
TOTAL UNITS	855	100.00	474,757	100.00

Source: Table DP-4. Selected Housing Characteristics, US 2010 Census, 2006-2010 American Community Survey.

Substandard Housing Conditions. Housing units are substandard if they are: 1) Overcrowded, 2) Do not have heat, or 3) Lack complete kitchens or plumbing. Table III-4 reveals that in 2010, 31 housing units—4.37% of all housing units in the Town of Eatonville--were overcrowded based on housing more than one person per room. Five (5) units—0.71% of the Town's housing units—lacked complete plumbing facilities. The 2010 US Census indicated that no units in Eatonville lacked kitchen facilities or heating facilities. These 2010 US Census indicated that the incidence of substandard housing conditions in Eatonville are slightly higher than substandard housing conditions in Orange County for all categories, excepting lack of complete kitchen facilities and lack of heating facilities than average incidence of substandard housing conditions countywide.

TABLE III-4: YEAR 2010 CENSUS INDICATORS OF SUBSTANDARD HOUSING
TOWN OF EATONVILLE AND ORANGE COUNTY, FLORIDA

Characteristics o Substandard Housing	Town of Eatonville # Units	Town of Eatonville % Units	Orange County # Units	Orange County % Units
Total Occupied Housing Units	709	100.0	406,002	100.0
Units Overcrowded (>1 person per room	31	4.37	10,384	2.56
Units lacking heating facilities	0	0.00		
Units lacking complete kitchen facilities	0	0.00	2,301	0.57
Units lacking complete plumbing facilities	5	0.71	1,577	0.39

Source: Table DP-4. Selected Housing Characteristics, US 2010 Census, 2006-2010 American Community Survey

Farmworker Housing. Eatonville has no farmworker housing.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

Housing Cost by Tenure. Table III-5 presents the 2010 Census reported monthly housing cost by tenure for the Town of Eatonville.

TABLE III-5: SELECTED MONTHLY HOUSING COST BY TENURE: 2010

Monthly Cost With a Mortgage	OWNER				RENTER			
	With a Mortgage		Monthly Cost Without a Mortgage	Without a Mortgage	Monthly Rental Cost	Total		State Median Gross
	#	%		# %		#	%	
Less than $300	0	0.0	Less than $100	0 0.0	Less than $200	23	6.71	
$300 - 499	0	0.0	$100 - 199	6 5.9	$200 - 299	32	9.33	
$500 - 699	3	1.4	$200 - 299	30 29.7	$300 - 499	13	3.79	
$700 - 999	64	29.4	$300 - 399	7 6.9	$500 - 749	33	9.62	
$1,00 – 1,499	81	37.2	$400 or more	58 57.4	$750 - 999	85	24.78	
$1,500 – 1,999	70	32.1			$1,000 – 1,499	149	43.44	
$2,000 or more	0	0.0			≥ $1,500	8	2.33	
Median Cost: $1,175			Median Cost $425		Median Gross Rent: $960			$990
					No Cash Rent paid: 47			
TOTAL	218	100.0	TOTAL	101 100.0	TOTAL	193	100.0	

Source: Table DP-4. Selected Housing Characteristics, US 2010 Census, 2006-2010 American Community Survey

Median Value of Single Family Homes. Table III-6 compares the Median value of single family homes in the Town of Eatonville with such values in Orange County during the period 2000 through 2010. Within Eatonville single-family homes declined in value by 52.01% during the 10-year period 2000 through 2010. The most significant decline in median single-family home value (-78.99%) was generated during the period 2006 to 2010 by the recession and home mortgage crisis beginning in 2006. However, Table III-7 shows that by 2015 Eatonville median single-family home value had increased by 40.47% over the 2010 median single-family home value in Eatonville. Although Orange County home values increased by a factor of 39.34% during the period 2000 through 2010, Orange County home values in 2015 decreased (-42.53%) below the 2006 median single-family home value. Orange County's 2015 median single-family home value was (-3.34%) below the median 2000 single family home value.

TABLE III-6: MEDIAN SINGLE-FAMILY HOME PRICE (Nominal $): 2000-2010
ORANGE COUNTY AND TOWN Of EATONVILLE, FLORIDA

PLACE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	% Change 2000-2010
Eatonville	62,300	58,000	58,000	68,000	87,000	95,000	142,550	140,000	63,700	28,000	29,900	(-52.01%)
Orange County	122,000	137,000	150,000	165,000	186,000	245,000	285,000	280,000	219,800	186,000	170,000	39.34%

Source: From the Shimberg Center FL Housing Data Clearinghouse based on the Florida Department of Revenue, Sales Data Files.

TABLE III-7: MEDIAN SINGLE-FAMILY HOME PRICE (Nominal $): 2006-2015
ORANGE COUNTY AND TOWN Of EATONVILLE, FLORIDA

PLACE	2006	2007	2008	2010	2011	2012	2013	2014	2015	% Change 2006-2015	% Change 2010-2015
Eatonville	142,550	140,000	63,700	29,900	36,550	47,600	43,150	52,000	42,000	(-70.54%)	40.47%
Orange County	285,000	280,000	219,800	170,000	2211,100	185,800	167,800	161,900	163,800	(-42.53%)	(-3.65%)

Source: From the Shimberg Center FL Housing Data Clearinghouse based on the Florida Department of Revenue, Sales Data Files.

Fair Market Rent. HUD Fair Market Rent is available only for counties. In Orange County, the estimated mean (average) wage for a renter is $13.70 an hour. To afford the Fair Market Rate (FMR) for a two-bedroom apartment at this wage, a renter must work 55 hours per week, 52 weeks per year. Or, working 40 hours per week year-round, a household must include 1.4 worker(s) earning the mean renter wage to make the two-bedroom FMR affordable. Monthly Supplemental Security Income (SSI) payments for an individual are $674 in Orange County. If SSI represents an individual's sole source of income, $202 in monthly rent is affordable, while the FMR for a one-bedroom is $865.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

Table III-8 below shows the 2011 area mean income limits as of June 2, 2011. FY 2011 estimates are calculated for 535 metropolitan and 2,037 nonmetropolitan areas in the U.S. and its territories, using the Fair Market Rent area definitions applied in the Section 8 Housing Choice Voucher program.

TABLE III-8: FINAL FY 2011 FAIR MARKET RENTS (FMRs) BY UNIT BEDROOMS

	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
FY 2011 FMR	$795	$865	$988	$1,237	$1,456

Source: Dept. of HUD. Retrieved on June 5, 2011 from http://www.huduser.org (From Orange County 2011-2016 Consolidated Plan)

Eatonville Households by Monthly Rent Paid. Table III-9 presents data on rent paid by households within the Town of Eatonville during the period 2009 through 2013.

TABLE III-9: 2009-2013 MONTHLY RENT PAID BY EATONVILLE HOUSEHOLDS

Place	<$200	$300-399	$400-499	$500-749	$750-999	$1,000-1,499	$1,500 or More	No Cash Rent	Total
Eatonville	21	6	17	58	37	76	7	80	302

Sources: U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Summary File (Form the Florida Housing Data Clearinghouse)

ANALYSIS OF HOUSING NEEDS

Planning Framework for Housing Needs Analysis. Florida's Consolidated Plan 2011-2015 encourages municipalities to link their respective County Consolidated Planning process. The Consolidated Plans prepared by the State and Orange County describe major housing needs, performance measures, issues, programs and funding sources to meet housing assistance needs on a statewide and countywide basis, respectively. Demographic analysis is a necessary foundation for setting housing assistance objectives. Similarly, the Town of Eatonville Comprehensive Plan Housing Element and Future Land Use Element Data Inventory and Analysis incorporates an inventory and analysis of past, present and future population, household, and housing characteristics required to assess and meet the Town of Eatonville housing needs. The Town's 2017 Housing Element establishes a direct linkage with the State and Orange County consolidated planning process used by the State of Florida and Orange County to identify, prioritize, and allocate federal program funding for housing assistance, related services and public facility improvements available through the Department of Housing and Urban Development (HUD). The Eatonville Comprehensive Plan Housing Element establishes linkage with the consolidated planning process and provides a data base, estimates and projections of the Town's housing assistance needs, and local goals, objectives and policies for meeting existing and projected housing needs. The Town's data and information comes from numerous sources, including the U.S. Census Bureau and the Shimberg Center for Affordable Housing located at the University of Florida in Gainesville as recommended in State and Orange County Consolidated Plans.

Significance of Householder Housing Cost Burden. Analysis of existing and projected housing cost burdens is a major and fundamental component of identifying and developing a plan to meet housing assistance needs. The Town of Eatonville Comprehensive Plan Housing Element includes an analysis of the housing cost burden experienced by the Town's current and projected households. The analysis of housing cost burden is required pursuant to Florida's Community Planning Act. The Town of Eatonville Housing Element analysis is primarily predicated on data available through the US Census and the Shimberg Center and includes data developed within the Shimberg Center that is applicable to the Town of Eatonville and can be downloaded from the interactive website of the Florida Housing Data Clearinghouse located at the Shimberg Center. In addition, the analysis applies the Shimberg Center findings in identifying and quantifying the population, household, and housing characteristics of those income groups that have experienced the greatest housing cost burden. The Shimberg Center analytical framework and methodology is also applied by the State of Florida and Orange County in respective assessments of housing cost burden presented in the State Consolidated Plan: 2011-2015 and the Orange County Consolidated Plan: 2011-2015. The 2010 US Census population and household counts for the Town of Eatonville indicated a 2010 population of 2,159 persons and occupied 674 households.

The State and Orange County Consolidated Plans have identified persons with disabilities and other households with special needs, the elderly, children and low-income farmworkers as households especially vulnerable to housing cost burdens. However, reliable data is unavailable that identifies the magnitude, character and distribution of these special needs households residing in small geographic areas such as the Town of Eatonville. Nevertheless, the vulnerability to housing cost burdens of persons with disabilities, children in low income households is well documented in the State and Orange County Consolidated Plans. The Town of Eatonville has no farmworkers; however, this component of Florida's population also is highly vulnerable to housing cost burdens.

Population Groups Most Impacted by Housing Cost Burden. The Town's Housing Element analysis of Housing Cost presents findings that are consistent with the general findings presented in the findings documented in the State and Orange County Consolidated Plans, respectively. Groups most impacted by housing cost burden are discussed under four broad classifications. Households with low-incomes, also known as "income constrained households," are the primary population groups in the Town of Eatonville that are impacted by housing cost burden. This finding is consistent with findings presented in the State and Orange County Consolidated Plans, respectively. The income group classifications and their respective definitions are consistent with those used in the State and Orange County Consolidated Plan and the definitions are generally consistent with HUD standard definitions for these income groups (exceptions are noted below).

The household income group ranges are determined based on each household's relative income compared to the "Area Median Income" (AMI) of the geographic area where each household resides. The Orange County 2011-2016 Consolidated Plan reported that, the median income in the Orlando MSA was $60,900; in 2011, the median income decreased to $57,400. About 14% of the Orlando MSA population is below poverty level and 19% of children 0-17 years of age are living below poverty. Households living in poverty are having even more difficulty paying rent or moving toward homeownership in this economic scenario. They often rely on rent subsidies or public assistance, and funds for these types of programs are in short supply. Many heads of households hold multiple jobs or live in substandard housing. This section discusses the estimated housing needs by income group and special needs, using Census data. When Census data is not available, other secondary sources (i.e. Florida Data Clearinghouse, National Low-Income Housing Coalition, and the Shimberg Center for Housing Studies) are utilized to perform this type of analysis. For determining income eligibility for federally funded programs, most HUD programs categorize low income households as: Extremely low income, Very Low Income and Low Income.

Housing Needs for Extremely Low-Income Families. Extremely low-income households or families are defined by HUD as those earning between 0-30 percent of the median income adjusted for family size. A one-person household making $12,250, a two-person household making $14,000 or a four-person household making $17,500, is considered an extremely low-income household. The maximum affordable monthly cost for housing for an Extremely Low-Income Household (at 30% of the AMI) is $431.

Persons likely to be included in this category are homeless families, disabled persons, the elderly and households that are severely cost burdened. These households are likely to benefit from long term rental assistance, assisted housing facilities, supportive housing facilities and transitional housing. This segment of the population is the hardest to serve when it comes to housing because of the lack of funding sources to support long term affordability for this income group. Section 8 Rental Assistance is the number one housing priority for this income group.

In 2010, the median income in the Orlando MSA was $ 60,900; in 2011, the median income decreased to $57,400. About 14% of the population is below the poverty level and 19% of children 0-17 years of age are living below poverty. Households living in poverty are having even more difficulty paying rent or moving toward homeownership in this economic scenario. They often rely on rent subsidies or public assistance, and funds for these types of programs are in short supply. Many heads of households hold multiple jobs or live in substandard housing. This section discusses the estimated housing needs by income group and special needs, using Census data. When Census data is not available, other secondary sources (i.e. Florida Data Clearinghouse, National Low-Income Housing Coalition, and the Shimberg Center for Housing Studies) are utilized to perform this type of analysis.

For determining income eligibility for federally funded programs, most of HUD programs categorize low income households as: Extremely low income, Very Low Income and Low Income.

Housing Needs for Extremely Low-Income Families. Extremely low-income households or families are defined by HUD as those earning between 0-30% of the Area Median Income (AMI) adjusted for family size. A one-person household making $12,250, a two-person household making $14,000 or a four-person household making $17,500, is considered an extremely low-income household.

Persons likely to be included in this category are homeless families, disabled persons, the elderly and households that are severely cost burdened. These households are likely to benefit from long term rental assistance, assisted housing facilities, supportive housing facilities and transitional housing. This segment of the population is the hardest to serve when it comes to housing because of the lack of funding sources to support long term affordability for this income group. Section 8 Rental Assistance is the number one housing priority for this income group. The maximum affordable monthly cost for housing for an Extremely Low-Income Household at 30% of Area Median Income (AMI) is $431.

Housing Needs for Very Low-Income Families. Very low-income households or families are defined as, earning between 31 to 50% of the Area Median Income (AMI) for the Metropolitan Statistical Area (MSA).

Persons likely to be in this category include homeless families, disabled persons, the elderly, and households that are severely cost burdened. A one-person household making $20,450, a two-person household making $23,350 or a four-person household making $29,150, is considered a very low-income household. Traditionally, persons in this category include elderly, persons with disabilities, female head of households, persons working in the tourism, retail and service industry, and households that are severely cost burdened. The maximum affordable housing cost for a very low-income household (at 50% of the Area Median Income (AMI) is $718.

Housing Needs for Low Income Families. Low-income households or families. are defined as earning between 51 to 80% of the median income, with adjustments for family size. A one-person household making $20,450, a two-person household making $37,350, or a four-person household making $46,650, is considered a low-income household. The maximum affordable monthly housing cost for a low-income family at 80% of the Area Median Income (AMI) is $1,148.

Housing Needs for Large Families. Large families are defined as families with five or more family members living together. These families often have difficulty in finding suitable living arrangements. They often don't make enough annual income to purchase a house and must seek rental housing. For example, a family of five in Orange County with annual household income of $31,500 is considered very low income. This family could afford to pay about $787 a month for rent without being cost burdened but the current market rate for a 3-bedroom unit is $1,237 and for a 4- bedroom unit is $1,456. The annual income needed to afford the "fair market rent" for a 4-bedroom apartment is $58,240. Table III-10 summarizes the maximum monthly rent that a household can afford by income category:

TABLE III-10: 2011 HOUSEHOLD (HH) INCOME AND HOUSING AFFORDABILITY

2011 Area Median Income (AMI) Orlando MSA - $57,400 annually (Household of 4 Persons)			Estimated Maximum Affordable* Monthly Housing Cost by Household Income		
Extremely Low Income Household (30% AMI)	Very Low Income Household (50% AMI)	Low to Moderate Income Household (80% AMI)	Extremely Low Income Household (30% AMI)	Very Low Income Household (50% AMI)	Low to Moderate Income Household (80% AMI)
$15,750	$29,150	$46,650	$431	$718	$1,148
2011 Fair Market Rent for 3-Bedroom Apartment:			$1,237	$1,237	$1,237
Affordability Gap			(-$806)	(-$518)	(-$89)

*Using HUD definition of affordable housing, a household's housing costs should not exceed more than 30% of the household's gross income.
Table III-8 shows that based on current fair market rents, extremely low income and very low-income households have the most difficulty affording the average 3-bedroom apartment in the Orlando MSA.

Constrained Income Groups. Constrained income households as defined by HUD are as follows:

- Extremely low income: equal to or less than 30% of AMI (≤17,220)
- Low income: 30.01-50% AMI (>$17,225-$28,700); and
- Moderate income: 50.01-80% AMI (>28,7010-$45,920)

Income Groups Not Consider "Constrained"

- Middle income: 80.01-120% AMI (>$45,920-$68,880)—This income group is not defined as a constrained income group and is included for comparison purposes. Middle income as defined by HUD, is stated between 81% and 95% of AMI. However, the State of Florida applies the 80.01-120% AMI income range in the consolidated planning process for estimating and projecting housing demand and assigning priorities for housing funding and the FHDC at the Shimberg Center also uses this income range in its housing data base.

Other Households with Special Housing Needs. Households with low-incomes possessing other special characteristics are of special concern in determining housing assistance needs. The following household status classifications are generally used housing cost burden assessments.

- Elderly households are those with one or more members, ages 65 and older.
- Large families are those households with 5 or more members.
- Single persons live in a single person household, and include small-related households with 1-2 members, excluding elderly households.
- Persons with disabilities include households where one or more members have HIII/AIDS, or a mental, physical, and/or developmental disability.

However, at the time this element was prepared (December 2016) no data was available for small geographic areas (generally described by the FHDC as areas with populations less than 50,000) to accurately estimate the housing cost burden of large families, single persons, or persons with disabilities. Table III-10 indicates that elderly households residing in the Town of Eatonville do not have disproportionate housing burdens to other households.

Households Living with a Housing Problem. These are households whose 1) income and housing costs create certain defined economic burdens, or 2) those that live in housing units which are substandard. These terms are defined as follows:

- Cost burdened households. Those where rent/mortgage payments exceed 30% of AMI.
- Severely cost burdened households. Those where rent/mortgage payments exceed 50% of the AMI.
- Households living in substandard housing units with one or more of the following problems;
  - √ Lacking complete kitchen facilities;
  - √ Lacking complete plumbing facilities;
  - √ Lacking a heating fuel source; or
  - √ Overcrowded housing – Those housing units with 1.01 or more persons per room.

Households with Disproportionately Greater Housing Needs. These households include racial or ethnic groups in any income group with disproportionately greater housing burden than other income groups.

Existing Household Housing Cost Burden by Tenure and Age. The Florida Housing Data Clearinghouse at the Shimberg Affordable Housing Center (FHDC) of the University of Florida Bureau of Economic and Business Research reports that "Cost-burdened" households pay more than 30% of income for rent or mortgage costs. Table III-11 reveals that the FHDC report states that in 2015, 316 Eatonville households (42.4%) had paid more than 30% of Area Median Income (AMI) on a housing cost. Table III-11 does not indicate that age of the householder is a significant causal factor for vulnerability to cost burden in Eatonville. Tables presented that follow will indicate the impacts of age and tenue since age and tenure are an important variable. Table III-11 indicates that in 2015, in the Town of Eatonville 172 households — (23.53%) were severely burdened by housing cost—paying more than 50% of Area Mean Income (AMI) for housing.

Table III-12 indicates that in 2015 Eatonville homeowners generally had a less cost burden than renters.

TABLE III-11: 2015 EATONVILLE HOUSEHOLDERS' COST BURDEN

	Amount of Income Paid for Housing							
	0-30%		30.01%-50%		50.01% or more		Total Households	
	#	%	#	%	#	%	#	%
Totals	421	57.59%	138	18.88%	172	23.53%	731	100.00%

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

TABLE III-12: 2015 EATONVILLE HOUSEHOLDERS' COST BURDEN AMONG HOMEOWNERS VS. RENTERS

	Amount of Income Paid for Housing by Homeowners							
	0-30% of AMI		30.01%-50% of AMI		50.01% or more of AMI		Total Households	
	#	%	#	%	#	%	#	%
Totals	247	71.59%	91	26.38%	7	2.03%	345	100.00%
	Amount of Income Paid for Housing by Renters							
	0-30% of AMI		30.01%-50% of AMI		50.01% or more of AMI		Total Households	
	#	%	#	%	#	%	#	%
	174	54.04%	47	14.60%	101	31.36%	322	100.00%

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

Households by Income and Cost Burden. Table III-13 describes the percent of actual household income that Eatonville households paid for housing in 2015. Table III-11 reveals that 66.86% of households having incomes equal to 30% or less than the median income for the Metro Orlando Area spent over 66.86% of their household income on housing. The Table also indicates that 42.22% of Eatonville households had household incomes of 30% or less than the median income for the Metro Orlando.

TABLE III-13: EATONVILLE 2015 HOUSEHOLDS BY INCOME AND COST BURDEN

Household Income as % of Area Mean Income (AMI)	Amount of Income Paid for Housing							
	0-30%		30.01%-50%		50.01% or more5		Total Households	
	#	%	#	%	#	%	#	%
0-30% AMI	48	24.00	35	36.08	115	66.86	198	42.22
30.01%-50% AMI	87	43.50	15	15.46	46	26.74	148	31.56
50.01% or more AMI	65	32.50	47	48.46	11	6.40	123	26.22
Totals	200	100.00%	97	100.00%	172	100.00%	469	100.00%

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

Eatonville Elderly Households by Age and Cost Burden. Table III-14 denotes that in 2015, 257 Eatonville households (35.2%) are headed by a person age 65 or older in 2015. In comparison, 29.6% of households statewide are headed by elderly persons. The Table also states that 150 elderly households (58.36% of the total elderly households) paid ≤30% income for rent or mortgage costs.

TABLE III-14: EATONVILLE 2015 ELDERLY HOUSEHOLDS BY AGE AND COST BURDEN

Age of Householder	Amount of Income Paid for Housing							
	0-30%		30-49.99%		50% or more%		Total Elderly Households	
	#	%	#	%	#	%	#	%
	150	58.36%	49	19.07%	58	22.57	257	100.00

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

Housing Cost Burden of All Age Groups: 2000 to 2040. Table III-13 shows the Shimberg Center for Affordable Housing past and projected future housing cost burden by age groups and tenue in the Town of Eatonville. Table III-13 indicates that in Eatonville in 2010, 55.16% of total households spent less 30% or less of their income on housing. The Shimberg Center Florida Housing Data Clearinghouse table indicates that Eatonville's elderly population (age 65 & over) had the least householder cost burden relative to other population age groups. For instance, in 2010, 74% of owner households in the 65 & over age group spent 30% or less of householder income on housing and 88% of renter households in the 65 & over age group spent 30% or less of householder income on housing. During 2010 owner and renter householders in age groups 15-24, 24-44, and 45-64, respectively, spent more than 30% of their householder income on housing.

By 2040 63.61% of total Eatonville households are projected to spent less than 30% of their household income on housing. The Shimberg Center Florida Housing Data Clearinghouse table indicates that in 2020 Eatonville's elderly population (age 65 & over) is projected to continue to have the least householder cost burden relative to other population age groups. For instance, in 2040, 74.13% of owner households in the 65 & over age group are projected to spend 30% or less of their householder income on housing and 88% of renter households in the 65 & over age group are projected to spend 30% or less of householder income on housing. During 2040, owner and renter householders in age groups 15-24, 24-44, and 45-64, respectively, are projected to spend more than 30% of their householder income on housing.

Please reference Table III-15 after reviewing the relationship between household age and housing cost burden. Table III-15 presents an analysis using Shimberg Center Florida Housing Clearinghouse Data that describes the past and projected impact of household income households with the most severe housing cost burdens.

CHAPTER 3 : HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

TABLE III-15: 2000-2030 HOUSING COST BURDEN BY AGE, TENURE AND HOUSEHOLDERS COST BURDEN

HOUSEHOLDER (HH) TENUE	HOUSE-HOLDER AGE	Housing Cost Burden: % of Income Spent on Housing							
		Total Households		30% or Less		30.1-50%		Over 50%	
		#	%	#	%	#	%	#	%
YEAR 2000 # % Owners: 314 48.23%	15-24	0	0.00	0	0.00	0	0.00	0	0.00
	25-44	74	100	22	29.73	37	50.00	15	20.27
	45-64	118	100	38	32.20	43	36.44	37	31.36
	65 & over	122	100	90	73.77	17	13.93	15	12.30
YEAR 2000 # % Renters: 337 49.68	15-24	14	100	3	21.43	1	7.14	10	71.43
	25-44	155	100	84	54.19	29	18.71	42	27.10
	45-64	127	100	83	65.35	16	12.60	28	22.05
	65 & over	41	100	39	95.1	0	0.00	2	4.88
2000 Total Householders:		651	100%	359	55.14%	143	21.97%	149	22.89%
YEAR 2010 # % Owners: 358 53.67%	15-24	0	0.00	0	0.00	0	0.00	0	0.00
	25-44	55	100	24	43.63	18	32.73	13	23.64
	45-64	153	100	64	42.83	42	27.45	47	30.72
	65 & over	150	100	111	74.00	18	12.00	21	14.00
YEAR 2010 # % Renters: 309 46.33%	15-24	13	100	4	30.77	1	7.69	8	61.54
	25-44	119	100	59	49.58	16	13.45	44	36.97
	45-64	127	100	63	49.61	17	13.38	47	37.01
	65 & over	50	100	44	88.00	4	8.00	2	4.00
2010 Total Householders:		667	100%	369	55.32%	116	17.39%	182	27.29%
YEAR 2020 # % Owners: 453 56.70%	15-24	0	0.00	0	0.00	0	0.00	0	0.00
	25-44	55	100	24	43.64	18	32.27	13	23.63
	45-64	170	100	68	40.00	53	31.18	49	28.82
	65 & over	228	100	167	73.25	28	12.28	33	14.47
YEAR 2020 # % Renters: 339 43.30%	15-24	11	100	4	36.36	1	9.09	6	54.55
	25-44	117	100	58	49.57	16	13.68	43	36.75
	45-64	133	100	50	37.60	18	13.53	65	48.87
	65 & over	78	100	66	84.61	8	10.26	4	5.13
2020 Total Householders:		792	100%	437	55.18%	142	17.93%	213	26.89%
YEAR 2030 # % Owners: 505 60.99%	15-24	0	0.00	0	0.00	0	0.00	0	0.00
	25-44	46	100	20	43.48	15	32.61	11	23.91
	45-64	138	100	58	42.03	38	27.54	42	30.43
	65 & over	321	100	238	74.14	38	11.84	45	14.02
YEAR 2030 # % Renters: 323 39.01%	15-24	7	100	4	57.14	1	14.29	2	28.57
	25-44	94	100	47	50.00	13	13.83	34	36.17
	45-64	114	100	57	50.00	15	13.16	42	36.84
	65 & over	108	100	93	86.11	10	9.26	5	4.63
2030 Total Householders:		828	100%	517	62.44%	130	15.70%	181	21.86%
YEAR 2040 # % Owners: 549 62.67%	15-24	0	0.00	0	0.00	0	0.00	0	0.00
	25-44	30	100	13	43.34	10	33.33	7	23.33
	45-64	144	100	61	42.36	40	27.78	43	29.86
	65 & over	375	100	278	74.13	44	11.74	53	14.13
YEAR 2040 # % Renters: 327 37.33%	15-24	10	100	4	40.00	1	10.00	5	50.00
	25-44	69	100	34	49.28	10	14.49	25	36.23
	45-64	119	100	59	49.58	17	14.28	43	36.14
	65 & over	129	100	111	86.05	12	9.30	6	4.65
2040 Total Householders:		876	100%	560	63.61%	134	12.23%	182	24.16%
HOUSEHOLDER (HH) TENUE	HOUSE-HOLDER AGE	#	%	#	%	#	%	#	%
		Total Households		30% or Less		30.1-50%		Over 50%	
		Housing Cost Burden: % of Income Spent on Housing							

2000-2030 HOUSING COST BURDEN BY AGE, TENURE AND HOUSEHOLDERS COST BURDEN

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

Households by Income and Cost Burden 2010 through 2040. Table III-16 describes the percent of actual household income that Eatonville households paid for housing in 2010 and the projected housing cost burden by percent of household Area Mean Income in the Metro Orlando Area (AMI) for years 2010, 2020, 2030, and 2040. Table III-16 reveals that households with incomes of 30% or less AMI had a substantially higher housing cost burden (61.36% of AMI) than all other income groups. Table III-16 also projects that households with 30% or less AMI are projected to continue having a substantially more severe housing cost burden through 2040 than other income groups.

TABLE III-16: SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN: 2010-2040
TOWN OF EATONVILLE

2010 SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN					
Householder Income as % of Area Mean Income (AMI)		Amount of Income Paid for Housing			
		>50%		Total Households	
		#	%	#	% HH with Severe Housing Cost Burden
YEAR 2010	0-30% AMI	54	61.36		
	30.01%-50% AMI	22	25.00		
	50.01%- 80% or more AMI	12	13.64		
	>50% AMI	0	0.00		
2010 Total Severely Impacted HH By Income and Cost Burden		88	100.00%	637	13.81%
2020 SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN					
YEAR 2020	0-30% AMI	125	63.45		
	30.01%-50% AMI	43	31.83		
	50.01%- 80% or more AMI	29	14.72		
	>50% AMI	0	0.00		
2020 Total Severely Impacted HH By Income and Cost Burden		197	100.00%	754	26.13%
2030 SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN					
YEAR 2030	0-30% AMI	116	63.05		
	30.01%-50% AMI	41	22.28		
	50.01%- 80% or more AMI	27	14.67		
	>50% AMI	0	0.00		
2030 Total Severely Impacted HH By Income and Cost Burden		184	100.00%	831	22.14%
2040 SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN					
YEAR 2040	0-30% AMI	116	63.74		
	30.01%-50% AMI	40	21.98		
	50.01%- 80% or more AMI	26	2.97		
	>50% AMI	0	0.00		
2040 Total Severely Impacted HH By Income and Cost Burden		182	100.00%	875	20.80
Householder Income as % of Area Mean Income (AMI)		#	%	#	% HH with Severe Housing Cost Burden
		>50%		Total Households	
		Amount of Income Paid for Housing			
SEVERELY IMPACTED HOUSEHOLDS BY INCOME AND COST BURDEN: 2010-2040					

Source: Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida.

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

Issues and Consolidated Planning Process and Resources for Meeting Needs. This section addresses alternative housing assistance programs available to the Eatonville and other municipalities in Orange County through the consolidated planning process and other resources. The Orange County Consolidated Plan has 3 statutory objectives established by the Department of Housing and Urban Development:

- Providing decent and affordable housing;
- Creating a suitable living environment; and
- Expanding economic opportunities;

Orange County aims to achieve the statutory objectives of the Consolidated Plan, through the following five-year goals and objectives:

Goal #1: Work in collaboration with local governments, other County departments, nonprofit organizations and housing industry partners to stabilize low to moderate income communities through redevelopment, infill and affordable housing initiatives

Objectives to Achieve Goal #1:

1.1. Increase homeownership opportunities for low to moderate income households through financial incentives
1.2. Increase access to affordable housing units for low to moderate income families
1.3 Increase the availability of affordable rental housing units for very low to low income households
1.4 Support the preservation of affordable housing stock through housing rehabilitation, weatherization and accessibility programs to enable low income homeowners to remain in their homes
1.5 Support the efforts of Community Housing Development Organizations (CHDOs) seeking to develop affordable rental housing projects
1.6 Assist households at risk of homelessness to remain in their homes
1.7 Support housing redevelopment initiatives including infill housing and mixed- use affordable housing
1.8 Increase the availability of affordable housing for the elderly, frail elderly and disabled

Goal #2: Utilize capital projects, affordable housing and public services to improve quality of life for low to moderate income residents

Orange County Objectives to Achieve Goal #2:

2.1 Improve the safety and livability of low to moderate income neighborhoods through infrastructure improvements and sustainability initiatives
2.2 Increase access to quality public facilities
2.3 Revitalize distressed neighborhoods through acquisition, rehabilitation and disposition of foreclosed homes
2.4 Revitalize distressed neighborhoods through demolition of dilapidated and vacant structures that are not suitable for rehabilitation
2.5 Expand neighborhood connectivity through streets and sidewalk improvements
2.6 Support public services benefiting low income persons, especially those addressing elderly, youth, disabled and homeless individuals
2.7 Support services related to job creation, training and placement
2.8 Promoting energy conservation in all housing and capital improvement projects
2.9 Continue working with local municipalities through inter-local agreements and in the implementation of housing and community development initiatives in low to moderate income neighborhoods
2.10 Support fair housing choice and enforcement
2.11 Address housing needs and service needs of homeless, and at-risk populations, including outreach/ assessment, emergency shelter, transitional housing, and permanent housing for homeless and chronically homeless persons
2.12 Revitalize distressed neighborhoods through acquisition, rehabilitation and rental of foreclosed housing
2.13 Continue to address crime and safety concerns through our working collaboration with Code Enforcement by redeveloping or eliminating blighted properties
2.14 Assist in efforts to provide homeownership education and counseling for low to moderate- income households

Goal #3: Expand job opportunities for low to moderate income residents through capital projects, affordable housing and economic development.

Objectives to Achieve Goal #3:

3.1 Expand opportunities for job creation and retention
3.2 Collaborate with local economic development initiatives to empower low to moderate income households with entrepreneurial and economic opportunities
3.3 Expand coordination and implementation of Section 3 goals to expand job opportunities for local low to moderate income residents
3.4 Assist in redevelopment efforts in distressed neighborhoods through infrastructure, façade improvements and rehabilitation with emphasis on job opportunities for low to moderate income residents

RESERVED

NO TEXT OR IMAGE

Table III-17 on the following page presents a summary of the Housing and Community Development Objectives that Orange County plans to implement with federal resources.

TABLE III-14: ORANGE COUNTY CONSOLIDATED PLAN SUMMARY OF SPECIFIC HOUSING AND COMMUNITY DEVELOPMENT OBJECTIVES

Five Year Consolidated Plan Goal #1: Work in collaboration with local government, County departments, nonprofit organizations and housing industry partners to stabilize low to moderate income communities through redevelopment, infill and affordable housing initiatives.				
Goal #1: Objectives	Sources of Funds*	Performance Indicators	Expected Five Years	HUD Outcome/ Objective
Statutory Objective #1: Providing decent affordable housing.				
1.1. Increase affordable homeownership for low to moderate income households through financial incentives to purchase homes				
1.1. Increase access to affordable housing units for sale through acquisition and rehabilitation of foreclosed homes	CDBG NSP	Number of Units	100	Decent Housing/ Accessibility and Availability
1.3. Increase the availability of affordable rental housing units for very low to low income households	HOME NSP SHIP	Number of Units	500	Decent Housing/ Accessibility and Availability
1.4. Support the preservation of affordable housing stock through housing rehabilitation, weatherization and accessibility programs to enable low income homeowners to remain in their homes	CDBG HOME NSP	Number of Units	400	Decent Housing/ Affordability
1.5. Support the efforts of Community Housing Development Organizations (CHDOs) seeking to undertake affordable rental housing projects	HOME	Number of Units	200	Decent Housing/ Affordability
1.6. Assist households at risk of homelessness to remain in their homes	CDBG ESG	Number of Individuals	300	Decent Housing/ Affordability
1.7. Support affordable housing redevelopment initiatives including infill housing and mix-use affordable housing	CDBG HOME NSP	Number of Units	50	Decent Housing/ Sustainability
1.8. Increase the availability of affordable housing for the elderly, frail elderly and disabled	CDBG HOME NSP	Number of Units	150	Decent Housing/ Affordability

Five Year Consolidated Plan Goal #2: Utilize capital projects, affordable housing and public services as a platform to improve the quality of life of low and moderate-income residents.				
Goal #2: Objectives:	Sources of Funds	Performance Indicators	Expected Number	HUD Outcome/ Objective
Statutory Objective #2: Creating a Suitable Living Environment				
2.1. Improve the safety and livability of low to moderate income communities through infrastructure improvements	CDBG HOME NSP	Number of Individuals	10,000	Suitable Living Environment/ Sustainability
2.2. Increase access to quality public facilities	CDBG	Number of Public facilities	5	Suitable Living Environment/ Accessibility
2.3. Revitalize distressed neighborhoods through acquisition, rehabilitation and disposition of foreclosed homes	CDBG NSP	Number of Homes	100	Suitable Living Environment/ Sustainability
2.4. Revitalize distressed neighborhoods through demolition of dilapidated and vacant structures not suitable for rehabilitation	CDBG NSP	# of Homes/ Structures	30	Suitable Living Environment/ Sustainability
2.5. Expand neighborhood connectivity through streets and sidewalk improvements	CDBG	Number of Individuals	5,000	Suitable Living Environment/ Availability and Sustainability
2.6. Support public services to benefit low income persons, especially addressing elderly, youth, disabled and homeless individuals	CDBG	Number of Individuals	15,000	Suitable Living Environment/ Availability and Sustainability
2.7. Support public services related to job training and placement	CDBG	Number of Individuals	500	Suitable Living Environment/ Availability and Sustainability
2.8 Promote energy conservation in all housing and capital improvement projects	CDBG HOME NSP	Number of Units	500	Suitable Living Environment/ Affordability
2.9. Continue working with municipalities through inter-local agreements and in the implementation of housing and community development initiatives in low to moderate income neighborhoods	CDBG HOME ESG NSP	Number of Individuals	1,000	Suitable Living Environment/Sustainability
2.10. Support fair housing choice and enforcement	Federal Grants	# of Individuals	75	Suitable Living Environment/ Availability and Accessibility
2.11 Address housing needs and service needs of homeless, and at risk populations, including outreach/ assessment, emergency shelter, transitional housing, and permanent housing for homeless and chronically homeless persons	CDBG ESG	Number of individuals	2,500	Suitable Living Environment/ Availability and Accessibility

CHAPTER 3: HOUSING ELEMENT DATA INVENTORY AND ANALYSIS

TABLE III-17: ORANGE COUNTY CONSOLIDATED PLAN SUMMARY OF SPECIFIC HOUSING AND COMMUNITY DEVELOPMENT OBJECTIVES (Cont'd)				
Statutory Objective #2: Creating a Suitable Living Environment				
Goal #2: Objectives: Continued	Sources of Funds	Performance Indicators	Expected Number	HUD Outcome/ Objective
2.12: Revitalize distressed neighborhoods through acquisition, rehabilitation and rental of foreclosed housing	HOME NSP	Units of Housing	300	Suitable Living Environment/ Affordability
2.13: Continue to address crime and safety concerns through our working collaboration with Code Enforcement by redeveloping or eliminating blighted properties	CDBG NSP	Units of Housing	50	Suitable Living Environment/Sustainability
2.14 Assist in efforts to provide homeownership education and counseling for low to moderate income households	SHIP	Individuals assisted	500	Suitable Living Environment/ Availability and Accessibility
Five Year Consolidated Plan Goal #2: Expand job opportunities for low to moderate income residents through capital projects, affordable housing and economic development activities.				
Objectives and Strategies	Sources of Funds*	Performance Indicators	Expected	HUD Outcome/ Objective
Statutory Objective #3: Expand economic opportunities				
3.1. Expand opportunities for job creation and retention	CDBG NSP	Number of jobs created or retained	300	Economic Opportunity/ Accessibility
3.2. Collaborate with local economic development initiatives to empower low to moderate income persons with entrepreneurial and economic opportunities	CDBG NSP	Number of businesses	10	Economic Opportunity/ Accessibility
3.3. Expand coordination and implementation of Section 3 goals to expand job opportunities for local low-income residents	All Federal Grants	Number of jobs created or retained	100	Economic Opportunity/ Accessibility
3.4. Assist in redevelopment efforts in distressed neighborhoods through infrastructure, façade improvements and rehabilitation with emphasis on job opportunities for low to moderate income residents	CDBG HOME NSP	Number of individuals	50	Economic Opportunity/ Affordability

FUTURE MINIMUM HOUSING NEEDS BASED ON HOUSEHOLD PROJECTIONS

As required in Chapter 163.3177(6), F.S. the Town of Eatonville data inventory and analysis has presented an analysis of the housing need for present and projected future residents. The Town's continued objective is to assist in planning for the provision of sufficient safe and sanitary housing for all current and anticipated future residents by working jointly with the private sector to achieve the following projected benchmarks describing the Town's projected additional housing needs.

The Town of Eatonville should continue to encourage provision of housing in areas with supportive infrastructure. The Town should continue to coordinate with local, federal and state public initiatives and the private sector to assist in developing housing incentive programs that encourage the creation or preservation of affordable housing and needed facility improvements within area having existing infrastructure to minimize the need for additional local services and avoid the concentration of affordable housing units only in specific areas of the jurisdiction. Projected minimum additional housing needs are indicated below in Table III-18, on the following page.

CHAPTER 3: HOUSING DATA INVENTORY AND ANALYSIS

Table III-18 below indicates the following:

- Projected 2017 Households (HH) will top out at 746 and increase by 148 HH reaching a 2040 total of 894 HH by 2040—a yearly increase of 6.4 HH between 2017-2040.
- Projected 2017 total Dwelling Units (DUs) will top out at 876 and increase by 178 DUs reaching a 2040 total of 1,075 DUs by 2040—a yearly increase of 7.7 DUs between 2017-2040.
- Projected 2017 Occupied Dwelling Units (ODUs) will top out at 746 and increase by 148 ODUs reaching a 2040 total of 894 ODUs by 2040---a yearly increase of 6.4 ODUs between 2017-2040.
- Projected 2017 dwelling units (DUs) will top out at 876 and increase by 178 DUs reaching a 2040 total of 1,075 DUs by 2040—a yearly increase of 7.7 DUs between 2017-2040.
- The ratio of owner and rental housing has remained stable with rates reported in the 2010 U.S. Census as has the vacancy rate.

TABLE III-18: FUTURE MINIMUM HOUSING NEEDS BASED ON HOUSEHOLD PROJECTIONS:
2017, 2020, 2025, 2030, 2035, & 2040
TOWN OF EATONVILLE

Year	Household Projection	Dwelling Units	Occupied Units	Owner Occupied Units	Rental Occupied Units	Vacant Units	Total Units Available
2017	746	897	746	402	344	151	897
2020	764	919	764	411	353	155	919
2025	804	955	804	433	371	161	955
2030	834	1,003	834	449	385	170	1,003
2035	864	1,040	864	465	399	176	1,040
2040	894	1,075	894	482	412	181	1,075

Source: Prepared by Solin and Associates, Inc. (SAI) based on SAI's research and analysis of land use and housing data, including population and housing data reported in the 2010 US Census and population and housing data reported by Florida Housing Data Clearinghouse at the Shimberg Center, University of Florida. Land use data reported on the Orange County Property Appraiser's website was also researched by Solin and Associates Inc.

Ch 4: SANITARY SEWER ELEMENT DATA INVENTORY AND ANALYSIS

Introduction. In the Town of Eatonville, wastewater treatment service is provided by central sewer. There is one development (J & J Moving and Storage) that has a permitted septic tank. Although all land uses are required to hookup to the central sewer systems, reports indicated the several units are not hooked into the system. The Town should locate these units and make them comply with this requirement. All developments must purchase capacity at a level of service of 300 gallons per day per equivalent residential units and connections shall only be allowed where the capacity is available to ensure concurrency.

The Town pumps all wastewater collected in the Town's central wastewater system to the City of Altamonte Springs for treatment and reuse. This arrangement is planned to continue over the long term since the Town has no significantly large lands under single ownership that can provide a market for the reuse. However, the City of Altamonte Springs has a large market for its reuse program. Currently the Town is planning for the extension of central sewerage lines to J & J Moving and Storage and must connect to the central sewer system within 365 days (1 year) after written notification that the central sewer system is available for connection as required by §381.00655, FS. The publicly owned or investor-owned sewerage system shall coordinate with the Town of Eatonville to notify owners of the onsite sewage treatment and disposal system of the availability of central sewer no less than 1 year prior to the date the sewerage system will become available.

The Sanitary Sewer Sub-Element will be divided into two major sections. The first section will address the collection and transportation system provided by Eatonville. The second section will analyze the management of wastewater treatment and disposal provided by the City of Altamonte Springs. Town policies recommend that all future developments use central sewer as the method of wastewater treatment. Wastewater treatment service is managed as an enterprise fund, meaning that expenses to operate and maintain this service must be covered by its users. Local taxes are not used to fund the operation cost of wastewater service. User fees and connection charges are the primary resources used to fund capital projects related to wastewater treatment. The Town has, also, issued bonds to finance wastewater treatment improvement. These bonds are paid off with user fees. The Town is presently using CDBG funds to finance improvements. The Town of Eatonville Sewer is treated by the City of Altamonte Springs. Their sewer system has a capacity of 12.5 mgd. The City has allocated 1.2 mgd. to serve the Town of Eatonville.

Eatonville's Collection and Transmission System

The Eatonville Sanitary Sewer System is basically a collection and transportation system which carries untreated effluent to the Altamonte Springs Wastewater Treatment Plant for treatment and disposal. The system was constructed in 1973 through a MUD grant program. The existing wastewater facilities consist of a gravity collection system, nine (9) lift stations and pressure lines discharging into Altamonte Springs Regional Wastewater Treatment Plant on Keller Road. The operation and maintenance of the gravity sewers, lift stations and pressure lines are the responsibility of the Town. Treatment is the responsibility of Altamonte Springs, currently at a rate of $1.18 per thousand gallons. The general service area of this collection and transmission system is Townwide. The Eatonville Public Works Department provides wastewater service to approximately 795 customers. The existing level of service is 300 gallons per day per equivalent residential unit. The 1989 Comprehensive Plan noted that the Town has 65,000 linear feet of sanitary sewer and concluded that over 29,000 linear feet were needed in the future. In addition, the 1989 Comprehensive Plan stated that at least one new lift station will have to be constructed, with major improvements to two others. The Town Council recently undertook a $200,000± CBDG funded project to refurbish deteriorating lift stations, clean pumps and refurbish the isolation valves on the force mains. As reflected in the Capital Improvement Program in the Capital Improvement Element, the Town has committed $50,000 to the extension of needed water and sewer lines.

Since 2015 the Katherine Avenue lift station has been taken out of service and the Campus View station was relocated to 200 Campus View Drive. New sewer mains and laterals have also been installed in the Catalina Park neighborhood. Currently the wastewater system is being telemetered as part of a wastewater and potable water engineering assessment of the systems. The Sanitary Sewer Element Data Inventory and analysis presents an evaluation of this system.
Table IV-1 shows wastewater projects in the FY 2016 through 2020 Capital Improvement Program:

TABLE IV-1: WASTEWATER SYSTEM FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Engineering Report: Improvement to Park Place Lift Station	$ 25,000				
Vereen Lift Station: Prevent Inflow and Infiltration	2,600,000				
Wastewater System-wide Upgrade and Improvement					$1,020,000
Bethune Lift Station Replacement					350,000
Totals:	$2,625,000	0.00	0.00	0.00	$1,370,000

Altamonte Springs Wastewater Treatment and Disposal

The City of Altamonte provides wastewater treatment service to eight entities located outside its city limits through wholesale agreements with each entity. Each entity collects the wastewater and conveys the flow to the City's Swofford Water Reclamation Facility for treatment and disposal. The wholesale customers are the cities of Eatonville, Maitland and Winter Park in Orange County. Each city pays for treatment and disposal based on actual flows and their allocation of capacity in the City's facility. The waste treatment facilities in Altamonte Spring reserves 1.2 mgd of its 12.5 mgd capacity to serve the present and future development in Eatonville. The Town of Eatonville contracts with the City of Altamonte Springs for waste water treatment and provides the City of Altamonte its effluent for reuse.

Improvements Needed within the Eatonville Collection System

The Florida Rural Water Association in cooperation with the Florida Department of Environmental Protection Revolving Loan Fund Program prepared a report entitled: "Fiscal Sustainability Plan Analysis & Asset Management Plan—2015." The analysis stated that a major collection system rehabilitation and replacement program is currently in progress. Based on the report recommendations the Katherine Lift Station has been taken out of service and the Campus View station was relocated to 200 Campus View Drive. New sewer mains and laterals have also been installed in the Catalina Park neighborhood. The West Lift Station has been rehabilitated. Based on the recommendations in the report, the Town's capital improvement program includes several major engineering assessments and major improvements as indicated in Table IV herein.

The Florida Rural Water Association report recommended that the Town take action to reduce the formation of corrosive hydrogen sulfide (H_2S) gas in portions of the wastewater collection system and increase the inspection, prioritization and rehabilitation of manholes in the wastewater collection system. The report also recommended that a lift station inspection and condition assessment program to prioritize the rehabilitation or replacement of the lift stations. This recommendation has occasioned the closure of the Katherine Lift Station, relocation of the Campus View station and initiation of other improvements as listed in the Table IV capital improvement program. The Florida Rural Water Association report recommended that the Town start monitoring and recording flow rates ate the master lift station, using pump run times and recommended that rainfall amounts also be recorded. This action will provide a method of measuring the success of improvements to the wastewater collection system with to reducing the Inflow/Infiltration (I&I). This information can also be used in future negotiations with the City of Altamonte Springs for the wastewater treatment charges. Reduction of I&I reduces the loading on the City of Altamonte Springs treatment facilities and could result in a reduced treatment for the Town.

CONCLUSIONS

The Town will adopt the level of service standards adopted by Altamonte Springs. The collection and transportation system of the Town has the capacity to service present and future development in their service area. The undeveloped areas of the Town will require construction of new facilities to serve those areas; these improvements will be funded by developers. When the original sanitary sewer system was installed (about 1972), a raw sewage flow meter was installed at the Altamonte Springs Regional Wastewater Treatment Plant. The meter only worked for a couple of months. After several attempts to repair this meter, the Town finally gave up on this meter. An inquiry from other meter users in the area disclosed that no raw sewage meter installations were satisfactory.

The Town is presently using CDBG monies to correct wastewater collection system deficiencies. Policies of the local Comprehensive Plan recommend that the Town develop a Master Sewer System Plan and the Town has initiated capital improvement programs to include analysis of existing and projected sewer facility needs, capacities, and deficiencies. The Town will only be able to properly plan for future sewer needs and repair after the CDBG project is complete and the master sewer system plan is developed. The Town will be able to better analyze the general performance of its sewer system, evaluate the adequacy of the current level of service, the general condition and life expectancy of sewer facilities and impacts these facilities have on surrounding natural resources once a flow meter is properly installed and a master sewer plan developed. Once the CDBG projects are complete, the local wastewater collection system, including lift stations will be in good repair. All sewer lines in the system are to be inspected. Broken lines are to be replaced and open joints and pipe cracks are to be repaired. The Town owned lift stations are to be overhauled with two of them to be completely repaired. These repairs should leave the entire system in first class condition. However, it should be pointed out that although the system will now be in good condition, it is an aging system and is subject to continuing deterioration. Therefore, an ongoing maintenance program is essential. With the proposed increase in water and sewer rates, the Town should have revenues available for the normal maintenance required and the development of a sewer system master plan.

APPENDIX 1: CHARACTERISTICS OF SANITARY SEWER SYSTEM COMPONENTS

TABLE A-1: SERVICE AREA OF SANITARY SEWER LIFT STATIONS WITHIN EATONVILLE

Lift Station #	Geographic Service Area
Station #1	Lake Shadow Area and Kennedy Commerce Center along West Kennedy Blvd/.
Station #2	Taken off-line
Station #3	Commercial developments and special housing facility located on the S side of Kennedy Blvd.
Station #4	Katherine Street area of Catalina Park Subdivision – This facility has been closed.
Station #5	The Campus View station has been relocated to 200 Campus View Drive.
Station #6	Lake Hungerford area from Deacon Jones Av. to Lake Destiny on the N side of W. Kennedy area to west along W. Kennedy to 440 W. Kennedy and then southward along Campus View Drive.
Station #7	Inter-State Industrial Park along Lake Destiny Dr. and I-4.
Station #8	Area E of Wymore Rd., along Kennedy Blvd. to the eastern and northern Town limits. Also serves area along College Street to Lime Street and Ruffel Street to East Town Limits.
Station #9	Lake Bell and Hungerford Elementary School area to East Street.

TABLE A-2: CHARACTERISTICS OF SANITARY SEWER LIFT STATION WITHIN EATONVILLE

System/Location	Pump Make	# of Pumps	Pump Capacity	Motor Size	Date Installed	Condition
Stations Owned and Operated by Eatonville						
Eaton Estates	Flygt	2	100 gpm @ 26' TDH	2 hp	1991	Excellent
West & Eaton Streets	Flygt	2	N/A	NA	1972	Very Good
Park Place	Flygt	2	740 gpm @ 68' TDH	20hp	1991	Very Good
Catalina Park (Relocated)	Not Available					Excellent
Stations Privately Owned and Operated						
Interstate Park	Flygt	2	200 gpm @ 27.5' TDH	5 hp	1982±	Unknown
Kennedy Commerce Ctr.	Flygt	2	100 gpm @ 57' TDH	4hp	1985±	Unknown
Lakeview Nursing Home	Flygt	2	N/A	NA	NA	Unknown
West Kennedy Apartments	Flygt	2	N/A	NS	NA	Unknown

Source: Eatonville Public Works Department.

CHAPTER 5: SOLID WASTE ELEMENT DATA INVENTORY AND ANALYSIS

The Town of Eatonville Comprehensive Plan and adopted Concurrency Management System establishes a minimum capacity of 6.0 pounds per capita per day (lbs/cap/day) as the level of service (LOS) standard upon which development will be measured and permits issued (Solid Waste Element Policy 5.1.2). This represents a standard of four pounds per person, per day for residential development and two pounds per person, per day for non-residential development.

The Town of Eatonville provides solid waste collection to its households, businesses and other non-residential land uses through a Town contract with its private contractor. Solid waste is delivered to the Orange County landfill. Solid waste services are financed through a Town Enterprise Fund. The Town manages the solid waste program and maintains the adopted LOS and available capacity at a constant level. Services are therefore self-financed by the revenues from the service and not subsidized by other revenue sources. As an enterprise fund, solid waste system expansion is financed through user fees.

The Orange County landfill has been influenced by the economic slowdown. For instance, the amount of waste generated by residents and businesses and its impact resulted in a 2% decline in tonnage disposed at the landfill 2012-2013 fiscal year. Based on tonnage for 2013 fiscal year, the estimated Class I residential waste projection for fiscal year 2013 is 311,535 tons and the class I commercial waste projection is 249,782 tons. Total estimated waste delivered to the Orange County landfill in FY 2013 is projected to be 782,750 tons.

The Orange County 2030 Comprehensive Plan states that with the southern expansion of Orange County Landfill Cells 9 through 12 these Cells are expected to meet projected demands for at least the next 27 years. The Orange County 2030 Comprehensive Plan states that the capacity of all dedicated Orange County Landfill Areas and contiguous lands are projected to meet disposal needs for the next fifty to seventy-five years.

CHAPTER 6: STORMWATER ELEMENT DATA INVENTORY AND ANALYSIS

Introduction. Stormwater runoff is water that accumulates during and after it rains. This water runoff flows towards the lowest elevations, traveling along the ground to surface storage areas, such as lakes and depressions. Urbanization alters the natural drainage features and increases the amount of impervious surface areas. The result is rain cannot be absorbed as easily in the ground. It is the purpose of stormwater management to control the distribution of stormwater.

A good stormwater management system will protect urbanized areas from flood damage and control the amount and type of stormwater that runs into bodies of water and drainage wells. This element will discuss Eatonville's ability to manage stormwater, inventory facilities that manage the flow of stormwater and look at plans and programs used by the Town to manage stormwater. Finally, this element will establish goals, objectives and policies aimed at stormwater management.

This data inventory includes analysis of the Town's Stormwater Master Plan prepared in 2005 by Spectra Engineering & Research, Inc. (SER), consultant to the Town of Eatonville. The stormwater master plan supports the passage of a stormwater utility. However, efforts to adopt the stormwater utility district failed as residents and leadership determined that the costs would be a disproportionate burden on the Town's residents. The master plan and engineered stormwater design studies identify specific stormwater needs of the community. The study described the St. Johns River Water Management District (District) regulatory framework, especially District policies and rules of procedure impacting stormwater improvement strategies, approach to system design, and documentation of methodologies employed in the stormwater engineering and management plan. The Town of Eatonville Stormwater Master Plan provides a basis for the recommended maintenance plan, capital improvements plan, and regulatory compliance plan. In addition, the master plan consists of the following items:

- Inventory of stormwater facilities and conditions;
- Basin studies of stormwater runoff patterns and conditions, including drainage calculations computer modeling results;
- Identification of maintenance requirements town-wide;
- Identification of hazards/problem areas for prioritization of capital improvements;
- Prioritized capital improvements, including documentation demonstrating achievement of design requirements; for the secondary storm sewer system;
- Maintenance activities schedule;
- Flood plain delineation;
- Recommended Land Development Code changes; and
- Inventory mapping.

The field inventory and data collection included a site survey of the Town's stormwater systems and drainage facilities. The analysis and field study was performed in general conformance with the scope and limitations of applicable standards and codes. The attached appendices and figures document the project findings and results included the existing condition of the storm systems, outfalls, basin delineation and analysis, model calculations and other project information. Assessment of these structures and outfalls tend to show that there are several outfalls and structures that are clogged or filled with sand and water. Some of the pipes seem to be inadequately sized and could cause upstream flooding. In all, adequate maintenance seems to be lacking. In preparing modeling and drainage analysis, several basins (about 25 were delineated encompassing the town and other pertinent areas.

Also, the areas of each basin and accompanying time of concentration and rational coefficient or curve numbers were also determined. Stage/volume relationships of the receiving water bodies or lakes were to be ascertained in order to run the ICPR Model. There are five key water bodies currently receiving untreated stormwater runoff within and around the town are Lake Bell, Lake Hungerford, Lake King, Lake Shadow, and Lake Weston.

Regulatory Framework. The Town's Stormwater Management System must be in accord with Federal, State and local rules and regulations. Following is a brief list of the most relevant regulations:

1. The Federal Government. The Federal Government has several plans and programs which regulate stormwater management. They are as follows:
   a. Section 101 of Public Law 92-500, which defines water pollution abatement goals and policies and identifies the needs for adequate public participation.
   b. Section 404 of Public Law 92-500, which defines responsibilities of the U.S. Army Corp. regarding the review and approval of permits to undertake dredge and fill activities in certain areas.
   c. The Federal Water Pollution Control Act of Amendments of 1972, which established the National Flood Insurance Program. This Act required that designated flood prone areas to undertake sound land use planning to minimize the potential of flood damage.

2. State Level. On the State level, there have been several laws and programs established to control and plan for the proper development and management of stormwater. The following list highlights the major State laws and regulations:
   a. The Florida Air and Water Pollution Control Act, (Chapter 403, Florida Statutes) which creates water quality standards and policies;
   b. The Water Resources Act (Chapter 373, Florida Statutes) which provides for the conservation, protection and management of water;
   c. Chapter 17-25, Florida Statutes which gives the authority of the Florida Department of Environmental Regulation the authority to treat and delegate the authority stormwater systems to the local water management districts;

3. Regional Level. St. Johns River Water Management District implements Rule 40C-42, which is the Water Management Districts stormwater rule. The St. Johns River Water Management District (SJRWMD) prepared the Master Stormwater Management Plan (MSMP), for the District and the Town of Eatonville adopted a Stormwater Management Master Plan which is designed to assist in implementing applicable policies of the SJRWMD MSMP, which include the Wekiva Study Area (WSA). The most recent funding initiatives associated with the SJRWMD MSMP are summarized below:

   Middle St. Johns River Basin Initiative Fiscal Year 2008-2009 St Johns River Water Management District. The two target areas within the MSJRB that impact the Town of Eatonville are the Lake Jesup Restoration and the Wekiva River Watershed Improvements. SJRWMD has formed cooperative partnerships with federal, state, and regional agencies as well as local governments, including the Town of Eatonville; and citizen groups in the development of 2008-2009 priorities for storm water management projects within the Middle St. Johns River Basin (MSJRB) which include the Town's municipal limits. The goal of the SJRWMD is to protect or enhance water quality and natural systems in the basin. The District is working to assist development and implementation of local government stormwater master plans and sub-projects; implement Little Wekiva River erosion control sub-projects; assist FDEP with total maximum daily loads (MDL) development and implementation; and pursue a nutrient removal initiative to improve water quality. The total funding package for the MSJRB for FY 2008-2009 is $8,500,000 and includes the following capital sub-projects:

   a. Lake Jesup Restoration:
   Priority Rating: 1
   Budget Request: $5,000,000
   Partners: Cities of Maitland, Orlando, Oviedo, Winter Springs, Sanford, Eatonville, Casselberry, and Winter Park; Seminole and Orange counties; Florida Department of Environmental Protection (FDEP); and Florida Fish and Wildlife Conservation Commission (FWC)
   Core Missions: Water quality/ surface water resource protection, flood protection
   Funding Administration: St. Johns River Water Management District (SJRWMD)
   Description: The requested funding will be used for the design and construction of stormwater treatment areas, regional stormwater facilities, and lake treatment projects, to reduce pollutant loading and sedimentation from tributary discharges while controlling erosion and flooding. Regional facilities will achieve substantial nutrient load reductions by intercepting and treating storm water from several of the major tributaries. Lake treatment projects will involve removing water from the lake, treating the water to remove pollutants, and circulating the water back to the lake. Subprojects will be targeted within the watersheds of Howell, Gee, and Soldier creeks and Bear Gully Canal. Local partners will provide the necessary funding match.

   High pollutant loads have been recorded in Lake Jesup; the lake is on the FDEP 303(d) verified impaired water bodies list for the Middle St. Johns River Basin (MSJRB). In 2006, total maximum daily loads (TMDLs) were adopted. The implementation of local government master stormwater management plans that include targeted stormwater parks and regional facilities will contribute to these reductions. The lake treatment projects will expedite the restoration of Lake Jesup when performed in conjunction with stormwater parks and regional facilities. SJRWMD, FDEP, and FWC have developed the —Lake Jesup Interagency Water Quality and Habitat Restoration Strategy to include several efforts to restore Lake Jesup. This funding request would support the efforts of these agencies and the stakeholder group with local governments as the restoration plan for Lake Jesup is pursued.

   b. Wekiva River Watershed Improvements. Eatonville comprises 0.1 percent of the Wekiva Study Area (WSA) and lies within the Little Wekiva River watershed. Little Wekiva River Watershed Management Plan—Stormwater Retrofit
   Priority Rating: 3
   Budget Request: $1,000,000
   Partners: 15 local governments within and including Orange, Seminole, and Lake counties; FDEP; Florida Department of Consumer Affairs; Florida Department of Transportation
   Core Mission: Water quality/ surface water resource protection
   Funding Administration: SJRWMD

Description: Part of the requested funding will be used to construct stormwater retrofit subprojects in the Little Wekiva River watershed, part of the Wekiva River watershed. A stormwater master plan has been completed for the Little Wekiva River watershed as a joint effort among the cities of Altamonte Springs and Orlando, Seminole and Orange counties, and SJRWMD. The stormwater master plan identifies water quality, flow attenuation, and water recharge opportunities within the watershed. Local partners will provide the necessary funding match. Part of requested funding may be used towards the proposed stormwater retrofit project associated with Lake Lawne that provide nutrient load abatement to an area that currently receives no treatment. Lake Lawne, at the headwaters of the Little Wekiva River watershed, is listed as an impaired water body and both the city of Orlando and Orange County have initiated efforts to address lake water quality. The tributary to Lake Lawne has been identified as being a significant pollutant load to the lake and to the Little Wekiva River system. Part of the requested funding will be used to implement the recommendations in the Wekiva Study Area master stormwater management plan. Subprojects will be selected to address pollutant load reduction goals (PLRGs) for the Wekiva River and Rock Springs Run. The Wekiva Parkway and Protection Act expanded the Wekiva Study Area and mandated studies and activities by many governmental agencies and local governments within the study area. The master stormwater plan was prepared by 14 of the 15 local governments in September 2005. The plan includes concepts and designs for projects to address water quality, recharge, and water quantity needs of the study area. The Wekiva River and Rock Springs Run have been identified as impaired waters and FDEP is developing TMDLs for nutrients for these streams. The District has developed PLRGs for these streams and FDEP is developing TMDLs. Additionally, the Little Wekiva River and several lakes within the basin are on the FDEP 303(d) verified impaired water bodies list and FDEP will be developing TMDLs for these listed water bodies. The District and local governments will be working together to implement water quality improvement projects to address the TMDLs. This funding request will support these efforts.

The District's Master Stormwater Management Plan (MSMP) Support Document, Table E-17: Estimated Percent Increase in Pollutant Loads (EPIPL) identifies the Little Wekiva-005 as having a 10.4% EPIPL. This subbasin is said to be affect Orange County, including the Town of Eatonville. The District has assigned a Priority #2 to management strategies addressing conservation and groundwater protection and reuse in this subbasin. Relative to reuse, the Town currently assigns all of its wastewater to the City of Altamonte Springs for treatment and reuse. The Town has less than five septic tanks all of which will be phased out and served by the Town's central wastewater collection system within five years or less. As for other issues addressed in the District MSMP, this sub-element contains the Town's objectives and policies contained in the Town's adopted 2005 engineered Stormwater Master Plan which provides local strategies for assisting implementation of the District's MSMP. The Town also is currently regulated under the Phase I NPDES program for large MS4s and under its permit the Town is required to implement specific objectives of the SJRWMD Stormwater Management Plan, including the following:

- Maintenance and inspection of structural controls and stormwater collection systems operations;
- Control of discharge and water quality treatment from areas of new development and significant redevelopment;
- Roadway litter control and street sweeping;
- Ensuring flood control projects consider water quality impacts;
- Training and certification of pesticide and herbicide applicators as well as public outreach and education on the proper use of pesticides, herbicides and fertilizers;
- Illicit discharge detection and elimination, spill prevention and response, public reporting, proper disposal of household hazardous waste and limitation of sanitary seepage; and
- Development of a construction inspection program, site runoff permitting, inspection, enforcements and operator training.

4. Local Level. In 1961, the Florida Legislature enacted a bill known as the "Orange County Water Conservation and Control Act" which gave the Board of County Commissioners the authority and responsibility for providing primary water control throughout the County, including within municipalities. The Act defined primary water control facilities as "those water conservation and control facilities that are designed as primary by the County Board upon recommendation of the County Engineer and the consulting engineers and after public hearing has been held in the manner approved by this Act, and shall include lakes, ponds, streams, major canals and other natural or man-made conservation and control facilities for the collection and control of drainage waters and for the transportation of such waters to the terminal disposition facilities including, but not limited to the St. Johns River, Kissimmee River and Indian River".

   Secondary facilities, conveying the storm water runoff to these designated primary facilities, are the responsibility of the municipalities where the runoff occurs. Under the provision of this act, the responsibility of the Town of Eatonville is to convey the surface runoff to the lakes (Lake Weston, Lake Shadow, Lake Bell, Lake Sybelia and/or Park Lake) where it then becomes the responsibility of Orange County. The situation at Lake King, in the southwest quadrant of the Town is unclear. When the County initially indicated the lakes in the primary system, Lake King did not exist in its present condition.

CHAPTER 6: STORMWATER ELEMENT DATA INVENTORY AND ANALYSIS

A large portion of the present lake was created when the land was used as a borrow pit for fill material for the construction of 1-4. The small pond existing before 1-4 construction probably could have, and should have, been included in the initial primary system, but it was not. It now definitely meets the definition of "primary" as given above. Although the Town constructed the existing control structure and outfall ditch from Lake King, action should be taken by the Town to have these facilities integrated into the County primary system for operation and maintenance. This is especially desirable since the drainage ditch connects into an existing County drainage pipe on Kennedy Boulevard.

The Town of Eatonville maintains off-site drainage systems that provide public benefits. On-site retention and detention systems are required to be maintained by property owners. However, the Town is permitted to conduct inspections and take corrective actions and the cost is placed on the private property owner. The Town also performs routine maintenance including mowing, street sweeping, and cleaning retention ponds and manholes. Monthly inspections of stormwater facilities are also performed and include inspections of weather outfall skimmers and using a television camera to inspect stormwater lines for leaks. Resources used for maintenance include but are not limited to equipment, man-hours and contractual services. In addition to the television equipment, other equipment used includes lawn mowers, front-end loader, and Vactron vacuum. The Town has established a separate stormwater utility fund for stormwater services. This fund is generated by revenues from user fees of $4.95 charged on the monthly utility bill.

Description of Existing Outfall and Basin Condition. Stormwater systems inventory by Spectra Engineering & Research, Inc. (SER) identified several stormwater structures, outfalls, manholes, basins and other structures during site reconnaissance. Several of the pipes appear to be in good condition and there are others that were not accessible, some were filled with dirt and debris and others were full of water. Table 1 "Conditions of Existing Outfall and Basin Conditions" is presented on the following page.

Table VI-1: Condition of Existing Outfall and Basin Conditions

Facility	Location	Condition
1. Sediment Basin #1	South of Fitzgerald St.	Standing water was noticed in the bottom of the basin.
2. Sediment Basin #2	West of Fitzgerald St.	Standing water was noticed in the bottom of the basin.
3. Ditch	West of Campus View Dr.	Heavily overgrown and slow stormwater flow W & N
4. Concrete Spillway	In ditch E of Campus View Dr.	The spillway was open and clean.
5. Sediment Basin	On Park Place.	Some trash and water at the bottom of the basin.
6. Ditch	S of Kennedy behind roofing bldg.	Overgrown and very slow flow to N toward Kennedy
7. Ditch	Looking W from Campus View Dr.	Very heavily overgrown & very slow flow W & N toward Kennedy.
8. Headwall	West of Campus View Drive into ditch going west to #9.	Minimum flow going through headwall and it is partially stopped up with grass and silt.
9. Headwall	East of sediment basin at Park Place	Good condition. Pipes open & drain to Lk Hungerford.
10 Headwall	E of campus View Dr. in open ditch.	Good drainage in good condition.
11. Headwall	In ditch before Kennedy S of Kennedy, draining toward Kennedy from Lk King going W, then N.	Good drainage.
12. Catch Basin	Campus View Dr. & Kennedy	Stopped up with debris, silt, & trash. No way to tell which way pipes drain or flow. Unable to find outlets.
13. Ditch	Looking towards Kennedy W of Campus View Drive.	Heavily overgrown with salt and slow flow.
14. Storm drain	Campus View Drive.	Full of water, no way to tell where this drains or flows to outlet pipe apparently blocked.
15. Manhole	West of Campus View Drive.	Full of water unable to determine direction of outlets.
16. Manhole	East of Campus View Drive	Inverts were determined. Unable to find pipe end to E.
17. Ditch	West of Katherine Avenue.	Very slow stormwater flow to the north.
18. Ditch	South of Katherine Avenue.	Heavily overgrown and has a very slow flow to west.
19. Storm Pipe	SW of Amador Circle.	Unable to locate pipe end near Lake King water's edge.
20. Manhole	NW on Washington Avenue.	Unable to remove manhole cover from manhole.
21. Manhole	North on Wymore Road.	Blocked, no stormwater flow.
22. Storm Pipe	W of Lk Destiny at S Town limits.	Unable to locate end of pipe
23. Storm Pipe	West of Jonotey Drive.	Unable to locate end of pipe.

Source: Town of Eatonville Stormwater Master Plan, Spectra Engineering & Research, Inc., February 2005.

Stormwater Systems Delineated Problem Areas. For purposes of delineating the problem areas, the Town would be divided into four (4) quadrants, with 1-4 and Kennedy Boulevard being the dividing lines (I-4 running north & south and Kennedy Boulevard running east and west). Areas north of Kennedy and west of I-4 will be designated as the NW quadrant, and areas south of Kennedy Boulevard and west of I-4 will be designated as the SW quadrant.

Areas east of I-4 and north of Kennedy Blvd. would be designated as the NE quadrant and the area east of I-4, south of Kennedy Blvd. would be designated as the SW quadrant. In some of the quadrants, there were some undersized stormwater pipe systems. Most of these pipes are fifteen inches (15") and under. Some of these areas and streets where these issues occur include:

- Sunnyview Circle
- Amador Circle (both east of Campus View Circle)
- Toni Street
- Bethune Drive
- Lincoln Boulevard
- Washington Avenue
- Deacon Jones Avenue
- Raffel Street

In addition to being undersized, some of these pipes experienced with sedimentations, etc. Improvements are needed to upgrade or replace some of these stormwater pipes and systems in these areas.

Other Identified Problem Stormwater Systems. Several ditches, headwalls and stormwater manholes were also identified as having drainage problems. These ditches do not appear to have positive continuous flow. Also, the capacity of some outfall pipes appeared to be affected by the water elevation or head in the lakes. Some of these stormwater structures include:

- Catch basins on Campus Drive and Kennedy Boulevard;
- Headwall west of Campus View Drive;
- Ditch looking west from Campus Drive;
- Ditch south of Kennedy Boulevard behind the roofing building;
- Sediment basin located along Fitzgerald Street;
- Storm drain on Campus View Drive;
- Stormwater Pipe on Mustard Seed Lane and Stormwater Manhole.

Potential Capital Improvement Project. Potential drainage infrastructure improvements for the Town of Eatonville may include the replacement and upgrades of stormwater system pipes, structure, swales, etc. Also appropriate design and permitting will be needed for these tasks. Furthermore, to reduce lake pollution, stormwater runoff discharging into the lakes should be treated. Such treatment may require the construction of stormwater treatment facilities at specific locations, near each lake. Therefore, the possible capital improvement projects include but not limited to:

1. Stormwater system upgrade
2. Road Improvements
3. New stormwater system construction
4. Construction of new stormwater treatment facilities
5. Design and permitting of new stormwater systems including ponds.
6. Recreational Areas
7. Land Acquisition

Cost Estimates for Potential Improvements. The cost estimates for land acquisition for stormwater ponds and roadway improvements rights-of-way, design, permitting, and construction are presented in three tables below based on the function of the scheduled improvement.

Table VI-2: Cost Estimates for Potential Improvements[1]

Potential Improvement	Estimated Cost
1. New Stormwater Facilities for Aiding in Lake Pollutant Reduction	
a. Land Design (3 sites)	$ 300,000
b. Design/Permitting	75,000
c. Construction	700,000
Subtotal for Aiding Lake Pollution Reduction	$1,075,000
2. Stormwater System Upgrade/Replacement	
a. Design/Permitting	$ 65,000
b. Construction Cost	800,000
Subtotal for Stormwater System Upgrade/Replacement	$ 865,000
3. Stormwater System Maintenance (Yearly)	
a. 2-man crew (Salary)	$ 160,000
b. 1 Vehicle	40,000
c. Gas! Maintenance	10,000
Subtotal	$ 210,000
Total Estimated Budget	$2,150,000

[1] The costs are estimates. The actual cost may vary. The cost of land may change depending on availability.
Source: Town of Eatonville Stormwater Master Plan, Spectra Engineering & Research, Inc., February 2005.

Possible Sources of Funding. The Town of Eatonville will seek out available sources of funding for the design and construction of the capital improvement projects. Typically, these types of infrastructure improvement are funded by Community Development Block Grant (CDBG) grants and other funding sources may be available. Furthermore, Department of Environmental Protection (DEP) has small city grants which may be used to fund some of the projects. For instance, the Town recently completed a $700,000 CDBG funded program to design and construct over 500 linear feet of stormwater pipes to enhance movement of stormwater in the Catalina Park subdivision.

Recommendations for Improvements

Maintenance and Scheduling. Scheduled or periodic maintenance is very important in the operation and functionality of all stormwater systems. The periodic maintenance should be carried out by the Town's staff for public facilities. Same maintenance should also be required for private facilities. All permitted facilities should have a budget track for its maintenance. Private stormwater facilities should be required to obtain a stormwater operating permit. This permit will at least provide maintenance plan for the system, budget and source of funding. The Stormwater facility operation and maintenance plan shall be followed to ensure that the facility operates as designed. It should at a minimum include:

After each major storm event:

1. Check the erosion of the side slopes, correct and stabilize. (if needed)
2. Remove all debris from pipes and structures.
3. Remove foreign objects deposited by run off or wind.

Periodic Maintenance

1. Cut and Remove all weeds or overgrowth or vegetation
2. Mowing and landscape maintenance shall be done every other month or as needed.
3. All control structures, pipes, and outfall pipes shall be inspected every six (6) months
4. Swales, ditches and other types of conveyances should be mowed, cleaned, and maintained.
5. All sediments should be removed when accumulation interferes with the function of the facility.

Training and Use of Best Management Practices. Training programs should be instituted by the municipalities such as the Town of Eatonville in the use installation and maintenance of stormwater systems. Florida's stormwater regulatory program requires the use, of Best Management Practices (BMPs) during and after construction to minimize erosion and sedimentation and to properly manage runoff for both stormwater quantity and quality. However, insufficient staffing among regulatory agencies, combined with lack of awareness among contractors, has resulted in a low rate of compliance. To improve this situation the Department of Environmental Protection has developed a training program curriculum on the use, installation, and maintenance of erosion, sedimentation, and stormwater BMPs. The training program is primarily directed towards inspectors and contractors; however, permit reviewers and public works personnel will also benefit from this program. The objectives of this training and certification program are:

- To assure that the desired benefits of stormwater management systems are being achieved.
- To assure that both the public and private sectors have enough inspectors trained in the proper installation and maintenance of BMPs during and after construction.
- To assure a consistent level of technical expertise and professional conduct for all individuals responsible for inspecting erosion and sediment controls and stormwater management systems.

Maintenance of Privately Owned Ponds. As discussed in §6.1, privately owned facilities should be required to obtain stormwater operating permits. Such application and permit should provide maintenance plan, budget and stormwater management compliance report. The report will be signed by a registered Engineer attesting that the facility was built in compliance with the design document and should function as intended. This operating permit should be renewed every three (3) years.

Lake Pollution Reduction Recommendation

Construction of Stormwater Facilities. To minimize pollution entering into lakes, a combination of things has to be done. We believe that there is need for the construction of stormwater facilities near King Lake, Lake Weston, and Lake Hungerford. Such facilities will help treat the runoff and as a result, will reduce the amount of pollutants going into the lakes.

Other measures to minimize lake pollution from stormwater runoff.

1. Public Education and outreach minimum control measures.
2. Public participation/involvement minimum control measure.
3. Illicit Discharge Detection and elimination minimum control measure.
4. Construction site stormwater runoff, control minimum measure.
5. Post construction stormwater management in new developments and redevelopments.
6. Municipal Operation pollution prevention and good housekeeping

Recommended Maintenance of Adopted Stormwater LOS Standard. The Town shall maintain a Level of Service Standard based on the following minimum design standard presented in Table 3: Stormwater Management Level of Service Standard:

Table VI-3: Stormwater Management Level of Service Standards	
Facility	Design Storm
Bridges	50 years
Canals, ditches or culverts for ditches external to the development.	25 years
Crossdrain, Storm Sewers	10 years
Roadside Swales for drainage internal to development	10 years
Detention basins	25 years
Retention basins (no positive outfall)	100 years

- Finished floor (not final slab) elevations one foot above 100-year flood elevation. Increase pollutant abatement loading through implementation of best management practices as established by the Florida Department of Environmental Protection (FDEP) and meet the water quality standards of Ch 62-302, §62-302.500, FAC.
- New development must include drainage improvements that require pre- and post-development or redevelopment peak flows to be similar but not exceed 10% for a 25-year storm. In addition, the first inch of rainfall must be retained on-site and natural vegetation should be used as a component of drainage design. Best management practices are required for stormwater runoff prior to discharge to natural or artificial drainage systems. Exceptions are allowed for single family dwellings and accessory structures, alterations or improvements to existing structures that do not change or affect the rate or volume of runoff; and construction that is on or parallel to the ground, less than or equal to 1,000 square feet of impervious surface.

Table VI-4 presents the FY 2016 capital improvements planned for stormwater managements improvements.

TABLE VI-4: STORMWATER MANAGEMENT FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Stormwater System-wide Upgrade and Improvements					$1,600,000.00
Park Place Stormwater Outfall Repair					500,000.00
Totals:	0.00	0.00	0.00	0.00	$2,100,000.00

CHAPTER 7: POTABLE WATER ELEMENT DATA INVENTORY AND ANALYSIS

Introduction. A major Town goal is to ensure the provision of potable water in a cost effective and environmentally sound manner. This element will include a facility inventory and existing conditions assessment; facility capacity analysis; projected demand; general facility performance and service area deficiencies. The underlying aquifer is the Town's only source of potable water. An aquifer is an underground formation of permeable rock that can absorb and retain large amounts of water. These aquifers must be recharged to replenish its supply. This recharge occurs naturally, through the percolation of rainwater into the aquifers. Some aquifers are recharged artificially by use of drainage wells. If this recharge does not occur, the groundwater supply can be exhausted. The town do not have any prime aquifer recharge areas.

Local Water System

Service Areas. The Town of Eatonville's water system is operated and maintained by the Town's Public Works Department. This system supplies water to every residence and business within its jurisdiction except the proposed television station to be located on Wymore Road. The Town's Future Facilities Location Map includes this area for future expansion.

Facilities and Distribution. The Town's water system is approximately 25 years old; however, the system has been significantly upgraded. The potable water source comes from two new 12-inch deep wells located south of the present Town Hall. Water is supplied in the following manner: The two well pumps deliver untreated groundwater to ground storage tanks where it flows through a cascade aerator by gravity to remove hydrogen sulfide. Chlorine is then added to the treated water. The two wells are served by two pumps which can deliver 500 gallons per minute (1.44 mgd) which is double the pumping capacity of the former two wells that had a pumping capacity of 250 gpd and are currently off-line and capped. The new service pumps deliver water from the wells to the aeration system and the ground storage tanks. The Town recently increased its total storage capacity from 450,000 gallons to 700,000 gallons by adding a new 0.25-million-gallon ground storage tank. The Town presently uses one overhead storage tank with a capacity of 300,000 gallons, and a ground storage tank with the capacity of 150,000 gallons. The designed capacity of Eatonville's potable water system is 1.44 mgd. The Town added 600 linear feet of 12 inch PVC finished water main connected to the distribution system which now comprises over 86,000 linear feet of transmission and distribution mains. The distribution system is comprised of PVC, asbestos cement, galvanized steel, cast iron and other pipe materials. This system services the entire Town, except those undeveloped areas. The potable water distribution system now delivers adequate flows to maintain the minimum allowable pressures. The system is designed for peak hour demands as well as fire flow requirements. The quality of the local system depends on system pressure and the ability of the pipelines to carry adequate flows. The Town accomplished the following as part of its CDBG program:

- Abandoned two (2) 250 gpd wells, after constructing two 500 gpd wells.
- Installed a new high service pump station.
- Installed a new 0.25-million-gallon ground storage tank
- Installed a new 600 linear feet of 12 inch PVC finished water main connected to the existing system.
- Relocated existing generator and fluoridation unit.

The above improvements were accomplished using funds of $105,000 for engineering and permitting and $900,000 for construction. The latter funding source was through a CDBG grant. These capital outlays were integrated into the capital improvement program of the capital improvement element. The St. Johns River Water Management District Master Water Supply Plan contains no water supply development projects that are located within Eatonville. However, Seminole County has initiated plans for its new Yankee Lake Potable Water Project that could possibly service the Town or the Town may purchase additional potable water from other municipalities that are included in plans to fund the Yankee Lake Project. The Town shall require that applications for future land use map amendments, and zoning map amendments be consistent with the DWSP and include an affidavit affirming that an adequate potable water supply meeting the adopted level of service standards shall be in place and available to serve the proposed development concurrent with the issuance of a certificate of occupancy. Prior to approval of a subdivision, site plan, or building permit or its functional equivalent, the applicant must obtain a statement from the Town's water utility department which certifies that adequate potable water supply will be available to serve the new development concurrent with issuance of the certificate of occupancy and must have submitted duly approved construction plans prepared by a Florida registered engineer demonstrating compliance with applicable construction codes and water conservation regulations.

Operation and Maintenance. The Town of Eatonville has only one water plant located near the present Town Hall. The major cost associated with the Town's potable water system operation and maintenance include: labor costs, facility repairs and replacement, chemicals, and other miscellaneous costs.

CHAPTER 7: POTABLE WATER ELEMENT DATA INVENTORY AND ANALYSIS
Land Use Buildout, Population and Potable Water Projections and Methodology

Present and Past Population Estimates. Past population estimates and projected population in the Town of Eatonville as reported by the US Bureau of Census and the University of Florida Bureau of Business and Economic Research have been quite conservative and are depicted in Table VII-1. Future population estimates are presented in Table VII-2. The projections are reprinted from the Future Land Use Element Data Inventory and Analysis and the methodology is explained on page 9 of that element. undeveloped acreage and underdeveloped parcels that will impact the Town's future land use profile and projected potable water demand which are explained in the next section.

TABLE VII-2: POPULATIION PROJECTION: 2017 TO 20240 and Build

Year	Occupied Household Units		Estimated Population
	Total	Occupied	
2017	897	746	2,178
2018	904	752	2,196
2019	912	758	2,213
2020	919	764	2,231
2021	926	770	2,248
2022	933	776	2,266
2023	941	782	2,283
2024	948	788	2,301
2025	955	794	2,318
2026	975	810	2,365
2027	982	816	2,383
2028	989	822	2,400
2029	996	828	2,418
2030	1003	834	2,435
2031	1011	840	2,452
2032	1018	846	2,470
2033	1025	852	2,488
2034	1032	858	2,505
2035	1040	864	2,523
2036	1047	870	2,540
2037	1054	876	2,558
2038	1061	882	2,575
2039	1068	888	2,593
2040	1076	894	2,610
Build Out	1182	982	2,867

Table VII-2 prepared by Solin and Associates, Inc., 2017 based on Straight line projections with methodology presented on page 9 of the Comprehensive Plan Future Land Use Element Data Inventory and Analysis.

TABLE VII-1: PAST POPULATION TRENDS: 2000 TO 2016

Year	Household Units (OHHU)			Estimated Population	Source of Estimate
	Total	Occupied	Source		
2000	858	761	2000 U.S. Census	2,432	U.S. Census Bureau, 2000 Decennial Census.
2010	811	674	2010 U.S. Census	2,159	U.S. Census Bureau, 2010 Decennial Census.
2011	824	685	Solin Projected Build Out and Used Straight-Line Projection using above 2010 U.S. Census OHHU Estimate and the 2015 Shimberg FHDCH OHHU estimate.	2,198	Bureau of Economic and Business Research, Univ. of FL.
2012	837	696		2,232	Bureau of Economic and Business Research, Univ. of FL.
2013	850	707		2,230	Bureau of Economic and Business Research, Univ. of FL.
2014	863	718		2,233	Bureau of Economic and Business Research, Univ. of FL.
2015	850	732	FL Housing Data Clearing House	2,246	Bureau of Economic and Business Research, Univ. of FL.
2016	890	740	Straight-Line Projection	2,251	Bureau of Economic and Business Research, Univ. of FL.

Table VII-2 prepared by Solin and Associates, Inc., 2017 based on Straight line projections with methodology presented on page 9 of the Comprehensive Plan Future Land Use Element Data Inventory and Analysis.

CHAPTER 7: POTABLE WATER ELEMENT DATA INVENTORY AND ANALYSIS

Land Use. Table VII-3: Existing Land Use Profile (2017) provides a composite perspective of land consumption by the current population and reveals a comparative analysis of existing developed and undeveloped land. Table VII-4 presents the potable water demand generated by existing land use. Table VIII-5 describes the future potable water demand generated by planned major redevelopment. Much of this development is occasioned by the sale of strategically located large parcel to the Town for mixed use development. The remaining large sites are anticipated to be ripe for redevelopment based on the planned expansion of West Kennedy Boulevard which is scheduled in the Orange County Capital Improvement Program. The West Kennedy corridor is the Town's major east-west thoroughfare connecting the Town with regional markets. Table VII- 6 reveals the impact of undeveloped infill parcels and underdeveloped parcels on future potable water demand. Table VII-5 and VII-6 demonstrate the future pent-up demand for potable water that will be generated by strategically located undeveloped and underdeveloped infill sites. Pressures for development of these lands is forthcoming as longstanding needs for roadway improvements are finally realized.

TABLE VI I-3: TOWN OF EATONVILLE EXISTING LAND USE PROFILE: 2017

Land Use	Total Acres		%
Developed Land	471.69		67.00%
Residential	123.58		26.13%
Single Family	100.11 acres	Accommodates 674 Existing Occupied Household Units	NA
Multiple Family	23.47 acres		NA
Commercial	67.53 acres		14.28%
Industrial	46.06 acres		10.00%
Institutional	234.52 acres		49.59%
Undeveloped Uplands	110.34		15.67%
Vacant Single Family Lots	12.20 acres		11.06%
Vacant Residential Unsubdivided	11.94 acres		8.03%
Undeveloped Commercial	50.19 acres		45.48%
Undeveloped Industrial	39.09 acres		35.43%
Lakes, Wetlands & Wasteland	121.97		17.33%
Total Acres in Town of Eatonville	704.00		100.00%

Source: Estimated acreage based on Solin and Associates, Inc. analysis of the Orange County Property Appraiser Data Base, 2017.

Table VII-4 displays the existing land use profile and impacts on existing potable water demand within the Town of Eatonville.

TABLE VII-4: POTABLE WATER DEMANDS GENERATIED BY EXISTING DEVELOPMENT

Developed Land Use	Future Land Use Map	Upland Acreage/Units	Formula to Calculate Potable Water Demand	x1500 gpd for non-res'l
Residential	Compliant	123.58	890 total Household Unit (HHU), including 740 occupied HH units x 350=	259,000 gpd
Commercial	Compliant	67.53	67.53 ac. X 1,500=	101,295 gpd
Industrial	Compliant	46.06	46.06 x 1,500=	69,090 gpd
Institutional	Compliant	23.84	23.84 x 1,500=	35,760 gpd
Total Potable Water Demand Generated by Existing Development				465,145 gpd

Source: Estimated acreage based on Solin and Associates, Inc. analysis of the Orange County Property Appraiser Data Base, 201 and potable water coefficients provided as a standard "rule of thumb" by the Town Public Works Director.

Table VII-5 presents the future projected water demand to be generated by major undeveloped uplands based on Future Land Use Map designations assigned to parcels exceeding 5 acres. This table includes the longstanding proposed redevelopment of the Town Center occasioned by the sale of the Orange County School Board's Hungerford Property to the Town of Eatonville. The Hungerford property is planned to become the southwest anchor of the Town Center. In addition, the table includes Orange County School Board's 10.61- acre site located at 525 West Kennedy which is planned for redevelopment. The site will accommodate a mixed-use development consisting of approximately 8.68 acres of commercial development fronting on W. Kennedy Boulevard with a planned 8.93-acre residential development to the north. The map following Table VII-6 identifies the large undeveloped site.

TABLE V11-5: FUTURE PROJECTED POTABLE WATER DEMAND TO BE GENERATED BASED ON FUTURE LAND USE MAP DESIGNATIONS ASSIGNED TO UPLAND PARCELS EXCEEDING 5 ACRES
[Includes Proposed Redevelopment of Orange County School Board Property--see Map I-5]]

Identity of Parcels	Future Land Use Map Designation	Upland Acreage/Units	Formula to Calculate Potable Water Demand	x1500 gpd for non-res'l Res'l Unit = x 350 gpd
E of Lake Weston	Industrial on Adopted FLUM	34.17 ac.	34.17 ac. x 1,500 gpd=	51,255
E of Lake Shadow	Commercial on Adopted FLUM	10.85 ac.	10.85 ac. x 1,500 gpd=	16,275
NW of I-4	Commercial on Adopted FLUM	11.59 ac.	11.59 ac. x 1,500 gpd=	17,385
Hungerford Site [OCSB selling site Eatonville for redevelopment]	Res'l: 7ac. X 43,560 ÷ 7,500=	40 units x 83.11%=	33 occupied HH unitsx350 gpd=	11,550
	Commercial	47.65 ac.	47.65 ac. x 1,500=	71,475
	Institutional	18.00 ac.	18.00 ac. x 1,500=	27,000
Hungerford Host-Dime Site	Commercial on Adopted FLUM	5.00 ac.	5.00 ac. x 1,500=	7,500
525 W Kennedy [OCSB selling site to Eatonville for redevelopment]	Commercial on Adopted FLUM	8.68 ac.	8.68 ac. x 1,500=	13,020
	Res'l: 8.93 ac x 43,560/7,500=	51 units x 83.11%=.	42 occupied HH Units x 350 gpd =	14,700
Starling Trust Res'l: Not S/D	Res'l: 9.47 ac x 43,560/7,500=	55 units x 83.11%=	45 occupied HH units x 350 gpd=	15,750
Undeveloped Large Parcel Acreage		161.34 ac.	*NA*	NA
Total Potable Water Demand for Major Undeveloped Properties Over 5 Acres				245,910 gpd

Source: Estimated acreage based on Solin and Associates, Inc. analysis of the Orange County Property Appraiser Data Base, 201 and potable water coefficients provided as a standard "rule of thumb" by the Town Public Works Director.

Table VII- 6 reveals the impact of undeveloped infill parcels and underdeveloped parcels on future potable water demand. Together Tables VII-5 and VII-6 demonstrate the future pent-up demand for potable water that will be generated by strategically located undeveloped and underdeveloped upland infill sites. Pressures for development of these lands is forthcoming as longstanding needs for roadway improvements are finally realized.

TABLE VII-6 FUTURE PROJECTED POTABLE WATER DEMAND TO BE GENERATED BY OTHER UNDEVELOPED UPLAND PARCELS BASED ON ADOPTED FUTURE LAND USE MAP DESIGNATIONS [EXCLUDES LARGE PARCELS EXCEEDING 5 ACRES]]

Type of Undeveloped Land	Future Land Use Map Designation	Acreage/Units		Formula to Calculate Potable Water Demand	x1500 gpd for non-res'l
Res'l Lots Undeveloped or Underdeveloped	Res'l: 16.87± ac. X 43,560/7,500=	16.87± acres	147 units x 83.11%=	122 occupied HH units x 350 gpd=	42,700 gpd
Commercial	Commercial on Adopted FLUM	41.21 ac.		41.21 ac. x 1,500=	61,815 gpd
Industrial	Industrial on Adopted FLUM	4.92 ac.		4.92 x 1,500=	7,380 gpd
Total Potable Water Demand for Other Undeveloped Properties [Not including Parcels Over 5 Acres]					111,895 gpd
Total Additional Potable Water Demand Generated by All Undeveloped Parcels					357,805 gpd
Total Potable Water Demand generated by Existing and Future Development					822,950gpd

Source: Estimated acreage based on Solin and Associates, Inc. analysis of the Orange County Property Appraiser Data Base, 201 and potable water coefficients provided as a standard "rule of thumb" by the Town Public Works Director.

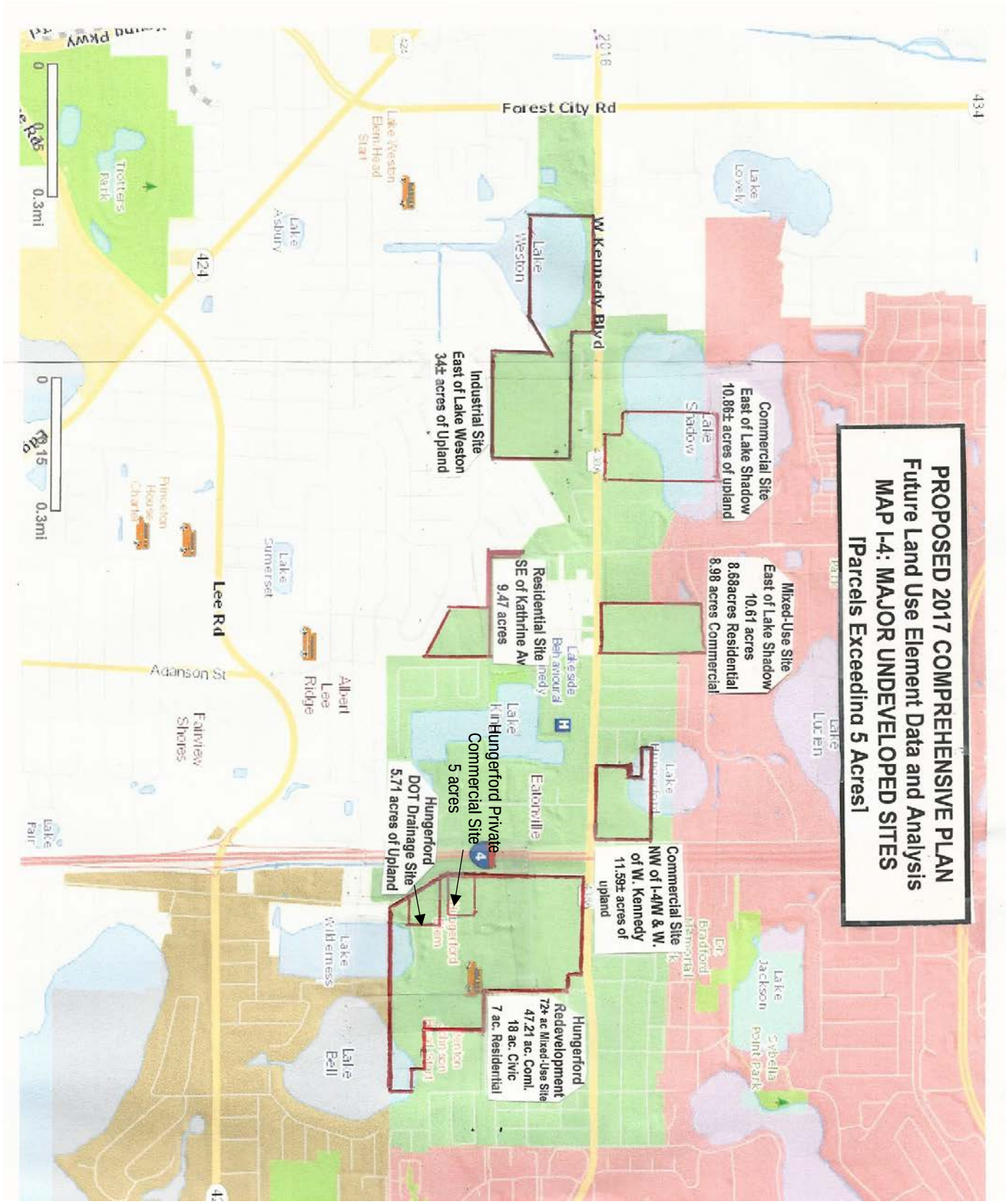
Table VII-7 provide the existing annual potable water generation based on the existing land use activities that are currently active in the Town of Eatonville. Projected land use is based on knowledge of planned development and redevelopment. All land uses identified are consistent with their land use designations on the proposed Comprehensive Plan. The acreage calculations include only estimated uplands and do not include wetland or water bodies.

CHAPTER 7: POTABLE WATER ELEMENT DATA INVENTORY AND ANALYSIS

TABLE VII-7 POTABLE \WATER DEMAND BY LAND USE: 2016 to 2035 and-BUILD-OUT

Year	Land Use	Occupied Household Units (HHU) and Upland Acres	Potable Water GPD	Total Potable Water Million GPD
2016	Residential	740 HHU x 350 gpd=	0.259	0.465
	Commercial	67.53 ac. X 1,500 gpd/ac =	0.101	
	Industrial	46.06 ac. x 1,500 gpd/ac =	0.069	
	Institutional	23.84 ac. x 1,500 gpd/ac =	0.036	
2017	Residential	746 HHU x 350 gpd=	0.261	0.477
	Non-Residential	144 ac. x 1,500 gpd/ac =	0.216	
2018	Residential	752 HHU x 350 gpd=	0.263	0.491
	Non-Residential	152. ac. x 1,500 gpd/ac =	0.228	
2019	Residential	758 HHU x 350 gpd=	0.265	0.502
	Non-Residential	158 ac. x 1,500 gpd/ac =	0.237	
2020	Residential	764 HHU x 350 gpd=	0.267	0.516
	Non-Residential	166 ac. x 1,500 gpd/ac =	0.249	
2021	Residential	770 HHU x 350 gpd=	0.270	0.527
	Non-Residential	177 ac. x 1,500 gpd/ac =	0.257	
2022	Residential	776 HHU x 350 gpd=	0.272	0.540
	Non-Residential	179 ac. x 1,500 gpd/ac =	0.268	
2023	Residential	782 HHU x 350 gpd=	0.274	0.554
	Non-Residential	187 ac. x 1,500 gpd/ac =	0.280	
2024	Residential	788 HHU x 350 gpd=	0.276	0.568
	Non-Residential	194 ac. x 1,500 gpd/ac =	0.292	
2025	Residential	794 HHU x 350 gpd=	0.278	0582
	Non-Residential	202 ac. x 1,500 gpd/ac =	0.304	
2026	Residential	810 HHU x 350 gpd=	0.284	0.594
	Non-Residential	207 ac. x 1,500 gpd/ac =	0.310	
2027	Residential	816 HHU x 350 gpd=	0.287	0.606
	Non-Residential	213 ac. x 1,500 gpd/ac =	0.319	
2028	Residential	822 HHU x 350 gpd=	0.288	0.618
	Non-Residential	220 ac. x 1,500 gpd/ac =	0.330	
2029	Residential	828 HHU x 350 gpd=	0.290	0.632
	Non-Residential	228 ac. x 1,500 gpd/ac =	0.342	
2030	Residential	834 HHU x 350 gpd=	0.292	0.645
	Non-Residential	235 ac. x 1,500 gpd/ac =	0.353	
2031	Residential	840 HHU x 350 gpd=	0.294	0.656
	Non-Residential	241 ac. x 1,500 gpd/ac =	0.362	
2032	Residential	846 HHU x 350 gpd=	0.296	0.664
	Non-Residential	245 ac. x 1,500 gpd/ac =	0.368	
2033	Residential	852 HHU x 350 gpd=	0.298	0.677
	Non-Residential	253 ac. x 1,500 gpd/ac =	0.379	
2034	Residential	858 HHU x 350 gpd=	0.300	0.691
	Non-Residential	261 ac. x 1,500 gpd/ac =	0.391	
2035	Residential	864 HHU x 350 gpd=	0.302	0.704
	Non-Residential	268 ac. x 1,500 gpd/ac =	0.402	
BUILD OUT	Residential	982 HHU x 350 gpd=	0.344	0.823
	Non-Residential	319.5 ac. x 1,500 gpd/ac=	0.479	

Source: Land use data based on existing and projected development based on Solin and Associates, Inc. field work, research and analysis, including preparation of the adopted Future Land Use Map. Solin and Associates, Inc. rendered analysis and recommendations regarding needed revisions to the Future Land Use Map. Acreage calculations are based on Solin and Associates, Inc. analysis of the Orange County Property Appraiser website data base, 2016-17. Occupied household units, population, and average occupied household unit population based on 2010 US Census and data from University of Florida Bureau of Economic and Business Research website data base and the University of Florida Shimberg Center for Affordable Housing for all years, excepting 2010 data provided from the 2010 US Census. Potable water coefficients for provided as a standard "rule of thumb" by the Town Public Works Director.


PROPOSED 2017 COMPREHENSIVE PLAN
Future Land Use Element Data and Analysis
MAP I-4: MAJOR UNDEVELOPED SITES
(Parcels Exceeding 5 Acres)
Forest City Rd
W Kennedy Blvd
Lee Rd
Adanson St
Commercial Site
East of Lake Shadow
10.88± acres of upland
Industrial Site
East of Lake Weston
34± acres of Upland
Mixed-Use Site
East of Lake Shadow
10.61 acres
8.68acres Residential
8.98 acres Commercial
Residential Site
SE of Kathrine Av
9.47 acres
Commercial Site
NW of I-4/W & W.
of W. Kennedy
11.59± acres of
upland
Hungerford Private
Commercial Site
5 acres
Hungerford
DOT Drainage Site
5.71 acres of Upland
Hungerford
Redevelopment
72+ ac Mixed-Use Site
47.21 ac. Comi.
18 ac. Civic
7 ac. Residential
Lake Lucien
Lake Jackson
Lake Shadow
Lake Weston
Lake Asbury
Lake Sumerset
Lake Wilderness
Lake Bell
Eatonville
Trotters Park
Cybella Point Park
Fairview Shores
Allert Lee Ridge
0.3mi

CHAPTER 8: GROUNDWATER AND AQUIFER RECHARGE ELEMENT DATA INVENTORY AND ANALYSIS

INTRODUCTION

The surficial aquifer and Floridan Aquifer supply one hundred percent of Orange County's potable water needs. An aquifer is an underground formation of permeable rock that can absorb and retain large quantities of water. Some aquifers are capable of yielding billions of gallons of water per day. The amount of water in the aquifers, however, is not infinite and must constantly be replenished. This replenishment is known as recharge and is the first issue of this element. Recharge can occur naturally, through the percolation of rainwater into the aquifers; or artificially, through the use of drainage wells. If recharge does not occur, then the groundwater supply can be exhausted.

Protecting groundwater quality is the second issue of this element. Maintaining the existing quality of groundwater is important since once contamination occurs it is difficult, and sometimes, impossible to clean the aquifers. Certain land uses, such as industrial and agricultural, and drainage wells have the highest probability for contaminating the groundwater. Stormwater run-off and malfunctioning septic tanks also can lead to groundwater degradation. Monitoring groundwater quality can help in the early detection of such contamination.

Protecting groundwater quality and preserving groundwater quantity are important to ensure the supply of potable water is available to future populations. To address these issues, the Natural Groundwater Aquifer Recharge Element includes a detailed description of the geologic formations underlying Orange County, a discussion of recharge characteristics, and an analysis of the major concerns regarding groundwater protection and supply. The goals, objectives and policies of this element set forth the strategy to ensure the protection of groundwater quality and quantity.

GEOLOGY OF THE FLORIDAN AND SURFICIAL AQUIFERS

Orange County relies entirely on the underlying aquifers to meet the potable water needs of its residents. In order to preserve and protect these groundwater resources, the availability and presence of groundwater must be understood. The availability and presence of groundwater within the aquifers are related to the geology and underlying rock formations. The type of rock material helps determine how much water can percolate downward and how much water can be absorbed and contained in the aquifer. Table VIII-1 is a summary of the geologic formations in Orange County and a description of the water-bearing properties of each formation. Figure VIII-1 is a cross-section view of the rock formations in Orange County. As Table VIII-1 and Figure VIII-1 indicate, two main aquifers are within Orange County: The surficial aquifer which lies just below land surface and is contained within the Recent, Pleistocene and Pliocene rock system; and, the Floridan Aquifer which lies within the Eocene rock system. Separating these two aquifers is usually an impermeable layer of clayey sands called the Hawthorn Formation.

The surficial aquifer is a non-artesian aquifer that can extend to depths of 200 feet below land surface. A non-artesian aquifer does not have an overlying bed of impermeable rock. Thus, the water table, or top of the surficial aquifer, can fluctuate with the variations in rainfall and discharge into surface waters or supply wells. These fluctuations can range from a few feet in eastern Orange County, where there is a flat topography; to 15 feet in the western highland areas. The height of the water table also varies with the topography. In the western highland region, the water table is well below land surface; while in the eastern low lands, the water table is at, or above, land surface. This height determines the required depth of supply wells extracting water from the surficial aquifer. The surficial aquifer is primarily comprised of quartz sands with varying amounts of clay, hardpan and marine sediments. This mixture is relatively porous and enables the surficial aquifer to store water prior to infiltration into the Floridan Aquifer. The thickness and permeability of the surficial aquifer vary with the amount of clayey soils present because clay inhibits the movement and retention of water. The bottom portion of the surficial aquifer contains significant amounts of marine sediments which are particularly porous.

Below the surficial aquifer usually lies the Hawthorn Formation. The Hawthorn Formation is primarily comprised of clayey sands which retard the vertical movement of water. As stated above, the Hawthorn Formation separates the surficial aquifer from the Floridan Aquifer. In some areas, such as northwest Orange County, the Hawthorn Formation is nonexistent. In other areas in Orange County, usually the southeast, the Hawthorn Formation can be 200 feet thick.

Although the Hawthorn Formation generally inhibits the percolation of water, the Formation does have small quantities of limestone that absorb water and permit water to percolate into the Floridan Aquifer. The limestone is concentrated in the lower section of the Hawthorn Formation. Especially south and east of Orlando, the limestone sections contain numerous secondary artesian aquifers. However, these secondary aquifers are generally not large enough to be used for public water supply.

Limestone with relatively high transmissibility, known as the Ocala Group, lies intermittently beneath the Hawthorn Formation. It forms the top portion of the Floridan Aquifer. In south central Orange County the limestone formation has been entirely eroded. In north east Orange County the Ocala Group is approximately 125 feet thick. The remaining portion of the Floridan Aquifer lies below the Ocala Group, or the Hawthorn Formation, when the Ocala Group has been eroded.

The Floridan Aquifer is artesian, meaning that it is confined by a layer of impermeable rock (the Hawthorn Formation). This impermeable rock does not permit the water level to fluctuate with variations in recharge and discharge of water. The top of an artesian aquifer is called the potentiometric surface. It is the height water would rise to in tightly cased wells. In some cases, the piezometric surface is above land surface. If a well is tapped in an area where the piezometric surface is above land surface, then water would rise to the land surface without pumping.

The Floridan Aquifer includes both the Avon Park and Lake City Limestone Formations. These two limestone formations, in general, divided the Floridan Aquifer into two zones: The upper producing zone and the lower producing zone. A thin semi-permeable layer separates the two producing zones. The upper producing zone lies 150 to 600 feet below surface, while the top of the lower producing zone lies approximately 1,100 to 1,500 feet below land surface.

The Avon Park Limestone Formation is approximately 400 to 600 feet thick. The upper sections of this Formation are mostly cream to tan in color, granular, and porous. The lower sections contain brown, hard, dense crystalline dolomite. Because the top of the Lake City Limestone has been partially crystallized and the fossils badly damaged, it is difficult to tell where the Avon Park Limestone ends and the Lake City Limestone begins.

The Lake City Limestone Formation consists of porous to densely packed, hard brown crystalline dolomite alternating with soft to hard, cream to tan, chalky, fossiliferous limestone and dolomite limestone. The exact extent of the Lake City Limestone is not known because only the top 1,500 feet have been penetrated by water wells. It is estimated that in some areas the Lake City Limestone is more than 2,000 feet thick.

Within both producing zones, the transmissibility of the Floridan Aquifer is very high, containing numerous interconnected cavities. These cavities act like sponges, absorbing and retaining water. The largest documented cavern is ninety feet high, with a ceiling 573 feet below land surface. These porous, interconnected cavities permit water to flow from areas of recharge to areas of discharge, and from the upper producing zone to the lower producing zone. Under natural, pre-development conditions, the amount of recharge equals the amount of discharge. This brief over view of the geology and rock materials underlying Orange County is important because the geology and underlying rock materials affect many issues of aquifer recharge. The types of rock materials help determine the quantity of water than can be retained in the aquifers and the degree of potential contamination problems that could affect the groundwater supply.

RECHARGE

Recharge is the process of replenishing the aquifer. Recharge can occur naturally through percolation or artificially through the use of drainage wells.

Natural Recharge. A natural recharge is the way most water reaches the aquifers. Natural recharge is the percolation of rainfall through the soil to the underlying aquifers. The potential for recharge is highest in the northwestern and western sections of the County. According to the St. Johns River Water Management District, the recharge potential of an area is based on six factors:

1. The amount of rainfall;
2. The conductivity of the surficial aquifer;
3. The size and extent of the surficial aquifer;
4. The height difference between the water table of the surficial aquifer and the potentiometric surface of the Floridan Aquifer;
5. The number and extent of sinkholes that breech the Hawthorn Formation; and,
6. The conductivity of the Floridan Aquifer.

CHAPTER 8: GROUNDWATER AND AQUIFER RECHARGE ELEMENT DATA INVENTORY AND ANALYSIS

Rainfall is the first factor of recharge. Rainfall in Orange County has remained relatively constant over the last five years, with an average annual rainfall of approximately 55 inches. The conductivity of the surficial aquifer, or the ability of water to percolate into the surficial aquifer, is the second factor. The conductivity of the surficial aquifer is based on the height of the water table, soil type, and land use. In particular, the water table must be below land surface for water to percolate downward. In the sandy highland regions of southwest Orange County, the water table is significantly below land surface. As such, the permeable soils can more readily absorb a rise in the water table resulting from a heavy rainfall.

Soil type is an indicator of high recharge areas because water can more efficiently percolate into the surficial aquifer through soils with coarse, sandy textures than through clay or organic-textured soils. These coarse, sandy soils are prevalent in the upland and low ridges of Orange County. Land use is also an indicator since land uses with a high concentration or impervious surfaces, such as buildings, parking lots, or roads, can reduce the amount of water that reaches the permeable soils. Land use controls should be developed to protect high recharge soils. The size and extent of the surficial aquifer are the third factor. If the surficial aquifer is extensive, more water can be retained for recharge into the Floridan Aquifer. The fourth factor is the height, or head, difference between the water table of the surficial aquifer and the potentiometric surface of the Floridan Aquifer. There must be a head difference for gravity to force the water downward and into the Floridan Aquifer.

The fifth factor is the thickness and hydraulic conductivity of impermeable clayey sands of the Hawthorn Formation which overly the Floridan Aquifer. While the Hawthorn Formation is primarily comprised of impermeable clayey sands, there are scattered deposits of impure limestone that allow water to slowly percolate downward. If the Hawthorn is relatively thick and has a scarcity of permeable limestone, then water cannot percolate downward. The high and moderately high recharge areas in the northwestern and western sections of the County contain these relatively thin, semi-permeable confining beds. The sixth factor is the number and extent of sinkholes, or Karst Formations, that breech the Hawthorn Formation. These sinkholes provide a connection between the surficial aquifer and the Floridan Aquifer. When water bypasses the semi-confining layers of the Hawthorn Formation, it reaches the Floridan Aquifer more quickly.

Recharge Areas within Eatonville. An analysis of soils, by a qualified professional, is likely one of the best ways to facilitate determination of whether “most effective recharge areas” that exist in the Town of Eatonville. As the term is used in Rule 40C-41.063(3), F.A.C. and as determined by the U.S. Soil Conservation Service, soils that are a part of Type “A” Hydrologic Soils Group are most characteristically associated with the “most effective recharge areas.” The Future Land Use Element Data Inventory and Analysis Soils Map I-5 delineates Basinger hydric soils identified by Map Key #3. The map delineates only a few small sites of less than one acre mainly located in the unincorporated enclave west of Campus View Drive. The only sizable site is primarily situated on an undeveloped parcel owned by the Orange County and planned as large drainage retention area which abuts the northeast portion of the Maitland Reserve Office Center west of Keller Road and north of W. Kennedy Blvd. Areas of high recharge are characterized by several characteristics:

- Sandy soils and sink holes are common.
- The water table is significantly below land surface, enabling water from prolonged rains to be stored without the water table rising to the land surface.
- The water table usually experiences a three to six inch change in its level between the dry and wet season. High recharge areas percolate an average of twelve inches of water per year, per acre into the aquifers, although some areas can recharge up to 20 inches per year. Twelve inches of recharge equals approximately 326,700 gallons of water.

GROUNDWATER AND AQUIFER RECHARGE ISSUES

This Section will address the three main issues regarding groundwater recharge and the supply of drinking water:

1. The amount of groundwater withdrawals;
2. Contamination of the groundwater through pollutants percolating into the aquifer; and
3. Contamination of surface water bodies which could contaminate the groundwater. Section V will address the public agencies and programs available to protect the aquifer from contamination and depletion.

Groundwater Withdrawals. To meet the water needs of the increasing population in Orange County, more water has been pumped from an increasing number of supply wells. Currently, water for Orange County, and municipalities within the County, is pumped from approximately 182 public-supply wells. This figure excludes privately owned wells. Orange County operates 55 of these wells.

Groundwater Contamination. A major issue of recharge and groundwater supply is the potential for groundwater contamination. There are several potential sources of contamination in Orange County including drainage wells, underground storage/septic tanks, certain types of land uses, and saltwater intrusion. Orange County and other government agencies have historically monitored these sources and have found little to no groundwater contamination. However, the threat of contamination is still present. For example, artificial recharge by drainage wells, although beneficial in supplementing the natural recharge process, can result in groundwater contamination. Drainage wells can permit polluted stormwater run-off from roads or agricultural areas to drain directly into the groundwater. In Orange County, ten percent of the drainage wells discharge into the lower producing zone of the Floridan Aquifer. This lower producing zone provides 65 percent of the public water supply in Orange County. When bypassing the surficial aquifer, water also bypasses the semi-confining beds of the Hawthorn Formation which act as a filtering system, preventing foreign particles from entering the Floridan Aquifer. These foreign particles can contaminate large portions of the Floridan Aquifer due to the interconnected cavities which allow water to travel from areas of recharge to areas of discharge. Drainage wells can also contaminate the groundwater through leaks along well casings. These leaks permit water to easily move between semi-permeable confining beds. Although the threat of contamination is high, the operation of drainage wells in Orange County has historically not resulted in groundwater contamination problems. The high quality of Orange County's groundwater was confirmed by the United States Geological Survey (USGS) in their Water-Resources Investigations Report #82-4094 (Schiner and German) which sampled water quality from 92 drainage and supply wells around Orlando between 1977 and 1979. Most of the wells tested were within a 16 mile radius of Orlando. Orange County owned 19 of these wells. Schiner and German tested the type and amount of dissolved constituents, metals, nutrients, and organic compounds at these wells to determine the areawide effect of drainage wells on water quality. The well types were categorized into five groups:

1. Drainage wells that received lake overflow;
2. Drainage wells that received Street run-off;
3. Supply wells that tap the upper producing zone and were located near drainage wells;
4. Supply wells that tap the lower producing zone and were located near drainage wells; and,
5. Supply wells that tap the upper producing zone near the study area and likely not affected by drainage wells.

This report indicated drainage wells had not adversely affected the water quality of the supply wells. The type of drainage well did not affect the report's results. Drainage wells that received Street run-off had the same water quality as drainage wells that received lake overflow. The only exception was bacteria colony counts, which were considerably lower in wells that received lake overflow. However, the report did conclude that water from drainage wells had slightly higher concentrations of most pollutants than water from supply wells. The color of drainage well water was also frequently cloudier than supply well water due to the presence of hydrogen sulfide, iron and magnesium. Color can be an indicator of water quality; however, the report indicated the color differences were not significant enough to affect water quality.

Certain land uses and activities are also potential sources of contamination and can generate leachate. Leachate is the liquid containing both solids and suspended particles that percolates downward into the aquifers. Industrial land uses have the highest potential for generating leachate. Industrial manufacturing and processing plants use many liquids and solids that, if not properly disposed of, can dilute with water. Many industrial plants are permitted to use hazardous materials which intensify the seriousness and impacts of any contamination that occurs, or could occur. The Town of Eatonville has no high intensity industries regulatory measure are designed to mitigate against noxious and hazardous impacts. Solid waste collection is administered through contractors based on contracts with the Town and solid waste disposal in at the Orange County landfill. The Town of Eatonville has no landfills.

Water Quality of Surface Waterbodies. The water quality of surface water bodies is an important issue of aquifer recharge. Surface water bodies are often located within high recharge areas or are directly connected to the underlying aquifers. Therefore, surface water spends little to no time percolating through the semi-confining beds which degree of surface water quality is important.

The main protection of surface water bodies in Orange County is through Florida Administrative Code (Chapter 17-3. Chapter 17-3 protects pristine Florida waters from the threat of development and contamination. The FDEP is the agency responsible for classifying waters as "Outstanding Florida Waters." Chapter 17-3 defines "Outstanding Florida Waters" to include, but not be limited to the following:

1. Waters in National Parks and Wildlife Refuges;
2. Water in the State Park System and Wilderness Area;
3. Waters purchased under the Environmentally Endangered Lands Bond Program and other land acquisition programs; and,
4. Special waters as listed in Chapter 17-3.041(4) (i), FAC.

Chapter 1703, FAC, includes a complete list of those waters recognized as needing special protection. Before waters are designated as "Outstanding Florida Waters", an economic impact analysis must be prepared that examines the impacts from growth and development. The Environmental Regulatory Commission, an advisory board to the Florida Department of Environmental Regulation, may designate special waters if they are found to be of exceptional recreational or ecological significance and when the environmental, social, and economic benefits of such a designation outweigh the environmental, social and economic costs. The Town of Eatonville has no water bodies designated as Outstanding Florida Waters.

REGULATORY FRAMEWORK

Federal, State and local agencies have implemented regulations and programs that address groundwater issues. The following section identifies existing and proposed programs on groundwater quality and quantity in Orange County.

Federal Agencies and Programs. There are four Federal Acts; that govern and protect groundwater, surface water, and hazardous materials. In addition to these Acts, the United States Geological Survey monitors groundwater quality in Orange County. These four Acts are the Clean Water Act of 1972 and amended in 1977; the Safe Drinking Water Act of 1974 and amended in 1986; the Solid Waste Management Act of 1976 as amended by the Resource Conservation and Recovery Act; and, the 1980 Comprehensive Environmental Response, Compensation, and Liability Act which is better known as the Superfund Law. The United States Environmental Protection Agency is the primary Federal department responsible for managing and implementing the programs mandated by these Acts.

The Clean Water Act, as amended, provides States with the primary responsibility of managing waters within their jurisdiction. The two main goals of this Act are to provide water quality high enough to protect fish and wildlife; and, to eliminate the discharge of pollutants. These goals are met by implementing effluent limitations or preventing pollution into "waters of the United States". As such, this Act focuses on surface water, not groundwater.

The State of Florida understands that protection of groundwater resources is also important and has included groundwater in the definition of "Waters of Florida" (CH 373.019(8), FS). To manage these waters, Florida has adopted the standards specified in the Clean Water Act. The safe Drinking Water Act requires public water supplies to meet minimum national health standards for public safety. Thus, this Act is the primary tool for protecting the groundwater supply. This Act addresses wellfield protection and protection of critical aquifer recharge areas. Each State must implement a program that identifies wellhead protection areas for all public supply wells, identifies the potential pollutants in the protection areas and explains how the area will be protected from these potential pollutants. The potential for pollutants contaminating the water supply must be addressed when siting new supply wells. The program also must explain State and local jurisdictional responsibilities. Under this legislation, State and local governments must identify these critical areas and develop protection plans in accordance with program guidelines prepared by the Environmental Protection Agency. These guidelines have not been completed. Once these guidelines are established, Orange County should develop programs to meet these regulations. This Act also establishes "maximum contaminant levels" (MCLs) for specific chemicals and creates standard guidelines for the aesthetic quality of drinking water.

The Resource Conservation and Recovery Act (RCRA) addresses management of hazardous wastes and underground storage tanks. The RCRA authorizes the Federal Government to require identification and tracking of hazardous wastes from origin to destination. It also creates minimum standards for storage treatment and disposal facilities, and requires the permitting of these facilities. The RCRA also addresses underground storage tanks. It stipulates that each State must maintain information files for all active storage tanks and tanks taken out of service since 1973. Information must include age, size, type location and use of the tanks. Records are required to address leakage detection monitoring programs, inventory control systems and tank testing standards. Each State must also develop regulations that guide the reporting of leaks and corrective actions taken. Storage tanks are subject to these regulations if 10 percent of the volume is underground. Implementation of these programs and standards help preserve the quality of groundwater because they reduce the potential for leakage and contamination of the groundwater. The Superfund Law empowers the Federal Government to respond to environmental threats due to chemical spills or releases of hazardous materials. The Hazardous Substance Response Fund was established as part of this law and is used for corrective action. Moneys from the fund can be allocated for waste cleanups regulated by the RCRA, Clean Air Act, Clean Water Act and Toxic Substances Control Act. If actions are not taken to reduce potential for hazardous waste contamination by responsible parties, administrative or judicial actions can be taken, including a maximum fine of $5,000 per day.

The Superfund Law also requires that the Federal Government be notified of all inactive hazardous waste sites and adequate record of these sites be maintained. In addition to these Acts, the United States Geological Survey (USGS) monitors potentiometric surface levels to help ensure that an adequate supply of potable water is maintained. The Florida Sinkhole Research Institute has used this USGS data to compare potentiometric surface levels over an eleven-year period. The test well is in west central Orange County. Results of this monitoring program indicate the potentiometric surface fluctuates with the seasons and with time, but has experienced a general decline over the eleven year test period. During a five-year period, the potentiometric surface remained fairly constant, with highs between 61 and 63 feet National Geodetic Vertical Datum (NGVD) and lows of approximately 57.5 feet NGVD. In 1976, the low dipped to 56 feet NGVD. The potentiometric surface then experienced a significant drop during 1981-1982. A low point of 50 feet NGVD occurred in 1981. Water levels then increased. Between 1983 and 1985, the potentiometric surface had highs of approximately 62 feet NGVD and lows between 58-59 feet NGVD. In 1985, the low dropped to 57 NGVD.

State Agencies and Programs. Chapter 403, FS, established the Florida Department of Environmental Protection as the primary agency responsible for the protection of the groundwater supply. This Chapter is known as the Florida Air and Water Pollution Control Act. Among other tasks, the FDEP is responsible for developing long range plans for water control and pollution abatement. Chapter 403.063, FS, states that the FDEP will develop a groundwater monitoring network designed to detect or predict contamination of the groundwater. The FDEP also is the authority to establish a permitting system that requires permits for activities that may be a source of water pollution. The FDEP is also the implementing agency for additional regulatory requirements as specified in the FAC. CH 17-4, Q, FAC, details how to obtain permits from the FDEP. CH 17-245, FAC, establishes regulatory requirements for facilities which discharge into the groundwater. CH 17-28, FAC, establishes regulatory requirements for facilities which inject materials directly underground; and CH 17-701, FAC, regulates the operation of landfills and includes requirements for groundwater monitoring at landfill sites.

The State Blue Belt Law, approved in 1988, is also under the FDEPS jurisdiction. The Blue Belt Law provides for property tax reductions for high recharge areas that are developed and not in agricultural use. A commission within the FDEP is currently assessing several issues related to the law including criteria for identifying recharge areas, the effects of different land use on recharge areas, and whether this law will assist local governments in their comprehensive planning efforts. The commission will also conduct a cost/benefit analysis. The Water Management Districts are other agencies that manage water and related resources as specified in Chapter 373, FS. In Orange County, there are two Water Management Districts: St. Johns River and South Florida that have boundaries based on hydrologic basins and not on political boundaries. Chapter 373, U Sections .0395 and .0391, details important aquifer recharge activities.

Chapter 373.0395, FS, requires the Water Management Districts to prepare a Groundwater Basin Resource Availability Inventory, designed to assist local governments with future development plans. This inventory will define and identify the groundwater basin, prime recharge areas, minimum surface and groundwater levels, potential quantities of water available for consumptive uses, and other items associated with development in water resource areas. This document was completed in June, 1990. Chapter 373.0391, FS, requires the Water Management Districts to development a Needs and Sources Study. This Study will analyze information from the Groundwater Basin Resource Availability Inventory to assist local governments in determining their future water supply options in critical areas. Information from the Needs and Sources Inventory and the Groundwater Basin Resource Availability Inventory will be computerized in a format that can be transferred to local government computer hardware and Geographical Information Systems (GIS). One important result of this Study will be the development of groundwater flow diagrams which will enable local governments to assess the impacts of development on water resources. Orange County can assist local governments in the development of these inventories by providing technical assistance and demographic information. The County should also inform the Water Management Districts of the potable water and wastewater infrastructure plans and demand projections to better assess the quantity and quality of water resources and needs. The Needs and Sources Study and the Groundwater Basin Resource Availability Inventory will help Orange County determine the impacts of impervious surface ratios on the natural rate of recharge and in the preparation of groundwater resource availability inventories. Additional duties of these Water Management Districts are identified in Chapter 40.C for St. Johns River Water Management District. Duties include permitting consumptive uses of water (Section 2), regulating water wells and well contractors (Section 3), managing the storage of surface water (Section 4), and regulating and coordinating the drainage wells permits. Permitting consumptive uses enable the Water Management Districts to more effectively conserve and control water resources. Consumptive use permits also enable the Water Management Districts to promote the conservation, development, and proper utilization of surface and groundwater resources. Permits are not issued where it has been determined that specific negative impacts could arise.

In addition to the FDEP and the Water Management Districts programs, Chapter 17-3, FAC, potable water supply standards. These four standards are listed below:

1. Class G-I - Potable Water Use – Proposed. Class G-I includes groundwater in a single source aquifer which has a total dissolved solids (TDS) content of less than 3,000 milligrams per liter (mg/l). G-1 classifications are achieved through a petition and hearing process. The G-I Rule is currently in the hearing process and no aquifers will be classified as G-I until this Rule is approved.
2. Class G-II - Potable Water Use. Class G-II includes groundwater which has a TDS content of less than 10,000 mg/l, unless otherwise classified by the Environmental Regulation Commission. All potable water in Orange County is Class G-II.
3. Class G-III - Non-Potable Water Use. Class G-Ill includes groundwater in an unconfined aquifer which has a TDS content of 10,000 mg/l or greater; or, which has a TDS of 3,000 - 10,000 mg/l, and has been reclassified by the commission as having no reasonable potential as a future source of drinking water, or has been designated by the Department as an exempt aquifer pursuant to Section 17-23.13(3), FAC.
4. Class G-IV - Non-Portable Water Use. Class G-IV includes groundwater in a confined aquifer having a TDS content to 10,000 mg/l or greater.

Local Agencies and Programs. At the local level, there are several County agencies that monitor and regulate groundwater supply and aquifer recharge. The County Environmental Protection Department oversees ground and surface water quality, and the Public Works Division maintains the drainage system and drainage wells. The Public Utilities Division also plays the role of operating and maintaining the supply wells used to provide potable water to its customers. In Orange County, these Departments are committed to preserving the function to high recharge areas and protecting the aquifers from contamination. Below is a discussion of the existing programs Orange County has implemented to monitor the quantity and quality of groundwater. Future programs are also discussed.

1. Groundwater Recharge. Recognizing the importance of aquifer recharge, Orange County has implemented several programs designed to preserve natural recharge areas and the supply of groundwater. These existing programs include water recharge programs and design criteria for developing in high recharge areas. Design criteria for development in prime recharge areas are listed in the 1989 Orange County Subdivision Regulations. Article X, Section 10.4.4.C of this regulation states that recharge facilities may be required in developments with Type "A" soils. Type "A" hydrologic soils have a high infiltration rate and low run-off potential when thoroughly wet. These hydrologic soil groups are defined in the 1989 Soils Survey of Orange County, Florida. If recharge is required for developments on these soil types, the total run-off generated by a 25-year frequency, 24 hour duration storm must be retained on site. This regulation, though, does not control land use types or construction techniques in areas with high recharge potential. Such regulations are needed. In addition to preserving the function of high recharge areas, Orange County has several programs that take advantage of recharge areas. One project involves diverting excess water from Lake Orlando to Horse Shoe Lake via a pipeline under Northland Road. Horse Shoe Lake is in a high recharge area. This project includes rainfall and run-off gauges to measure the diverted water.

   The County's man-made Rapid Infiltration Basins (RIBS), located on prime recharge lands, allows reclaimed water to percolate rapidly through the sandy soils to the surficial aquifer. The thick layer of sandy soils provides additional filtration before the reclaimed water reaches the aquifer and replenishes the fresh water supply. RIB systems are designed and operated in accordance with Chapters 17-4 and 17-6, FAC, and are permitted by the FDEP prior to construction and operation. Detailed soil and hydrogeologic investigations, subsequent groundwater flow modeling, and a groundwater monitoring program are necessary to satisfy the requirements of the FAC and the FDEP. Programs and policies that promote recharge to the aquifer and reduce the demand for water are important and must continue to be implemented. The County should study effects of impervious surfaces on high recharge areas. Proper zoning can also help protect recharge areas. For instance, "cluster zoning" and planned development districts allow reduction of lot size if permanent open space is established. Use of these techniques in recharge areas should be emphasized in the Land Development Code. The Land Development Code should also contain a definition and map of the potential high recharge areas.

   Reducing demand for groundwater can also preserve its supply. The CONSERV II program in west Orange County should be expanded to include other water intensive uses such as agricultural farms, golf courses, and cemeteries. A significant amount of water can also be used for landscaping Private residential homes. To protect groundwater resources, businesses and residents should be educated on the average demand for everyday uses and on conservation programs that can reduce this average demand.

   Xeriscape landscaping is one method of water conservation. Xeriscape includes the use of drought tolerant and native Florida plants, as well as the proper placement, maintenance, and irrigation of these plants. Educational pamphlets, which explain which plants are drought resistant, should be mailed to all water intensive businesses and should be available to the general public at all nurseries located in unincorporated Orange County.

2. Groundwater Contamination. Programs and regulations to preserve water quality are as important as those to protect water quantity. Monitoring must be a part of these programs since once the aquifer is contaminated it could remain so for decades. If contamination is detected immediate actions must be taken to eliminate the source. Monitoring is especially important near potential sources of contamination such as landfills. Currently, the State only requires monitoring of Class I landfills, such as the county's extensive groundwater monitoring program in place at the County Landfill.

   The County's monitoring program encompasses over 90 monitoring wells intercepting the surficial aquifer and the Floridan Aquifer, and covers approximately 2,000 acres. Twenty-four of these wells are sampled monthly and tested for a broad spectrum of contaminants including trace metals, volatile organic, and "indicator" parameters. Mapping the water table of the surficial aquifer is performed biannually. Additional surface water monitoring, including biotoxicity assays, is also performed routinely to ensure that the landfill operation is not creating adverse environmental impacts outside its permitted zone of discharge. The high level of monitoring is designed to quickly detect potential contamination problems attributable to land fill activities so that mitigation efforts can be initiated, if necessary. To date, this monitoring program has not detected evidence of significant groundwater or surface water contamination outside the permitted zone of discharge as defined in site regulatory permits.

   Monitoring at Class III landfills is not required by the State since it is assumed that only inert materials will be dumped. Orange County, however, monitors Class III landfills near residential neighborhoods where the County believes there is a potential for unauthorized dumping. Orange County should consider making such monitoring requirements mandatory for all new or expanded landfills. Drainage wells are also a potential source of contamination. The Orange County's Environmental Protection Department tested and monitored a limited number of parameters for water quality of twelve drainage wells between 1978 and 1984. Little contamination was found. This monitoring program should be continued and expanded to include samples of water at more drainage wells, especially those wells that drain street water run-off. This would help in the early detection and awareness of contaminated waters. The monitoring program should also include samplings of water near industrial sites, agricultural land uses, and land uses with septic tanks; especially where these sites are near potable water supply wells, high recharge areas, or Outstanding Florida Waters.

   Additional programs are needed to regulate potential contamination problems. The County is currently developing a wellfield protection program. The proposed wellfield protection program is designed to protect potable water wellfields and related geographic areas that would be harmed by the introduction of contaminates. This program would also establish "cones of influence" for drainage and supply wells. Cones of influence vary depending upon the flow rate of run-off of groundwater to the well system or drawdown depth. In addition, this program could determine how differing land uses affect the wellfields and could promote regulations for those land uses which could have a detrimental effect on groundwater quality. The wellfield protection program is proposed to be implemented as regional water treatment plants begin operation.

   Protecting surface waters against contamination is also an important step in preserving the quality of groundwater. The Conservation and Stormwater Elements contain specific recommendations regarding surface water protection. Orange County is proposing to identify all point and significant non-point sources of water pollution and develop programs to reduce the harmful effects. Point sources release pollutants at a particular location along a water way and are attributed to a particular source. Development that could impact Outstanding Florida Waters also should be subject to special development regulations. These measures help to protect groundwater resources.

3 Intergovernmental Coordination. Orange County cannot resolve all issues relating to groundwater quality and quantity. Assistance and cooperation from other agencies are needed. Regional and national groundwater programs are essential for protecting the surficial aquifer and Florida Aquifer. Without this intergovernmental coordination, there is a potential for Orange County's water supply to become depleted or contaminated by the actions of others. Therefore, Orange County should encourage the coordination of Federal, State. and local guidelines and programs designed to protect groundwater from contamination or depletion.

   At the local level, Orange County should encourage adjacent municipalities and counties to adopt a uniform set of guidelines and programs that regulate land uses and activities near recharge areas or Outstanding Florida Waters in Orange County. These regulations should be incorporated into all Joint Planning Area Agreements. These regulations should also be supplemented by coordination efforts to reduce potential contamination and monitoring of water use. A monitoring program for septic tanks should be developed. The Council has already begun coordinating with local, State and Federal agencies.

The Town will use the Local Code Enforcement and the Public Works Department to enforce the St. John's Water Management District Water Shortage Plan as well as other state and federal plans and programs. The major deficiencies with the existing regulations and programs pertain to natural recharge areas are lack of intergovernmental coordination and the need for stronger regional and national groundwater programs which provides financial assistance and technical expertise to local authorities.

The goal of the Town's Comprehensive Plan is to provide for a safe water supply by preserving and protecting all natural recharge areas. The Aquifer Recharge Element and the Intergovernmental Elements contain objectives and policies that direct the actions the Town shall work with all Federal, State and Regional and Local Agencies to protect all natural recharge areas.

CHAPTER 9: CONSERVATION ELEMENT DATA INVENTORY AND ANALYSIS

INTRODUCTION

Purpose. The purpose of the conservation element is to provide a guide for the conservation use, and protection of natural resources located within the Town of Eatonville. 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 Town Officials. As growth occurs in Eatonville, the need for protection and management of the Town's natural resources will increase. The Town's natural resources are identified and analyzed. A description of these resources and their significance to the Town is discussed. Policies are established to maintain and enhance these resources as well as shape growth patterns of the Town is included.

Character of the Town's Natural Features and Resources

Topography/Climate. Within the Town of Eatonville, elevations range from ninety (90) feet above mean sea level to one-hundred feet above mean sea level. Most of the land has an elevation of 100 feet above sea level. The land is mostly flat with only a gentle slope from the northwest to southwest toward Lake Bell. One of the more important factors in Eatonville affecting the future development is the suitability of the area's soil for urban development. The Future Land Use Map Series illustrates the soil association found in Eatonville as determined by the U.S. Department of Agriculture Soil Conservation Service (SCS). Table 1 presents development limitations for soil types mapped in Eatonville.

Surface Water Inventory and Quality. This section will deal only with surface water found in Lakes and other wet lands. A detail discussion on subsurface water will be highlighted in the Sanitary Sewer, Solid Waste, Drainage and Potable Water Element of this plan. There are approximately 118.09 acres of surface water and wetland within the Town limits of Eatonville. These bodies of water consist of the following lakes: Lake Bell, Lake Wilderness, Lake Hungerford, Lake Shadow, Lake Weston and Lake King. Lake King, which is located South of Kennedy Boulevard and West of Interstate 4, is not a natural body of water. It is a borrow pit created for the construction of Interstate 4 and holds water throughout the year. It is primarily composed of surface water runoff from the surrounding area. Lake Wilderness is also a borrow pit located just west of Lake Bell and east of Wymore Road. Lake Sybelia, located north of the Town within Maitland, must also be noted since some of the surface runoff from northeast Eatonville is discharged into this lake. At present, none of the Lakes, within or adjacent to Eatonville, receive any sewage effluent from the Town. All of the lakes do, however, receive surface water runoff from the Town. Because all the streets in Eatonville have been paved and the large number of commercial development activities which are now occurring in the Town, there must be programs aimed at limiting the amount of runoff created by these development improvements. These improvements will result in a more abundant and faster rate of surface runoff than in the past. The more rapid rate of runoff will carry a higher level of contaminants into the lakes.

Information regarding existing water quality within the Town's lakes was furnished by the Orange County Pollution Control Department. The Florida Department of Environmental Protection (DEP) classifies surface water within the Town as Class III waters. Class III waters represent those waters which are suitable for recreational use and wildlife support and propagation, and maintenance of a healthy well-balanced population of fish and wildlife.

Eatonville is located within the Howell Branch Drainage Basin. The local Code Enforcement Department, Orange County Environmental Protection Department (EPD), the Florida Department of Environmental Protection (DEP) and the St. Johns River Water Management District (SJRWMD) provide control and regulatory authority through local, county, and state ordinances and statues. These regulations control water pollution, flood plain development, dredge and fill operation, storm water management, and other activities relating to water management. At the present time the surface water in Eatonville is used for only limited recreational uses. These lakes are relative small in size and no future commercial uses of these waters are projected.

The Orange County Board of County Commissioners regulates water pollution through the authority granted to it by Chapter 67-1839, Laws of Florida, as codified in Chapter 24, Orange County Code. The Board has established a countywide Environmental Protection Commission and Department which monitors water bodies. The County Environmental Protection Department (EDP) rates the Town's surface water quality as "good".

As the Town becomes more developed potential exists for storm water runoff to emit non-point sources of pollution. The Town will control the potential problem through enforcing stormwater management land development regulations. Over the next ten (10) years the demands for the use of surface water for industrial and agriculture will be very limited. The Town uses non-surface water for potables uses. The needs and sources, quality and quantity of water to meet the demands for the next ten (10) years are discussed in the Potable Water Sub-Element of this plan. The St. Johns River Water Management District (SJRWMD) has concentrated its efforts on maintaining a high-quality water supply. The State Legislature has allocated funds to the SJRWMD through the Surface Water Improvement and Management Trust Funds for surface water improvement and management programs. The SJRWMD has three major functions, programs and projects in its district. These are resource assessments which include resource investigations, data collection and monitoring programs. Water management implementation which includes land acquisition, project construction maintenance, land management regulation and outreach programs. The last function is support including facility expansion, administration and information management programs.

The SJRWMD operates a variety of programs relating to protection of water supply and quality. These range from programs establishing permitting process for wells to identification of areas of ground water contamination. The SJRWMD consumptive use permit (CUP) program is the primary initiative for controlling water quantity pursuant to CH 373.216/40C-2, FS. The SJRWMD addresses of natural systems protection by land acquisition, wetland monitoring systems, mitigation plans as well as management and preservation programs. The SJRWMD has also developed programs that regulate release of waste water to surface waters, and identify, develop and encourage environmentally sound wastewater treatment and disposal methods. The Town of Eatonville currently assists the District in enforcing the Water Shortage Rule (Chapter 40C-21, FAC) and the Water Conservation Rule (Rule 40C-2, FAC, Consumptive Uses of Water).

Flood Plains. The only flood plains in the Town of Eatonville are the areas found adjacent to the five lakes. These areas are the only areas identified by the Federal Emergency Management Agency as being a Flood Hazard Area or as being flood prone. Because of the Town's relatively high elevation and permeable soils, potential for large scale flooding in the Town is considered to be extremely remote. But, as the Town grows, the potential for flooding within the Town's lowest elevations is possible. These drainage issues are addressed in the Stormwater Management-Element.

Ground Water Resources. The Floridan Aquifer provides one-hundred percent of the Town's potable water. The protection of groundwater resources is essential to ensure the Town's long-term water supply and maintain its water-related natural resources. The protection of ground water resources will be discussed in the Groundwater and Aquifer Recharge Element of this plan.

Vegetative Communities. Upland vegetation predominates in the Eatonville area. The area's natural vegetation consists primarily of scrub as delineated on the Future Land Use Map series delineating natural features of the Wekiva Study Area.

Soils. The Orange County Soils Survey, prepared by the Soils Conservation Service of the United States Department of Agriculture, identifies 16 soil types and the water bodies present within the Town of Eatonville as characterized below in Table IX-1 and on the Delineation of Eatonville Area Soil Types Map on page 86. These soils are generally characterized by nearly level to gently sloping, moderately well drained to poorly drained sandy soils. Soils are a limited resource that requires protection. The Town and County should continue to work with the U.S. Soil Conservation Service to rate and classify soils and minimize erosion. Presently no potential soil erosion problems exist in the Town. An analysis of soils, by a qualified professional, is likely one of the best ways to facilitate determination of whether "most effective recharge areas" that exist in the Town of Eatonville. As the term is used in Rule 40C-41.063(3), F.A.C. and as determined by the U.S. Soil Conservation Service, soils that are a part of Type "A" Hydrologic Soils Group are most characteristically associated with the "most effective recharge areas." The Soils Map delineates Basinger hydric soils identified by Map Key #3. The map delineates only a few small sites of less than one acre mainly located in the unincorporated enclave west of Campus View Drive. The only sizable site is primarily situated on an undeveloped parcel owned by the Orange County and planned as large drainage retention area which abuts the northeast portion of the Maitland Reserve Office Center west of Keller Road and north of W. Kennedy Blvd. Areas of high recharge are characterized as follows:

- Sandy soils and sink holes are common.
- The water table is significantly below land surface, enabling water from prolonged rains to be stored without the water table rising to land surface.
- The water table usually experiences a three to six-inch change in its level between the dry and wet season. High recharge areas percolate an average of twelve inches of water per year, per acre into the aquifers, although some areas can recharge up to 20 inches per year. Twelve inches of recharge equals approximately 326,700 gallons of water.

CHAPTER 9: CONSERVATION ELEMENT DATA INVENTORY AND ANALYSIS

Table IX-1 on the following page generally classifies soil types by their basic character, slope, capacity to drain, associated runoff, flooding frequency, and ponding frequency.

TABLE IX-1: CHARACTERISTICS OF SOIL TYPES: TOWN OF EATONVILLE

Map ID#	Soil Types	Base Character	% Slope	Drainage Class	Runoff Class	Flooding Frequency	Ponding Frequency
1	Arents	Nearly Level	0-2	Poorly Drained	Negligible	None	None
3	Basinger	Fine Sand	0-1	Hydric Very Poorly Drained	Negligible	None	Frequent
7	Candler	Urban Complex	0-5	Excessively Drained	Very Low	None	None
20	Immokalee	Fine Sand	0-2	Poorly Drained	Very High	None	None
27	Ona	Urban Complex	0-2	Poorly Drained	Very High	None	None
33	Pomello	Fine Sand	0-5	Moderately Well Drained	Negligible	None	None
34	Pomello	Urban Complex	0-5	Moderately Well Drained	Negligible	None	None
37	St. Johns	Fine Sand	0-2	Poorly Drained	Very High	None	None
41	Samsula-Hontoon-Basinger	Depressional	0-1	Hydric Very Poorly Drained	Negligible	None	Frequent
44	Smyrna-Smyrna	Wet, Fine Sand	0-2	Poorly Drained	High	None	None
45	Smyrna	Urban Complex	0-2	Poorly Drained	Very High	None	None
46	Tavares	Fine Sand	0-5	Moderately Well Drained	Negligible	None	None
48	Tavares	Urban Complex	0-5	Moderately Well Drained	Very Low	None	None
50	Urban Land	Urban	NA	NA	NA	NA	NA
54	Zolfo	Fine Sand	0-2	Somewhat Poorly Drained	Negligible	None	None
55	Zolfo	Urban Complex	0-2	Somewhat Poorly Drained	Very Low	None	None
99	Water	NA	NA	NA	NA	NA	NA

Source: "Custom Soil Resource Report for Orange County Florida," Natural Resource Conservation Service, United States Department of Agriculture

Endangered Plants and Animals. Partial or complete destruction of local ecological communities has occurred due to the Town's urban nature. This destruction has resulted in the isolation of vegetation and animals into small pockets. Animals and plants which depend on these communities are generally in the greatest danger of disappearance. The protection of endangered, threatened and rare wildlife and open space corridors should be a priority in the development of goals objectives and policies of the Conservation Element. Table IX 2 [on page 86] indicates endangered, threatened and rare species that could be expected to be found in the Eatonville area. These species have not necessarily been specifically identified in Eatonville; however, suitable habitat to support them exists in surrounding areas. Future development should be regulated in order to ensure conservation of open space and preservation of the physical and biological function of natural systems. The Town should develop land development regulations and incentives to protect vegetative communities which serve as habitats for threatened or endangered wildlife as well as species of special concern.

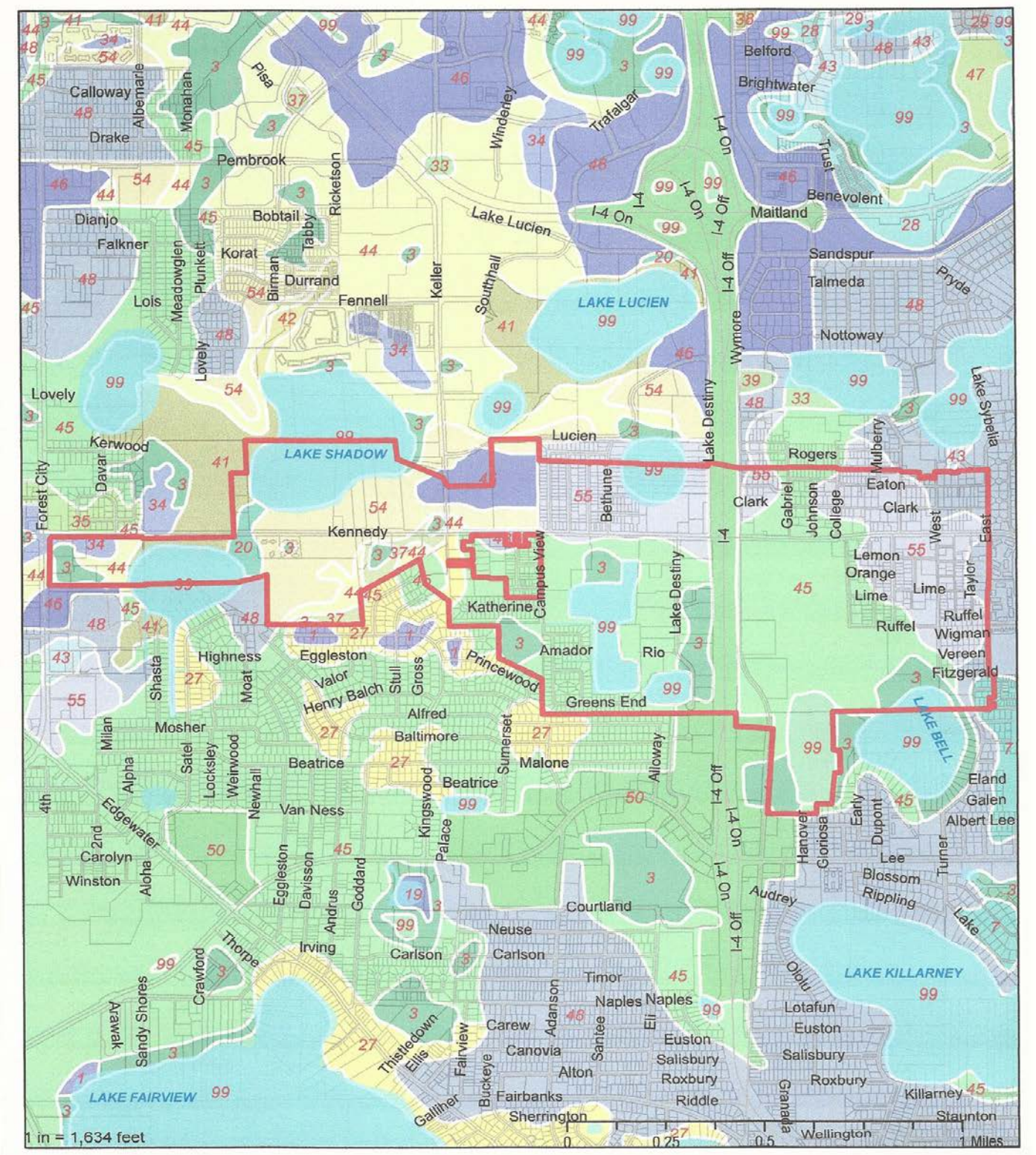
ANALYSIS OF NATURAL RESOURCES

Air Quality. Eatonville and Orange County's air quality is currently good. However, the Town together with Orange County should carefully monitor natural resources and ensure that regulatory measures are enforced to maintain qualitative standards established by the State. Orange County does not contain a large concentration of heavy industries. Automobile emissions are the principal contaminant of air quality. This issue is generally addressed by federal Clean Air Act and state regulatory measures. Development of multi-modal transportation initiatives also can aid in abating air pollution caused by automotive emissions. Eatonville should encourage car-pooling, bike paths, mass transit and other alternative transportation modes. Planned Unit Development (PUD) that includes vertically mixed land use activities and other similar innovative development concepts can assist in reducing automotive trips by creating vertically mixed-use activity centers containing employment and shopping venues served by a captive residential market co-located on site.

Water Quality. Potable water in Eatonville comes from the underlying Floridan aquifer. Rainfall is the primary contributor in recharging the Floridan aquifer. Rainfall percolates through sandy soils and seeps into the underlying water table. The Town must work with the County to identify potential sources of pollution that could threaten groundwater quality and act to eliminate improperly installed or malfunctioning septic tanks, improper disposal of hazardous and toxic waste and underground fuel storage tanks. The Town is presently removing all underground fuel storage tanks and testing the areas around this these tanks for contamination. The Town's Council has also supported an ordinance discouraging construction of potential hazardous waste generators.

Natural Resources and Development Constraints-- Wekiva River Basin Implication

All land west of I-4 within the Town of Eatonville is located within the Wekiva River Basin Study Area but no land within the Town limits is located within the Wekiva River Protection Area. State shape files indicate that the only area east of I-4 that contains any one of the natural resource identified in available State natural resource files is the shoreline of Lake Bell which contains karst areas and sensitive scrub habitat along the lake shoreline.



Town of Eatonville
Delineation of Area Soils Map

CHAPTER 9: CONSERVATION ELEMENT DATA INVENTORY AND ANALYSIS

Table IX-2 includes resources throughout the entire Town limits. The Town is not within an area impacted by the Wekiva Parkway and no interchange locations exist in the Town limits. Map IX-3 denotes special natural resources of concern in the Wekiva Study Area.

TABLE IX-2: ENDANGERED AND THREATENED SPECIES OF SPECIAL CONCERN

Species	Common Name	Habitat	USFWS	FGFWFC	FCREPA	FHAI	Major Group
Rena Areolata Aesopus	Florida Gopher Frog	Sand hill Scrub	UR	SSC	T	S3	Amphibian
Accipter Cooperii	Cooper's Hawk	Mixed Wood			SSC	S3	Bird
Ammodramus Savannarum Floridan	Florida Grasshopper Sparrow	Palmettos, Scrub	UR	E	E	S1S2	Bird
Aphelocoma Coerulescens	Florida Scrub Jay	Sand Pine Scrub	UR	T	T	S3	Bird
Aramus Guarauna	Limpkin	Freshwater	SSC		SSC	S3	Bird
Athene Cunicularia Floridana	Florida Burrowing Owl	Prairie	SSC		SSC	S3	Bird
Buteo Brachyurus	Short-Tailed Hawk	Mixed Woodland		R	R	S3	Bird
Egretta Caerulea	Little Blue Heron	Littoral Zones	SSC		SSC	S4	Bird
Elanoides Forticatus	Swallow-Tailed Kite		UR				Bird
Eudocimus Albus	White Ibis	Marsh			SSC	S4	Bird
Falco Sparverius	Southeastern Kestrel	Prairie Flatwoods	UR	T	T	S3	Bird
Grus Canadensis	Florida Sand hill Crane	Prairie Marsh		T	T	S2S3	Bird
Haliaeetus Leucocephalus	Southern Bald Eagle	Flatwoods		T	T	S2S3	Bird
Izobrychus Exilis	Least Bittern	Marsh			SSC	S4	Bird
Mycteria Americanus	Wood Stork	Swamp	E	E	E	S2	Bird
Pandion Haliaetus	Osprey	Marsh, Lakes			T	S2S2	Bird
Picoides Borealis	Red-Cockaded Woodpecker	Pinelands	E	T	E	S2	Bird
Picoides Villosus	Hairy Woodpecker	Woodlands			SSC	S3	Bird
Ictalurus Brunneus	Snail Bullhead Catfish	Swift Streams			R	S3	Fish
Lucania Parva	Rainwater Killifish	Swamps, Springs			SSC	S2	Fish
Lasiurus Cinereus	Hoary Bat	Forests			R	SU	Mammal
Mustela Frenata Peninsulae	Southeastern Weasel	Various			R	S3	Mammal
Neofiber Alleni	Round-Tailed Muskrat	Shallow Marsh			R	S3	Mammal
Peromyscus Floridanus	Florida Mouse	Sand Pine Scrub	UR	SSC	T	S3	Mammal
Plecotus Rafinesquei Floridanus	Southeastern Big-Eared Bat	Forest Cavities			R	S3	Mammal
Sciurus Niger Shermanii	Sherman's Fox Squirrel	Sandhi11	UR	SSC	T	S3	Mammal
Ursus Americanus Floridanus	Florida Black Bear	Dense Forest	UR	T	T	S3	Mammal
Asclepis Curtissii	Curtis Milkweed	Scrub		T	T	S2S3	Plant
Bonamia Grandiflora	Florida Bonamia	Scrub	UR		T	S3	Plant
Deeringothamus Rugelli	Yellow Squirrel Banana	Flatwoods	UR		E	S1	Plant
Dennstaedtia Bipinnata	Couplet Fern	Hydric Hammocks			E	S1	Plant
Drosera Intermedia	Water Sundew	Bog, Stream			R	S3	Plant
Eriogonum Floridanum	Scrub Buckwheat	Sand hill Scrub			T	S3	Plant
Nemastylis Floridanum	Fall-Flowering Ixia	Wet Flatwoods	UR		T	S2	Plant
Ophioglossum Palmatum	Hand Fern	Hydric Hammock	UR		E	S1	Plant
Peltandra Sagittifolia	Spoon-Flower	Wetlands			R	S3	Plant
Rhapidophyllum Hystrix	Needle Palm	Hydric Hammock	UR		T		Plant
Alligator Mississippiensis	Alligator	Wetlands, Lakes, River	T	SSC	SSC	S4	Reptile
Drymarchon Corais Couperi	Eastern Indigo Snake	Scrub, Music Woods	T	T	SSC	S3	Reptile
Gopherus Polyphemus	Gopher Tortoise	Herbaceous Scrub	UR	SSC	T	S2	Reptile
Pituophis Melanoleucus Mugitus	Florida Pine Snake	Xeric Oak, Pine	UR	SSC			Reptile
Sceloporus Woodi	Florida Scrub Lizard	Sand Pine Scrub			R	S3	Reptile
Stilosoma Extenuatum	Short-Tailed Snake	Pine-Turkey Oak	UR	T	E	S3	Reptile

Source: Orange County Planning Department.

TABLE IX-3: TOWN OF EATONVILLE WEKIVA STUDY AREA NATURAL RESOURCE

Natural Resource	Location	Acres
Habitat		0.35
Scrub	West of Lake Bell	0.00
Long Leaf Pine	None	0.00
Sand Pine	None	0.00
Xeric Oak	None	
Karst	South of Kennedy Blvd. E of Kinston Ct.	0.08
Most Effective Recharge Area		
• Site One	West of Lake Weston	0.03
• Site Two	SE of Lake Shadow at Orange Co Retention	0.12
• Site Three	Area	1.54
• Site Four	North of Samuel Street	0.30

Source: Geographic Information Systems of Orange Co.; "Custom Soil Resource Report for Orange Co. FL; Natural Resource Conservation Service, United States Department of Agriculture; East Central FL RPC; SJRWMD, and FDEP

Land Use Strategies for Protecting Natural Resources and Private Property Rights

The major goal in protecting natural resources should be to protect their physical and biological functions. Land use strategies should ensure that development does not disturb the physical and biological functions of the natural systems required to sustain our community. In this manner by protecting natural resources within the Town of Eatonville, the Comprehensive Plan can assist in protecting the quality of life characterizing the Town and ensure an optimum living and working environment to sustain the population and the economic activities within the Town. A major purpose of the Comprehensive Plan is to ensure that natural resource are protected in order to sustain private property rights and ensure maintenance of the Town's quality of life, In this manner by protecting natural resources within the Town of Eatonville, the Comprehensive Plan can assist in protecting the quality of life characterizing the Town, ensure an optimum living and working environment to sustain the Town's population and economic activities consistent with the Bert Harris Act.

1. Natural Resources Overlay Protection District. The Town should establish a natural resource protection area which should include the lakes and shorelines within the Wekiva Study Area. These lakes and wetlands area are designated Conservation Areas on the Future Land Use Map. The U.S. Soil Conservation Service has determined that soils which are a part of Type "A" Hydrologic Soils Group are most characteristically associated with the "most effective recharge areas." This fact is also reflected in Rule 40C-41.063(3), F.A.C. The Future Land Use Element Data Inventory and Analysis Soils Map I-5 delineates Basinger hydric soils identified by Map Key #3. The map delineates three small sites of one-acre or less. The only sizable site is primarily situated on a large undeveloped parcel owned by the Orange County as a storm drainage retention pond which abuts the northeast portion of the Maitland Reserve Office Center west of Keller Road and north of W. Kennedy Boulevard. Field surveys for all development plans should be required to delineate each resource as well as jurisdictional wetlands and the 100- year flood plain that exists on each site, respectively.

2. Need to Restrict or Prohibit Certain Land Use Activities in the Town's Natural Resources Overlay Protection District while Preserving Private Property Rights. The Town should adopt policies that limit new land use activities within the Natural Resources Overlay Protection District as well as other areas delineated in future development plans as jurisdictional wetlands. The Town should restrict land use and development that have potential to adversely impact groundwater and surface water quality and should prohibit activities such as mining, landfills, sprayfields, heavy industrial, intense animal operations and on-site septic systems for wastewater treatment. The land use strategies recommended should require lawful regulatory flexibility required to ensure preservation of private property rights, including right to access life sustaining natural resources such as reliable potable water supply and reliable water quality.

3. Application of Best Management Practices and Development Standards. Where avoidance of impacts through the limitation of land use activities is not feasible, the Town should implement best management practices and development standards, such as buffering, setbacks and open space standards, to minimize the impact of land use and development on the identified natural resources.

4. Recommended Analytical Procedures for Development Plans within the Natural Resource Overlay Protection District. The following surveys and analysis should be required as part of all new subdivision plans, site plans, or the functional equivalent. The surveys and analysis should evaluate the location and characteristics of each of the natural resources within the Wekiva Study Area, including all water bodies, hydric soils and should include all jurisdictional wetlands delineated as part of the site analysis. The field surveys and analysis shall be undertaken as part of the development review process or the functional equivalent by a professional environmental engineer, biologist, limnologist or other professional any one of which must demonstrate by education and experience competency and knowledge of the best management practices for protecting the physical and biological functions of natural resources in the Wekiva Study Area. No development on adjacent developable uplands shall cause disturbance within any area delineated as a habitat for protected vegetative species or other natural resource identified within the Wekiva Study Area.
    a. Identification and Analysis of Soils. An analysis of soils, by a qualified professional, to determine the location of most effective recharge areas as the term is used in Rule 40C-41.063(3), F.A.C. or soils determined by the U.S. Soil Conservation Service to be Type "A" Hydrologic Soils Group which are considered to be the most effective recharge areas. The survey should also verify the 100-year flood plain.
    b. Identification and Analysis of Sinkholes and Other Karst Features. A site analysis by a licensed professional geologist, to determine the location and nature of sinkholes and other karst features on-site, such as stream-to-sink and other direct connections to the aquifer including analysis determining the depth of the water table, location of the Floridan Aquifer relative to ground surface and thickness and extent of the bedrock or other confining layers over the aquifer. The analysis may include use of geophysical surveys, such as microgravity and ground penetrating radar surveys, and may be supplemented with documented locations of sinkholes, light detection and ranging surveys and aerial photographs.

c. Identification and Analysis of Sensitive Natural Habitats. As stated in subsection "4" above, all subdivision plans, site plans, or the functional equivalent for undeveloped sites that include a natural resource shown on Map W-1: Wekiva Study Area Natural Resources Designated "Conservation" shall include a field survey verifying the type natural resource and delineating the outer perimeter of the sensitive natural habitats including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. The analysis should be coordinated with the Florida Fish and Wildlife Conservation Commission and the Florida Department of Environmental Protection (F-DEP). The Map of the Wekiva Study Area Boundary was based on geographic information system analysis employing the data base of Orange County, East Central Florida Regional Planning Council, St. Johns River Water Management District Geographical Information System, and F-DEP, including all shape files forwarded by the Florida Department of Community Affairs.

The inventory revealed no presence of Longleaf Pine or Sand Hill habitats. The only habitat identified was defined as "Scrub" habitat. Throughout the entire Town of Eatonville all new subdivision plans, site plans, or the functional equivalent for undeveloped sites of over two acres that are heavily vegetated should be required to undertake a field survey by a competent environmental engineer, biologist or limnologist any one of which must possess education and experience in the resource that is the subject of the survey and the survey shall include delineation of sensitive habitat, including, but not limited to, any Longleaf Pine, Sand Hill, Sand Pine or Xeric Oak Scrub, or karst features prevalent on-site.

d. Identify Measures to Protect Natural Resources with Direct Connection to Aquifer and Stream-to-Sink Features. The analysis required above should be used to characterize on-site soils and determine locations of geologic features including sinkholes, solution pipes, depressions, and depth of soil to lime rock, including karst features like sinkholes with a direct connection to the aquifer and stream-to-sink features that require protection.

5 Recommend Preservation and Dedication of Open Space Conservation Easement for Natural Resource System Components. The field survey shall identify natural resources identified in subsections 1 through 5 herein, including jurisdictional wetlands. All such field verified natural resource areas should be delineated on development plans as "Conservation Open Space" and the Town should require that such areas be preserved by requiring dedication of a conservation easement that envelops the designated "Conservation Open Space" area(s) on the plat or other recordable instrument.

a. Open Space Defined. Green permeable surface which does not include impermeable ground cover. Open space is defined as permeable, green space that remains undeveloped or minimally developed, with boardwalks and trails as part of a natural resource preserve or passive recreation area, and shall include land preserved for conservation purposes. Open space excludes impervious surfaces, street rights of way, parking lots, and impervious recreation areas. Open space areas may include stormwater management areas that follow recommended "best management practices" (BMPs). A maximum of 25% of a site's wetland acreage may be credited toward the open space requirement. There are no open space preserves in Eatonville.

b. Recommended Upland Buffer and Minimum Open Space Requirements. As documented in the first section of the future land use element, the Town of Eatonville has a unique heritage having been originally incorporated as a Black municipality in 1887. The Town is near build out and its urban pattern is characterized by small lot subdivisions primarily ranging from 4,400 to 7,500 sq. ft. The entire Town is part of an adopted Community Redevelopment Area (CRA) approved by Orange County and consistent with Florida Statutes. Therefore, attracting re-investment and revitalization within the community, especially within the Hungerford School Town Center Redevelopment expansion site (66.50 undeveloped and underdeveloped acres), is a major objective of the Town Council as stated in its adopted CRA Plan and in this Comprehensive Plan. The Town is also part of the Orange County Enterprise Zone program—a program designed to encourage reinvestment, revitalization and economic development.

Major opportunities for infill and redevelopment exist as documented in the Future Land Use Element Data Inventory and Analysis. Land use policies, including state, regional and local goals designed to protect natural resources must be balanced against sometimes conflicting state, regional and local goals such as those aimed at economic development, protection of private property rights, and revitalization and infill of urban areas targeted for redevelopment. For instance, the Town of Eatonville desires to promote the State's objectives within the Wekiva Study Area, including conservation of natural resources as well as enhancing water quality and conserving supply. Therefore, as documented in Table IX- 4: Recommended Impervious Surface/Open Space Ratios and Density/Intensity, the Town should require that development of sites greater than 7,500 square feet that are within 30 feet of a field verified natural resource areas designated "Conservation" on Map W-1: Wekiva Study Area Natural Resources, including areas designated along the Lake Bell Shoreline, should preserve at least 40% of the total site as open space. No new development shall disturb sensitive natural resources identified on Map W-1: Wekiva Study Area Natural Resources Designated "Conservation."

However, a policy that requires all land owners, within the CRA, especially owners of smaller undeveloped parcels to retain 40% of the gross land area as open space would: 1) increase potential for litigation of property rights issues including takings issues; 2) constitute a major disincentive to reinvestment; and 3) would impede implementation of economic stimulus programs aimed at generating economic enterprise and revitalization of the community redevelopment area, including blighted areas along the West Kennedy corridor." Table IX-4 recommends maximum impervious surface ratios and minimum open space requirements for the Town that are sensitive to private property rights issues, effectively protect natural resources and also assist in maintaining and enhancing water quality, provide reasonable regulatory measures that should not deter private initiatives to reinvest in the CRA, participate in revitalization through the Eatonville Enterprise Zone program, and should not become impediments to economic stimulus packages or breed unnecessary property rights litigation.

c. Recommended Upland Buffers. Upland sites located within thirty (30) feet of the outer perimeter boundary of field verified natural resource areas designated "Conservation Open Space" pursuant to criteria in subsections 4 (a-d) and 5 above should preserve a system of open space buffers having an average width of 30 feet and a minimum width of 20 feet from the outer boundary of areas delineated "Conservation Open Space" No new development within the recommended Wekiva Natural Resource Overlay District should disturb sensitive natural resources identified on Map W-1: Wekiva Study Area Natural Resources Designated "Conservation."

Table IX- 4: RECOMMENDED IMPERVIOUS SURFACE/OPEN SPACE RATIOS AND DENSITY/INTENSITY[1].

Future Land Use Map Designation	Maximum Impervious Surface Ratio				Minimum Open Space Ratio				Maximum Density/ Intensity	Consistent Zoning Districts
	Wekiva Study Area and Lake Bell Shoreline		East of I-4, Hungerford	East of I-4	Wekiva Study Area and Lake Bell Shoreline		East of I-4,	East of I-4		
	>7,500ф w/in 30' of Natural Resource	Other sites **>7,500ф or #7,500ф**	Hungerford Town Center Expansion, Excl. Lk Bell	Excluding Hungerford Town Center Expansion	**>7,500ф** w/in 30' of Natural Resource	Other sites **>7,500ф or #7,500ф**	Hungerford Town Center Expansion Excl. Lk Bell	Excluding Hungerford Town Center Expansion		
Conservation	0.05	0.05	0.05	0.05	0.95	0.95	0.95	0.95	0.05 FAR	Conservation (C)
Residential										
Low Density	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	5.8 DUs/ac	R-1
Medium Density	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	8.7 DUs/ac	R-2
High Density	0.60	0.60	0.65	0.75	0.40	0.35	0.35	0.25	17.4 DUs/ac	R-3
Commercial										
Limited	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	40 ft. ht.	C-1
Office	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	60 ft. ht.	C-2
General	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	48 ft. ht.	C-3
Industrial	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	48 ft. ht.	I-1
Institutional	0.60	0.65	0.65	0.75	0.40	0.35	0.35	0.25	48 ft. ht.	C-1,C-2,C-3

ISR is the abbreviation for Impervious Surface Ratio

Natural resources identified on the Wekiva Study Area Natural Resources Map must be delineated in the field prior to subdivision or site plan approval or the functional equivalent by a professional environmental engineer, biologist, limnologist or other professional any one of which must by education and experience demonstrate competency in the natural resources being identified in order to ensure accuracy of the boundaries of the natural resource protection area. No development shall occur within an area designated "Conservation" on Map W-1: Wekiva Study Area Natural Resources [i.e., including the shoreline of Lake Bell] unless such development is essential to the public welfare and appropriate permits are obtained from the state agency having jurisdiction. Similarly, no development on adjacent developable uplands shall cause disturbance within the area delineated as a habitat for protected vegetative species identified on Map W-1: Wekiva Study Area Natural Resources Designated "Conservation." Development on uplands within 30 ft. of the outer perimeter of a designated natural resource in the Wekiva Study Area shall preserve at least 40% of the total site as open space if the site is greater than 7,500 sq. ft. and therefore the maximum ISR shall be 60%.

6. Conservation Design Standards: Protective Standards Applicable to Natural Resources. All new residential and non-residential development proposals for site plan or subdivision plan or its functional equivalent on undisturbed sites that support sensitive habitats, jurisdictional wetlands and/or 100-year flood plain comprising two acres or more should apply cluster design standards and open space preservation techniques as described above. On the outer fringe of environmentally sensitive areas, clustering of development should be the desired option and open space should be connected, to the greatest extent possible, to open space systems to create habitat and corridors of larger areas. The following principles should be applied:
   a. Clustering of units on uplands lying outside of the natural resource protection district.
   b. Establishment of open space, consistent with paragraphs 5, 5(a) and 5(b) above, which shall be connected whenever possible, in recordable easements, plat, or other recordable instrument;
   c. Development should be served by central water and sewer treatment facilities; and
   d. Development should not disturb areas within the natural resource protection district.

7. Protect Other Significant Natural Resources. Other significant resources, such as wetlands and floodplains and other sensitive natural habitats, within the Town of Eatonville should be protected consistent with the other comprehensive plan's objectives and policies requiring their protection.


FUTURE LAND USE MAP SERIES:
MAP OF TOWN OF EATONVILLE WEKIVA STUDY AREA
LAKE LUCIEN
LAKE LOVELY
LAKE HARVEST
LAKE JACKSON
LAKE SHADOW
LAKE HUNGERFORD
LAKE WESTON
LAKE KING
LAKE BELL
LAKE ASBURY
LAKE SUMERSET
Wekiva Study Area
Natural Resources Designated Conservation
Longleaf Pine
Sand Pine
Xeric Oak
Scrub
Lakes
Karst
Most Effective Recharge Area
Town Limits
Sources: Orange County
East Central Florida Regional Planning Council
St Johns River Water Management District
Florida Department of Environmental Protection
Prepared by
Soin and Associates Inc
Geographic Systems LLC
July 2008

8. Recommended Conservation Design Standards to Protect Natural Features Cite on the FLUM. The following are recommended regulatory techniques to protect Wekiva River Basin Protection Study Area resources.

   a. Setbacks from Karst Features. All development should be setback from sinkholes and other karst features as shown below. There are no identified springs in the Town limits. However, if field studies identify such resources the setbacks below stated should apply. The setback should consist of a buffer that excludes development and retains all natural vegetation within the setback area. The Town has no caves or spring heads. Where an existing lot of record is too small to accommodate the minimum amount of development necessary for the recommended setbacks and open space standards in paragraph 5 herein, the allowable use may be established provided that the building and associated paved areas are located the maximum distance possible from the karst features, and further provided that a swale and berm are located between the development and the karst feature with a direct connection to the aquifer. The swale and berm should be designed to direct drainage away from the karst feature.

Table 5: RECOMMENDED MINIMUM SETBACKS FROM KARST FEATURES

Feature	Minimum setback (feet)
Springs	300
Spring runs	100
Sinkholes, with a direct connection to the aquifer	200, measured from the drainage divide
Other sinkholes	100, measured from the drainage divide
Other karst features with direct connection to aquifer (swallet or stream to sink)	200, measured from the drainage divide

Source: "Model Goals, Objectives, and Policies for the Wekiva Study Area," Prepared by the Division of Community Planning, Department of Community Affairs, April 14, 2006.

   b. Joint or Shared Access and Stormwater Facilities to Minimize Impervious Surface. Development should use joint or shared access and stormwater facilities to the maximum extent feasible in order to minimize impervious surfaces.

   c. Non-Residential Development Strategies to Minimize Impervious Surfaces. Non-residential development located adjacent to a natural resource identified on the Future Land Use Map should use shared parking to the maximum extent feasible in order to minimize impervious surfaces. Any such parking lot with 100 or more parking spaces should be designed with a minimum of twenty (20) percent of the parking spaces with a commercially marketed porous pavement material approved by the Town engineer.

   d. Design Criteria for Impervious Surfaces. Design of parking lots, sidewalks, buildings, and other impervious surfaces located adjacent to natural resources designated on the Future Land Use Map should minimize connections between impervious surfaces through techniques shown on a site plan such as:
      i. Directing flows from roof drains to vegetated areas or rain barrels/cisterns for reuse of water;
      ii. Directing flows from paved areas to vegetated areas;
      iii. Locating impervious surfaces so that they drain to vegetated buffers or natural areas; and
      iv. Breaking up flow directions from large paved surfaces.

   e. Use of Alternative Materials for Impervious Surfaces. Porous pavement materials, pervious concrete, and pervious asphalt should be used to minimize the amount of impervious surface within new development and redevelopment.

   f. Design Criteria for Roads and Drainage Systems. Drainage for streets and roads within new development immediately adjacent to a natural resource designated on the Future Land Use Map shall be through roadside swales and berms. Curb and gutter design should not be approved, except where safety issues exist. Infill and redevelopment in existing urban areas with existing curb and gutter are exempt from these requirements. To the extent feasible, where curb and gutter systems are approved the curb and gutter shall be designed to provide adequate curb cuts to allow run-off to be directed to roadside landscaped swales for infiltration and treatment prior to discharge.

   g. Design Criteria for Reducing Site Disturbance. Development on sites adjacent to natural features designated on the Future Land Use Map should be designed to minimize site disturbance by limiting clearing to the minimum area necessary to accomplish development through the following:
      i. Avoid or minimize the removal of existing trees and vegetation;
      ii. Minimize soil compaction by delineating the smallest disturbance area feasible; and
      iii. Maximize disconnection of impervious surfaces to reduce water runoff and increase infiltration opportunities.

h. Use of Landscaping BMPs. The following landscaping best management practices (BMPs) should be instituted to reduce nitrate loading:
   i. Planted turf grass and landscaping within residential lots should be restricted wherever feasible to minimize the use of fertilization and water for irrigation;
   ii. Drought tolerant and native landscaping should be required wherever feasible; and
   iii. All development should require best management practices as dictated by the principles and practices of the Florida Yards and Neighborhood Program.

i. Wildfire minimization. Habitats supporting threatened, endangered, and special listed species identified on Wekiva Study Area in Eatonville should be protected from wildfires through wildfire protection regulations and firewise landscaping. Future land use policies should require a wildfire protection zone averaging no less than thirty feet (30') in width be placed along the perimeter of a planned development or residential subdivision that is exposed to potential wildfire impacts. The minimum width of the wildfire protection zone should be twenty feet (20') while preserving the minimum average width. The future land use policies should require that land development regulations be amended to include appropriate access for emergency vehicles, generally a path of at least fourteen (14) feet. The regulatory measures should require firewise landscaping designed to ensure that tree plantings are at least fifteen (15) feet from the wildfire protection zone. Plants and trees planted within thirty feet (30') of the protection zone should be fire-resistant species. The Town with the fire marshal should have the authority to waive or reduce requirements in firewise areas based on the current or expected characteristics of the site, local area fire history, site location/overall terrain, prevailing winds/seasonal weather conditions, the vegetative communities present on adjacent property, or insufficient parcel size.

9. Future Land Use Map Amendments. Amendments to the Future Land Use Map (FLUM) adjacent to a natural resource designated on the Future Land Use Map should meet the criteria in the following policies:

a. Least Intensive Land Use Proposed to Meet Demonstrated Need. Support the plan amendment with data and analysis demonstrating that the proposed land use category is the least intensive category that will meet a demonstrated need of the use; and

b. Demonstrate Consistency with Groundwater and Surface Water and Natural Resources Protection Policies. A major environmental protection priority in Eatonville should be protecting water quality. For example, the Town's recent Stormwater Master Plan prepared by Spectra Engineering & Research, Inc. (2005) concluded that, at the time of the water quality analysis, all five of the Town lakes (i.e., Lake Bell, Lake Hungerford, Lake King, Lake Shadow, and Lake Weston) were receiving untreated stormwater runoff. The latter issue heightened the Town's interest in pursuing measures to improve the quality of the Town's surface water and groundwater resources. Therefore, any Future Land Use Map amendment impacting an area adjacent to a lake or other natural resource identified on the Future Land Use Map should be supported by data and analysis recommended in paragraphs 4 (a-d) herein previously demonstrate that the development is consistent with protection of groundwater and surface water and natural resources.

c. Nitrate/Nitrogen Loading Analysis to Compare Existing Land Use and Proposed Development at Build-Out. Any Future Land Use Map amendment impacting an area adjacent to a lake or other natural resource identified on the Future Land Use Map should be supported with a nitrate/nitrogen loading analysis prepared by a licensed professional geologist using professionally accepted methods that compares the existing land use activity to the proposed future land use activity at build-out. The analysis may take into account specific on-site BMPs and compensatory treatment for nitrate/nitrogen reduction, both on-site and off-site, including through the expansion and connection to central sanitary sewer. The analysis should demonstrate that the proposed development will not yield an increase in nitrate/nitrogen loading to groundwater and surface water.

Development in Flood Prone Areas

The National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA) has determined areas within Eatonville that are located within the 100 Year Floodplain as presented in the FEMA Map of Floodplains within the Town of Eatonville displayed on the following page. The Public Facilities Element describes in more detail the Town's drainage system. In Compliance with the Federal Flood Insurance Program, the Town has adopted an ordinance which prohibits development in the 100 year Flood Plain unless flood-proof measures are undertaken. Four specific areas are affected by potential flood conditions within the 100-year Flood Plain within the Town as indicated below:

1. Industrial and Commercial development proposed on the large tract of land south of Kennedy Avenue and west of 1-4 will require flood-proofing. Because Lake King is not a natural lake, but rather a borrow pit, no negative environmental impacts should occur from filling in this area. Finished floor and Street elevations for this area should be established.
2. The area just north of Lake Bell is planned for recreation. This is ideal land use for a flood prone area as no permanent structures are proposed.
3. There is sufficient land area outside the flood plain for the planned commercial and office uses south of Lake Hungerford and Lake Shadow. Local land use controls should be enforced to prevent structures within the flood prone area unless flood-proofing is used and setbacks are established.
4. The area north of Lake Weston is only approximated as being flood-prone because no detailed methods were used. However, residential development planned for this area should be prohibited unless flood-proofing measures are used for a more detailed study redefines the flood plain.

The only areas in the Town that are considered as flood prone according to the Federal Flood Insurance Rate Map are those areas surrounding the local lakes. The Town has adopted an ordinance which prohibits development in these areas, according to guidelines of the Federal Flood Insurance Program, unless flood-proof measures are undertaken. The Town Land Development Code also establishes finished floor and Street elevations for all areas in the Town.

Significant Floodplain Functions and Development Constraints. This section summarizes floodplain functions in the hydrologic cycle and explains discusses need for regulation of development in the floodplain.

Floodplains serve the following important functions in the hydrologic cycle:
1. Floodplains provide natural storage and conveyance of flood waters;
2. Temporary storage of waters on floodplains regulates flood elevations and the timing, velocity and rate of discharge;
3. Natural floodplains export detritus and other food sources to open waterbodies and are vital habitat for fish, birds, and wildlife and native plant communities.
4. Regulation of development within flood plains is necessary in order to accomplish the following objectives:
5. Minimizes the potential for property damage and personal injury from flooding;
6. Restricts adverse interference with the normal movement of surface waters;
7. Maintains the optimum storage capacity of watersheds;
8. Maintains desirable water quality;
9. Maintains the natural hydrological and ecological functions of wetlands and other flood prone lands;
10. Prevents increased erosion and sedimentation;
11. Protects the public from the economic and social disruption of flood damage;
12. Protects the public from the costs of flood relief; and
13. Avoids the need to construct costly and environmentally disruptive flood management structures.

The Conservation Element identifies and discusses the following in greater detail:
1. Surface water resources, including water quality and quantity;
2. Air resources and quality;
3. Vegetative communities and aquatic habitats;
4. Floodplains;
5. Wetlands; and
6. Aquatic resources

Air Quality. The quality of air in the Town greatly impacts the Town's quality of life. At the present time no specific air quality measurements are available for Eatonville. However, it can be assumed that the Town's air quality is equal to Orange County's average figures. Orange County's air quality is considered good.

Use of Natural Resources. The Town's natural resources are not being used in commercial or industrial land use activities. Protection of natural resources is addressed in the Land Use Element and Conservation Element Goals, Objectives and Policies. Land Development Code provisions shall provide a regulatory framework for conserving open space and preserving wetlands and natural habitats.

Appendix A to Conservation Element
Orange County Ecological Communities: Vegetation, Animals, Endangered Flora and Fauna

I. Longleaf Pine - Turkey Oak Hills

A. Vegetation: Plants which characterize this community are:
1. Trees: Longleaf Pine (Pinups palustris), Turkey Oak (Quercus laevis)
2. Herbaceous Plants and Vines: Aster; Blazing Star (Liatris tenuifolia); Brackern Fern (Pteridum aquilinum); Butterfly Pea (Centrosema virginianum); Elephant's Foot (elephantopus ssp.); Grassleaf Glodenaster (Herterotheca graminifolia); Partridge pea (Cassia ssp.); Pineland Beggarweed (Desmodium strictum); Sandhill Milkweed (Asclepias humistrata); Showy Crotalaria (Crotalaria spectabilis); Wild Indigo (Baptista ssp.)
3. Grasses and Grasslike Plants: Curtiss dropseed (Sporabolus curtissii); Hairy Panicum (Panicum anceps); Yellow Indiangrass (Sorghastrum nutans); Low Panicum (Panicum ssp.); Pinewoods Dropseed (Sporobolus junceus).

B. Animals: Animals which characterize this community include:
1. Mammals: fox squirrel, pocket gopher, white-tailed deer
2. Birds: bobwhite quail, ground dove, rufous-sided towhee
3. Reptiles: gopher tortoise, fence lizard

C. Endangered and Threatened Plants and Animals: The following endangered and threatened plants and animals may occur in this community:
1. Shrubs: Florida Coontie (Amia floridana)
2. Herbaceous Plants and Vines: Godfreys Blazing Star (Liatris provincialis)
3. Mammals: Florida panther (Felis concolor coryi); Florida mouse (Peramyscus floridanus); Sherman's Fox Squirrel
4. Birds: Southeastern kestral (Falco sparverius paulus); Red-cockaded woodpecker (Picoides borealis)
5. Reptiles: Blue-tailed mole skink (Eumeces egregius lividus); Eastern indigo snake (Drymarchon corais couperi); Short-tailed snake (Stilosoma extenuatum); Gopher Tortoise

CHAPTER 10: RECREATION AND OPEN SPACE ELEMENT DATA INVENTORY AND ANALYSIS

This section presents an inventory of existing public and private recreational and open space facilities within the Town of Eatonville. No Orange County State parks are in the Town of Eatonville. However, recreation the Orange County School Board and the Town have agreed to the joint use of school and park facilities.

Park and Recreation Facilities Classified.

Following is a list of the various types of parks and recreation facilities. The Town of Eatonville has a population of less than 3,000. Therefore, the major types of parks and recreation facilities within the Town are neighborhood parks, special facilities, and tot lot facilities.

Tot Lots. A small park designed to serve a 2-3 block area and generally a population of up to 2,500. Tot lots are 0.5 to 1.0 acres in size. Tot lots contain the following types of recreation: equipped play areas, benches, open space landscaping, and picnic tables. Tot lots may be used in areas where it is difficult to acquire sufficient land for a neighborhood park.

Mini-Park. A mini-park has a service area smaller than a neighborhood and often serves one or two residential subdivisions within a neighborhood. A mini-park is similar but smaller than a neighborhood park. Mini-parks are generally located within walking distance to the residential areas they serve. Mini-parks are often referred to as tot lots. Typically containing open lawns and play areas, mini-parks may also provide play apparatuses for small children, half- or full-size basketball courts, one or two tennis courts, picnic areas, landscaping, or natural areas. However, the small land area occupied by a mini-park usually restricts the number of recreation facilities to no more than three or four. A mini-park usually does not provide automobile parking.

Neighborhood Park. A park for intense and diverse recreational activities which may include, but are not limited to, activities in a Tot Lot, field games, court games, picnic area, landscaping and gardens, or senior citizen areas. Neighborhood parks are generally I to 5 acres and are accessible by foot or bicycle with a service radius of about one-half mile and a service population of up to 5,000 persons.

Community Park. A park that provides a diverse range of recreational and leisure activities or contains area of environmental or aesthetic quality. Facilities and activities may include, but are not limited to, athletic fields, swimming pools, gymnasiums, performing and designing art centers, crafts buildings, and any facilities associated with neighborhood or mini-park recreation areas. A community park is typically a "drive -to" facility from 5 to 25 acres in size that services the needs of up to 25,000 people. Community parks are ideally located near collector or arterial roads to accommodate adequate access and should be well-buffered from adjacent residential areas.

Special Facilities. Special recreation facilities are generally identified as specialized public recreation facilities that are unique in their nature and purpose. Special facilities are exemplified by golf courses, community centers, boat ramps, stadiums and other single-purpose facilities. While development standards are available for such facilities, special facilities are based more on the desires or unique characteristics of a community rather than actual need.

District Parks. A major or district park is usually designed to provide recreation opportunities to more than one community or to an entire county. These sub-regional parks are often based on a resource that cannot be provided by a community park. District parks can serve populations of approximately 100,000 people and are typically located within 30 minutes driving time of the users. These parks may provide ample contact with natural aspects of the setting and include large picnic areas, areas for field sports, nature trails, boating facilities and riding paths.

Regional Parks. Regional parks primarily to provide special natural resource use to people of all ages. They are generally over 3,000 acres in size and within an hour's driving time of the population they serve. Activities available at a typical regional park include boating, swimming, hiking, horseback riding, picnicking, overnight camping, and nature appreciation.

Nature Reserve Areas. Area primarily designed with consideration for outdoor recreation and nature preservation, including, but not limited to, areas for viewing and studying land, aquatic, or avian wildlife, conservation activities, swimming, hiking, camping, trails, nature centers, or botanical gardens. Service area radius and desirable acreage may vary. A nature reserve area may be one or more of the following:

1. Conservation/Open Space Area. Area preserved and managed to protect its natural environment or aesthetic quality or to protect health, safety and welfare by providing open spaces between roadways or development, with recreation and leisure activity serving as a secondary function.

2. Linear Recreation Area. Area developed to provide travel routes for one or more types of recreational or human operated vehicles such as horseback riding, bicycling, hiking, or jogging.

Active and Passive Parks and Recreation Areas. In addition to the recreation area classification system, recreation areas can be classified into two broad categories: active-based and passive-based recreation activities. Most public parks and open space can be classified as either active- or passive-based recreation depending on the facilities and natural resources located at the park site. These terms are defined as follows:

A. *Active-Based Recreation Activities.* Active-based recreation activities involve the pursuit of physical exertion that raises the heart rate to a level significantly above the resting level. This benefit may be achieved through a variety of activities which may include team sports such as baseball and football, as well as individual activities including jogging, bicycling, hiking, swimming, or playground activity. The main benefits of such recreation activities are increased cardiovascular fitness and improved mental health through release of energy and/or tensions. Active-based recreation activities rely on the presence of recreational facilities that enable certain activities to function. Without the provision of such facilities, the activity would either be limited in quality or altogether eliminated. Active- based recreation areas may include open space areas, especially when such areas are unsuitable for development and/or protect the existing natural resource. Active-based recreation facilities promote participation. Active-based recreation activities are further divided into two categories:
   1. User-Oriented Recreation Activities. User-oriented activities can be provided anywhere, if funding and space are available. Activities include: baseball, football, basketball, golf, and tennis. User- oriented facilities generally are man-made and should be located to best serve the population of the community.
   2. Resource-Based Recreation Activities. Resource-based activities are those activities that can only occur in certain environments. These activities include all water related activities, hiking trails, hunting, camping and winter activities. Resource-based activities are designed to make maximum use of the natural resources, such as waterways, woodlands, and wetlands.

B. Passive-Based Recreation Activities. Passive-based recreation involves activities that do not necessarily raise the heart rate significantly above the resting level, but rather provide refreshment through furnishing a visual and/or psychological release from the pressure of everyday life. In passive-based recreation facilities, emphasis is placed on enjoyment of a natural resource or an activity and not on participation. Examples of passive-based recreation facilities include picnic tables, park benches, observation areas, botanical gardens, and historical or archaeological sites. Passive recreation activities include sunbathing at a beach, walking through a scenic area, or visiting an historic site. Passive-based recreation areas typically serve as open spaces and often occur as fields, walking trails, scenic viewpoints, gathering places for pedestrians, landscaped areas or gardens, greenbelts, and conservation areas. Generally, open space areas have minimal facilities. Open space areas can also be used to enhance urban areas by providing relief from expansive impervious surfaces such as parking lots and shopping centers.

Recreation Space Service Guidelines.

Table X-1 identifies the service guidelines recommended by the Florida Department of Environmental Protection (DEP) for recreation space. DEP recommends that the guidelines set forth in Table X-1 be modified to suit community needs.

TABLE X-1: DEP SERVICE GUIDELINES FOR RECREATION SPACE

Park Classification	Primary Service Area	Acres/1,000 Population	Park Size (acres)	Service Area Per Pop. Served	Facilities Associated with Parks
Tot Lots	Neighborhood Area	0.5	1.0	2-3 block area Per up to 2,500	Playground facilities within play areas, benches. open spaces, landscaping, and picnic tables optional
Neighborhood Park	Neighborhood Area	2.0	5.0	0.25 to 0.5 mile Per up to 5,000	Facilities for tot lots & sports fields. recreation buildings, paved multi-purpose courts, sr. citizen facilities, picnic facilities, playgrounds and landscaped grounds.
Community Park	Designed to serve residents of a group of neighborhoods	2.0	20.0	0.5 to 3 miles l up to 5,000	All facilities found in a neighborhood park, plus facilities to service the entire family. Pools, active sports fields, tennis courts, play grounds, picnic facilities, passive and active recreation areas, recreation building and off-street parking.
Urban Open Space	Urban Areas	1.0	0.1	0.25 to 0.5 mile	Passive recreation area. Trails and commemorative structures optional

Source: Florida Department of Environmental Protection, Outdoor Recreation in Florida, 2002.

CHAPTER 10: RECREATION AND OPEN SPACE ELEMENT DATA INVENTORY AND ANALYSIS

Inventory of Parks and Recreation Areas

An inventory of the facilities provided at each park site is provided below, and a summary profile is provided in Table X-2. Table X-3 lists Hungerford Elementary School recreation facilities and Table X-4 lists recreation facilities on the Hungerford redevelopment property. The locations of the Town owned permanent Parks and Recreation Sites are shown on Map X-1.

TABLE X-2: PARKS AND RECREATION SITES IN TOWN OF EATONVILLE

Park and Recreation Facilities	Acres	Classification	Location and Recreation Facilities
Denton Johnson Community Center & Boys and Girls Club:	11.16	Neighborhood Park	Located at 400 Ruffel Street includes two playground facilities and two covered Pavilions.
Elizabeth Park Recreation Center	1.58	Neighborhood Park	Located in the Calhoun Hall neighborhood on Elizabeth Street includes a small basketball court, a tennis court, a municipal pool and a small playground.
Frances Jerry Park [AKA Catalina Park]	4.72	Neighborhood Park	Located at 200 Campus View Drive includes a playground set, two basketball courts and a fishing pier. A small boat launch exists at the far east end of the park.
Lake Hungerford Park [AKA Lake Lovely Park]	0.53	Lakefront Mini-Park	Located at 232 Park Place includes a small playground set and a fishing pier.
Total Acres of Parks in Town of Eatonville	17.99		

TABLE X-3: HUNGERFORD ELEMENTARY SCHOOL PARKS AND RECREATION FACILITIES

Park and Recreation Facilities	Acres	Classification	Location and Recreation Facilities
Hungerford Elementary School	5±	School Park	Located south of Ruffel Street includes a 2 tennis courts & 2 basketball courts; 1 ball field; a jogging path; & playground.

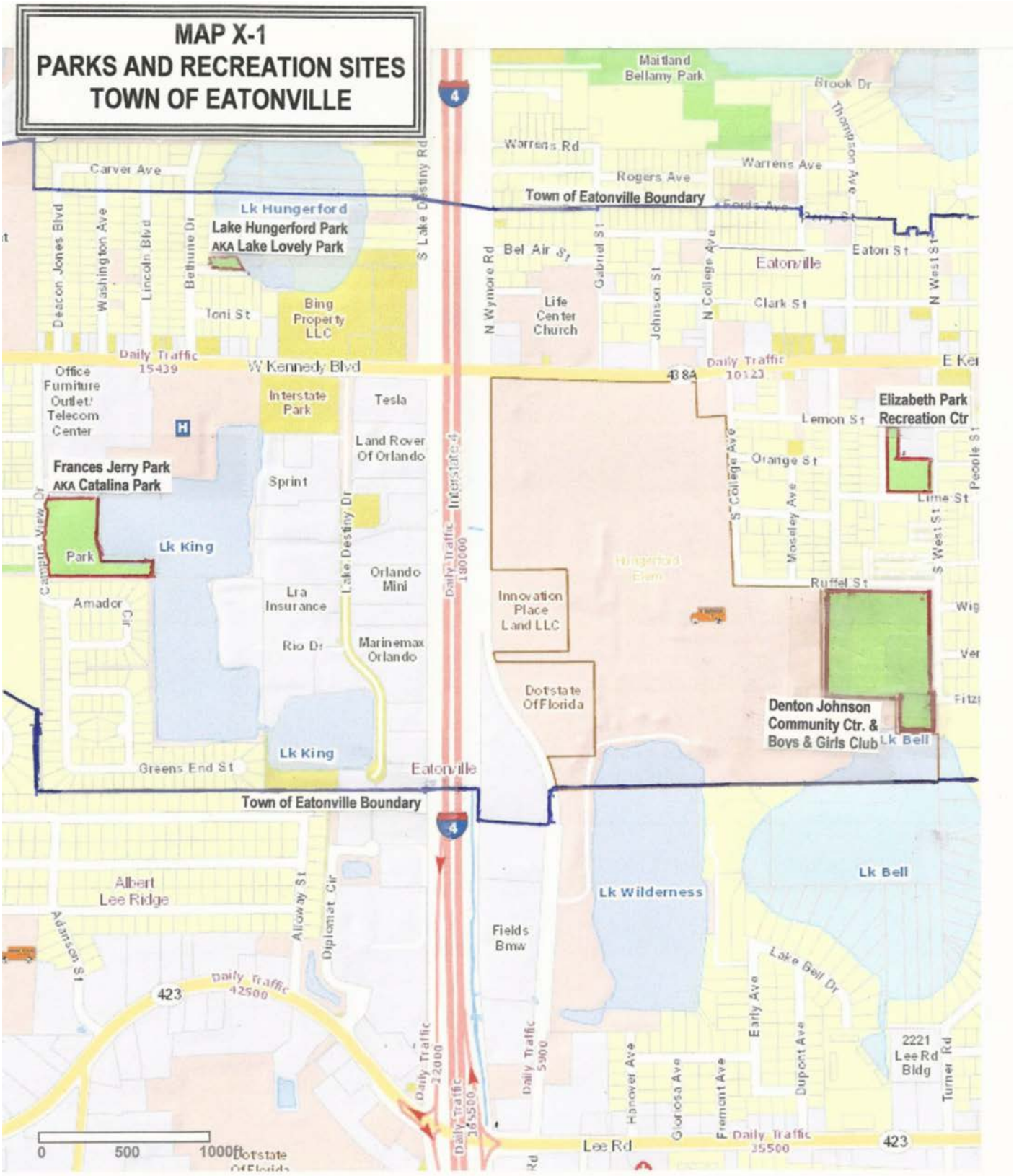
TABLE X-4: HUNGERFORD PROPERTY RECREATION FACITIES

Park and Recreation Facilities	Acres	Classification	Location and Recreation Facilities
Hungerford Property Recreation Facilities	6±	School Park	Located at 100 E. Kennedy Blvd. includes a multi-football/soccer/lacrosse field, track, & gymnasium

TABLE X-4: PARKS AND RECREATION SITES NEAR THE TOWN OF EATONVILLE

Park and Recreation Facilities	Acres	Classification	Location and Recreation Facilities
Lake Sybelia Beach Park City of Maitland	4.86	Neighborhood Park Passive	N Lake Sybelia. Secluded picnic areas and indoor restroom facilities.
Lake Lily Park City of Maitland	5.06	Community Park Passive	701 Lake Lily Dr. Boardwalk along Lake Lily. Jogging trails, museum, picnic areas, playground, and special events.
Bellamy Park City of Maitland	31.06	Community Park Active and Passive	745 Kentucky Av. Large playground and picnic pavilion, basketball & hopscotch courts & restrooms
Loch Haven Park City of Orlando	45+	Regional Park	777 E Princeton St. serves as the region's premier cultural park. Next to 3 lakes, the extensive lawn area is a passive area to view the lakes shaded by majestic oak trees. One of Central Florida's oldest and largest oak trees, "The Mayor," is in Loch Haven Park. The park is home to the: Orlando Shakespeare Theater, Orlando Repertory Theater, Orlando Science Center, Orlando Museum of Art, Orlando Fire Museum, Mennello Museum of American Art, Orlando Garden Club, & Orlando Ballet.
Total Acres:	85.98		

Source: Solin and Associates, Inc., 2017 & Cities of Maitland and Orlando websites and Orange County Property Appraiser's website data.


MAP X-1
PARKS AND RECREATION SITES
TOWN OF EATONVILLE
Maitland
Bellamy Park
Brook Dr
Warrens Rd
Warrens Ave
Carver Ave
Rogers Ave
Town of Eatonville Boundary
Lk Hungerford
Lake Hungerford Park
AKA Lake Lovely Park
Deacon Jones Blvd
Washington Ave
Lincoln Blvd
Bethune Dr
S Lake Destiny Rd
Bel Air St
Gabriel St
Johnson St
N College Ave
Eatonville
Eaton St
N West St
N Wymore Rd
Life
Center
Church
Clark St
Toni St
Bing
Property
LLC
Daily Traffic
15439
W Kennedy Blvd
Daily Traffic
10123
E Ken
Office
Furniture
Outlet/
Telecom
Center
Interstate
Park
Tesla
Land Rover
Of Orlando
Elizabeth Park
Recreation Ctr
Lemon St
Orange St
S College Ave
Moseley Ave
Lime St
People St
S West St
Frances Jerry Park
AKA Catalina Park
Sprint
Campus View Dr
Park
Lk King
Lake Destiny Dr
Interstate 4
Daily Traffic
180000
Orlando
Mini
Lra
Insurance
Amador
Cir
Rio Dr
Marinemax
Orlando
Innovation
Place
Land LLC
Ruffel St
Dotstate
Of Florida
Denton Johnson
Community Ctr. &
Boys & Girls Club
Lk Bell
Greens End St
Lk King
Eatonville
Town of Eatonville Boundary
Albert
Lee Ridge
Addison St
Alloway St
Diplomat Cir
Lk Wilderness
Fields
Bmw
Lk Bell
Lake Bell Dr
Early Ave
423
daily Traffic
42500
Daily Traffic
22000
Daily Traffic
5900
Daily Traffic
35500
Hanover Ave
Gloriosa Ave
Fremont Ave
Dupont Ave
2221
Lee Rd
Bldg
Turner Rd
F Daily Traffic
35500
Lee Rd
423
0
500
1000ft
Dotstate
Of Florida

CHAPTER 10: RECREATION AND OPEN SPACE ELEMENT DATA INVENTORY AND ANALYSIS

Recreational Analysis

This subsection presents an analysis of existing and future recreational needs.

Summary of Recreation Inventory. The recreation and open space inventory indicates that the Town of Eatonville contains approximately 17.99 acres in the Town dedicated for public recreation. Based on the Eatonville's 2016 population (2,251) for and applying a formula of 2.50 acres per 1,000 residents, the park and recreation acreage represents a total of 7.99 acres per 1,000 residents. A variety of facilities are available to serve the recreation demands for a diverse range of interests and age groups. Various recreation demands will be discussed further in the analysis.

Methodology Used to Determine Current and Future Recreation Demands and Needs. Current and future demands for recreation space and facilities were determined by applying recreational facility and space standards to the Town of Eatonville population estimates and projections. Standards recommended in guidelines established by the Florida Department of Environmental Protection (DEP) were
used in the analysis. Guidelines were extrapolated from DEP's publication Outdoor Recreation in Florida, dated 2002.

Recreational Facility Demands and Needs. Table X-5 summarizes recreation facilities guidelines prepared by FDEP. Based on a review of these standards and an analysis of existing recreation facilities within the Town of Eatonville, Table X-6 analyzes the surplus/deficit of park acreage within the Town of Eatonville.

Table X-5: Planning Guidelines for Recreational Facilities

Facility	FDEP Median Guidelines[1]
Baseball/Softball Field	1 per 5,000 population
Basketball Court	1 per 5,000 population
Equipped Playground	1 per 750 population
Community Swimming Pool	1 per 25,000 population
Football/Soccer/Lacrosse/Rugby Field	1 per 6,000 population
Racquetball/Handball Court	1 per 10,000 population
Multi-Purpose Field	1 per 3,750 population
Tennis Court	1 per 2,000 population

[1] Source: "Outdoor Recreation in Florida–2000", Florida Department of Environmental Protection, February 2002

TABLE X-6 TOWN OF EATONVILLE RECREATION STANDARDS FOR FACILITIES

Facility	FDEP Median Guidelines[1]	2016 Facility Demand	# Facilities Available	Surplus + Deficit -
Baseball/Softball Field	1 per 5,000 population	1	1	1
Basketball Court	1 per 5,000 population	1	3 (5 incl. ES)	+3 (+5 incl. Hungerford ES 2 basketball courts)
Equipped Playground	1 per 750 population	3	5	2
Community Swimming Pool	1 per 25,000 population	0	1	1
Football/Soccer/Lacrosse Field	1 per 6,000 population	0	0 (1 incl. Hungerford property Multi-Use Field	0 (1 incl. Hungerford Property Field)
Racquetball/Handball Court	1 per 10,000 population	0	0	No surplus or deficit
Multi-Purpose Field	1 per 3,750 population	0	0	0; (2 underdeveloped multi-sport fields exist—one at the Hungerford ES and one on the SE side of the Hungerford Redevelopment Property.
Fishing Pier	No standard provided	NA	2	+2; One each at Denton Johnson & Catalina Parks.
Boat Launch	No standard provided	NA	1	+1; Located at Catalina Pk.
Tennis Court	1 per 2,000 population	1	1 (2 at Hungerford ES)	+1; (3 incl. 2 at Hungerford ES.)

[1] Source: "Outdoor Recreation in Florida–2000, Florida Department of Environmental Protection, February 2002.
Analysis by Solin and Associates, Inc., 2017.

CHAPTER 10: RECREATION AND OPEN SPACE ELEMENT DATA INVENTORY AND ANALYSIS

Quality of Recreational Facilities. Recreation facilities should be measured not only by the quantity available but also by the quality of the facilities. Facilities in disrepair should be repaired on a timely basis. Recreational facilities that are underdeveloped or in disrepair reduce the level of service provided. The Town should annually inventory all facilities and evaluate their condition and safety.

Existing Recreational Space Demands and Needs. Parks should be designed to provide service to neighborhoods. To meet the overall space requirements for residents, minimum land needs for recreation space should not be less than the existing level of service.

Recreation Needs for Special Groups -Seniors, Young Children, and Handicapped. The provision of recreational facilities should consider needs of special groups such as the elderly, handicapped, and young adolescents. Parks should be designed to meet the needs of these groups.

Handicapped. Parks and recreational facilities should generally be designed to accommodate special access needs handicapped persons. For instance, parking facilities should include handicapped parking spaces and recreation areas and facilities should contain ramps at access points where necessary to enable passive participation in recreational activities. Many handicapped and walking-impaired persons will not be able to participate in both active and passive recreation activities without special design considerations at access points.

Senior Citizens. Recreational interests of senior citizens vary from those of more active age groups. Senior citizens, particularly those in their later years, may prefer more passive and less energetic activities such as shuffleboard, card games, nature walks, fishing, and picnicking.

Young Children. Young children lack the physical size and strength to actively participate in certain recreational activities but can participate if special facilities are designed to meet their needs. For example, shallow wading pools provide young children opportunity to safely enjoy water activities.

Summary of Current Recreation Needs. The recreation and open space analysis indicates that the Town of Eatonville contains approximately 17.99 acres in the Town dedicated for public recreation. Based on the Eatonville's 2016 population (2,251) for and applying a formula of 2 acres per 1,000 residents, the park and recreation acreage represents a total of 7.99 acres per 1,000 residents. A variety of facilities are available to serve the recreation demands for a diverse range of interests and age groups. Various recreation demands will be discussed further in the analysis.

Future Recreation Needs

As evidenced in projections described in Table X-7, future growth in resident population within the Town of Eatonville will not create a need for additional recreational acreage based upon the adopted level of service of 2 acres/1,000 population.

TABLE X-7: PROJECTED PARK ACREAGE NEEDS

Year	Adopted Level of Service (LOS) (Acres/1,000 Population)	Projected Population	Acres Needed	Actual Acres	Actual Level of Service (LOS) (Acres/1,000 Population)	Surplus/Deficit (acres)
2016	2.50	2,251	5.63	17.99	7.99/1,000 population	12.36
2020	2.50	2,231	5.58	17.99	8.06/1,000 population	12.41
2025	2.50	2,318	5.80	17.99	7.76/1,000 population	12.19
2030	2.50	2,435	6.09	17.99	7.39/1,000 population	11.90
2035	2.50	2,523	6.31	17.99	7.13/1,000 population	11.68

Source: Solin and Associates, Inc. 2017

While Table X-7 describes projected demands for recreation acreage, Table X-8 illustrates the projected demand for recreational facilities.

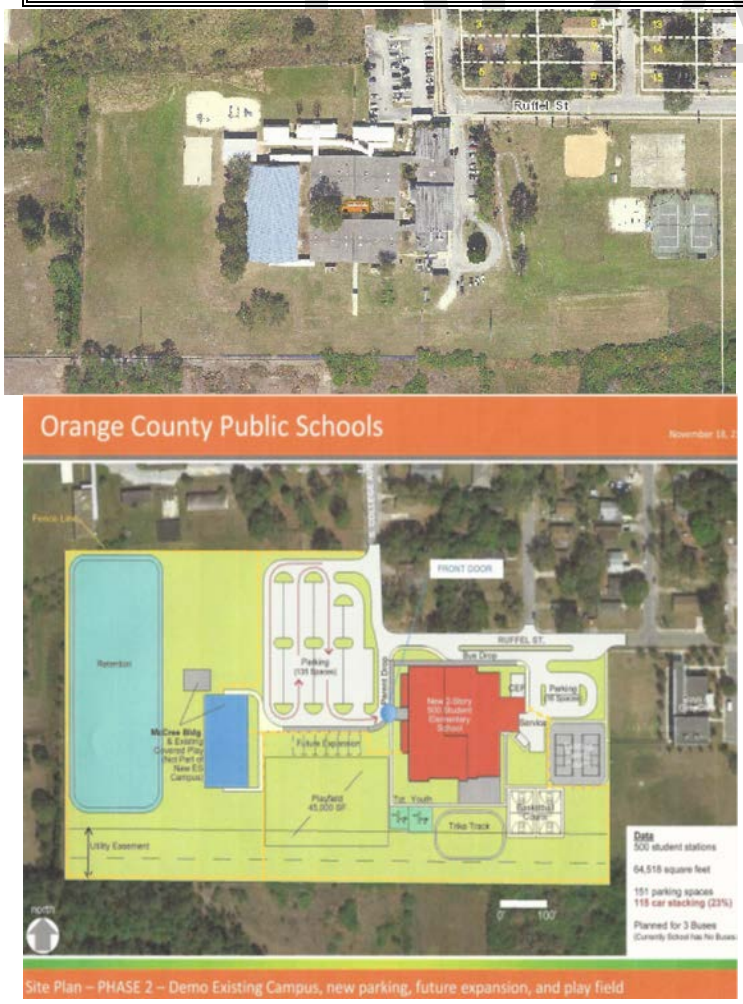
CHAPTER 10: RECREATION AND OPEN SPACE ELEMENT DATA INVENTORY AND ANALYSIS

The Town is near build-out with most of the strategically located vacant lands planned for economic development. Therefore, the demand for additional recreation facilities appears to be satisfied through the planning period except for a need to replace the ball field at Hungerford Elementary School where the new Elementary School Building will replace the ball field. In addition, concept plans for the Hungerford Property Planned Redevelopment do not appear to include retention of the Football/Lacrosse/Soccer Field and Track.

TABLE X-8: PROJECTED PARK FACILITIES NEEDS

Facility	FDEP Median Guidelines[1]	2016 2,251 Pop'n Facility Demand	2020 2,231 Pop'n Facility Demand	2025 2,318 Pop'n Facility Demand	2030 2,435 Pop'n Facility Demand	2035 2,523 Pop'n Facility Demand
Baseball/Softball Field	1 per 5,000 population	1	1	1	1	1
Basketball Court	1 per 5,000 population	1	1	1	1	1
Equipped Playground	1 per 750 population	3	3	3	3	3
Community Swimming Pool	1 per 25,000 population	0	0	0	0	0
Football/Soccer/Lacrosse Field	1 per 6,000 population	0	0	0	0	0
Racquetball/Handball Court	1 per 10,000 population	0	0	0	0	0
Multi-Purpose Field	1 per 3,750 population	0	0	0	0	0
Fishing Pier	No standard provided	NA	NA	NA	NA	NA
Boat Launch	No standard provided	NA	NA	NA	NA	NA
Tennis Court	1 per 2,000 population	1	1	1	1	1

[1] Source: "Outdoor Recreation in Florida–2000, Florida Department of Environmental Protection, February 2002. Analysis by Solin and Associates, Inc., 2017.



Existing Hungerford Elementary School abutting the west side of the Boys and Girls Club. Note the 2 existing basketball courts shall remain in place. A parking lot shall replace the existing basketball courts just N of the tennis courts and 2 new basketball courts will be built abutting the SW corner of the existing tennis courts. The new 2 story elementary school building will be built on the site on the existing ball field. The existing parking lot abutting S. College Av. will be extended southward and a new 45,000 sq. ft. playfield is proposed south of the extended parking lot. South of the new school building a "Trike Track" will be built west of the new basketball courts. The Town will likely need more field sport facilities since the new school building will replace existing the ball field. In addition, concept plans for the Hungerford Property Planned Redevelopment do not appear to include retaining the Football/Lacrosse/Soccer Field and Track.

CHAPTER 11: INTERGOVERNMENTAL COORDINATION INVENTORY AND ANALYSIS

Inventory of Existing Intergovernmental Coordination Mechanisms

This section presents a description of governmental entities that have formal or informal intergovernmental relationships with the Town of Eatonville. The inventory provides a brief description of the coordination mechanisms identifies targeted issues, and the office with primary responsibility of coordination. Table VIII-1 summarizes entities involved in Town of Eatonville intergovernmental coordination.

TABLE 8-1: INVENTORY OF INTERGOVERNMENTAL COORDINATION RESPONSIBILITIES

GOVERNMENTAL ENTITY	RELATIONSHIP	MAJOR SUBJECTS OF MUTUAL INTEREST
Orange County	County where Town of Eatonville is located.	1. The Eatonville Community Redevelopment Agency receives funds from and management oversight is through Orange County. 2. West Kennedy Blvd., Wymore Rd., Keller Rd and S. Lake Destiny Dr. are Orange County collector streets. 3. Transportation and land use issues that transcend jurisdictional boundaries. 4. Solid waste disposal is received at the Orange County Landfill. 5. Environmental and natural resource issues that transcend local jurisdictions. 5. Mutual assistance arrangements with Orange Co. law enforcement. 6. Other services: parks and recreation. 7. Mosquito control. 8. Socio-economic issues, including housing and social service grants to low-income households and individuals. Coordination of economic development strategies. 9. Emergency management, including disaster preparedness and hurricane evacuation.
Orange County School Board	Hungerford Elementary is in Eatonville.	1. Coordination of recreation facilities/program 2. Projected need for new/improved facilities 3. Ingress and Egress to Schools
City of Altamonte Springs	Eatonville purchases wastewater treatment services from Alt. Sprgs.	1. Eatonville purchases wastewater treatment services from the City of Altamonte Springs.
City of Maitland	Maitland abuts the east and north portions of the Town corporate limits.	1. Coordinate land use and infrastructure issues having potential impacts that transcend their jurisdictions.
City of Maitland	Maitland provides fire & EMS services to Eatonville & coordinates assignments of addresses.	1. Maitland provides fire & EMS services to Eatonville & coordinates assignments of addresses.
City of Winter Park	Winter Park abuts a portion of the south corporate limits of the Town east of Lake Wilderness.	2. Coordinate land use and infrastructure issues having potential impacts that transcend their jurisdictions.
St. Johns River Water Management District	Eatonville in SJRWMD jurisdiction.	1. Stormwater drainage 2. Wetlands protection 3. Groundwater withdrawal & Consumptive use permits
East Central Florida Regional Planning Council	District includes Eatonville in its jurisdiction.	1. Strategic Regional Policy Plan 2. Technical Assistance as Needed 3. Development of Regional Impact issues
Florida Department of Economic Opportunity, Division of Planning	DEO has state land planning division that administers grant programs and maintains statutory administration and review functions.	1. Eatonville's Comprehensive Plan is subject to DEO delegated statutory and administrative requirements. 2. Coordinating resource conservation and growth management issues under Chapter 380, FS 3. Technical assistance grants
Florida Department of Children and Family Services	DCFS administers programs provides housing or shelter for people with special needs.	1. Regulates community residential homes, mobile homes, foster care homes, and homes for special children
Florida Department of Health	DOH administers all health-related issues.	1. Well and septic tank permits. 2. Cesspit inventory and removal
Florida Department of Transportation	Funds for federal facilities, including I-4 maintenance and improvement are allocated and managed by DOT. Statewide transportation grants are administered by DOT.	1. Improvements to I-4 (planning/construction)

Florida Department of State	DOS includes Division of Historic Resources	1. Historic Survey Grants 2. Review of any project with Federal and/or State Involvement
Florida Department of Environmental Protection	DEP has statewide jurisdiction for protecting and conserving Florida's natural resources; managing State owned lands/ aquatic preserves, and regulating impacts on the environment.	1. Monitoring/reporting on quality of drinking water supply and wastewater treatment. 2. Air quality monitoring/reporting. 3. Hazardous and solid waste disposal 4. Alteration to environmentally sensitive areas 5. Wetlands 6. Acquisition and development of parks and recreation
Florida Fish and Wildlife Conservation Commission	FWC has regulatory control over hunting, fishing and taking of animals and fish.	1. Provide comments on permit applications 2. Technical assistance on endangered animals and habitats
US Fish and Wildlife Service	FWS regulatory control over certain habitats and wildlife	1. Provide comments on permit applications related to endangered animals and habitats
Federal Environmental Protection Agency	EPA has jurisdiction over all environmental issues of federal concern.	1. Minimum federal standards for wastewater, drinking water, and air quality. 2. Funding of wastewater facilities.
Federal Emergency Management Agency, Flood Insurance Administration	FEA has responsibility for all 100-year flood zone mapping.	1. Compliance with federal flooding regulations. 2. Regulation of habitable structure below flood elevation.
US Department of Agriculture, Natural Resources Conservation Service	NRCS maps soil types and describes their suitability for agricultural and urban uses.	1. Ensuring land use activities occur consistent with specific soil properties. 2. NRCS has responsibility with Orange County for Soil Type mapping.
US Army Corp of Engineers	EPA has granted the Corp certain regulatory authority in the Keys.	1. Regulates dredge and fill permits.
National Hurricane Center	Provides hurricane warnings and watches for incoming storms.	1. Provides watches and warnings through its hurricane tracking service.
Source: Town of Eatonville. Table Prepared By: Solin and Associates, Inc., 2016-17		

Local Entities Involved in Intergovernmental Coordination

A. Orange County. Town of Eatonville coordinates with Eatonville County on two main issues: 1) numerous issues surrounding managing community development, infrastructure, and service delivery systems. Major components of the County's service delivery system include:

- Community Redevelopment Agency planning and funding
- Maintenance and funding of Co. collector streets in Eatonville
- Coordination of land use issues transcending Town limits
- Solid waste disposal at Orange Co. landfill
- Environmental and natural resource issues transcending Town limits.
- Mutual assistance with Orange Co. law enforcement.
- Mosquito control.
- Housing and social service grants to low-income households and individuals.
- Coordination of economic development strategies.
- Emergency management, incl. disaster preparedness/hurricane evacuation

.

B. Orange County School Board. Orange County School Board formulates policy governing the administration and operation of all public schools in Orange County, including Hungerford Elementary School. The Town of Eatonville coordinates with the School Board on joint use issues of facilities and recreation areas. The Town and the School Board coordinate on issues such as the school's impact on the traffic circulation system. The Town and the School Board have intergovernmental agreements on school planning as well as agreements governing the process of managing the transition in ownership, management and planning of properties recently purchased by the Town from the School Board as explained in the Future Land Use Element.

C. City of Maitland. Town of Eatonville coordinates with the City of Maitland which is adjacent to the east and NE municipal limits of the Town on two main issues: 1) land use and infrastructure issues having potential impacts that transcend respective jurisdictions; and 2) Maitland provides fire & EMS services to Eatonville & coordinates assignments of addresses pursuant to an interlocal agreement.

D. City of Winter Park. Town of Eatonville coordinates with the City of Winter Park which is adjacent to the south boundary of the Town of Eatonville—from the east end of the Town's south boundary westward to Lake Wilderness. The Town coordinates with the City of Winter Park on land use and infrastructure issues having potential impacts that transcend their jurisdictions

CHAPTER 11: INTERGOVERNMENTAL OORDINATION INVENTORY AND ANALYSIS

Regional Agencies

A St. Johns River Water Management District. The South Florida Water Management District (SJRWMD), located in Palatka--an agency created by the State--is a multi-county independent special district responsible for flood-control and water conservation within the St. Johns River Region. In 2016, the Town purchased the 72.65 upland acres of the Hungerford property from the Orange County School Board that is planned for redevelopment as the southwest expansion of the Town center. In addition, the Town purchased a 17.61-acre undeveloped Orange County School Board site at 525 W. Kennedy which is anticipated to accommodate an 8.68±-acre commercial development with an 8.93±-acre site to the north planned for residential development. As documented in the Future Land Use Element and Potable Water Element Data Inventory and Analysis, the Town's land use profile includes a total of 161.34 acres of undeveloped sites ripe for redevelopment. All but one 9.47-acre residential parcel are located on segment of W. Kennedy Boulevard that is planned for widening in the Orange County Five-Year plan with completion scheduled by FY 2019-2020. The Town has commenced discussions with the SJRWMD, which include presenting land use plans as well as recent improvements as well as scheduled new upgrades to serve these developing areas with improved systems of potable water and wastewater programs. To provide property owner with reasonable development rights, the Town will need a consumptive use permit that increases the recent severe reduction by the SJRWMD in ground water withdrawal for use as potable water. As one of Florida's five regional water management districts, SJRWMD issues permits for the consumptive use of water, well construction, surface water management, groundwater withdrawal and artificial recharge. Besides its permitting activities, the district is authorized to:

- Construct and operate water control works
- Engage in water resource planning
- Participate in technical investigations of water resources
- Gather water resource data
- Monitor Discharges into waterway

B. The East Central Florida Regional Planning Council. The East Central Florida Regional Planning Council (ECFRPC), located in Altamonte Springs, is one of Florida's eleven regional planning councils. The ECFRPC provides technical assistance to local government. In addition, the ECFRPC has the responsibility for reviewing comprehensive plans or portions thereof to ensure consistency with Regional plans, goals, objectives, and policies. Similarly, the ECFRPC is responsible for identifying inconsistencies in policies of local government plans with those of the ECFRPC Strategic Regional Policy Plan. If the Town of Eatonville were to attract a development of regional impact as defined in Chapter 380, F.S., the Town would be required to coordinate such large-scale plans with the ECFRPC.

State Agencies

A. Department of Economic Opportunity. The Bureau of Community Planning within the Florida Department of Economic Opportunity (DEO) is headquartered in Tallahassee. A Secretary appointed by the Governor administers the Department. DEO administers a variety of grant programs designed to assist local governments in improving growth management resources, community infrastructure, and service delivery systems. The Town of Eatonville coordinates with the DEO on issues related to the following technical services, grants and State oversight reviews:

- Community Redevelopment and Community Development
- Historic Preservation
- Housing
- Community Services
- Land and Water Management
- Post-Disaster Recovery
- Resource Planning and Management
- Public Safety
- Emergency Management Preparedness

B. Department of Environmental Protection. The Department of Environmental Protection (DEP) is responsible for managing and regulating functions of related to protection of resources. Primary issues that the Town coordinates with DEP include:

- Protecting and conserving natural resources; and
- Regulating hazardous waste, air pollution emission, solid waste disposal, dredge and fill activities, and alteration to environmentally sensitive areas.

DEP also serves as an umbrella agency for Florida's five regional water management districts.

C. Department of Transportation. The Florida Department of Transportation (FDOT) directs planning functions and coordinates maintenance and development of Florida's transportation system. FDOT has authority to direct the design, construction, maintenance, and related activities of the Florida Highway System. FDOT is responsible for the maintenance of Interstate-4 in coordination with Orange County and MetroPlan Orlando. FDOT has limited regulatory authority over the use of land along State roads including design standards for curb cuts on the State's major highway system.

D. Department of State. The Town of Eatonville coordinates with the Florida Department of State on issues related to State archives and records as well as issues related to the historic sites and properties within the Town of Eatonville. The Town works with the Division of Historical Resources, Bureau of Historic Preservation provides technical assistance on comprehensive planning issues surrounding historic and archaeological sites of significance. The Eatonville Historic District is listed on the National Register of Historic Places. The State was instrumental in recommending the Eatonville Historic District for placement on the National Register of Historic Places and by administering grant projects in subsequent years.

E. Department of Health. The Town of Eatonville coordinates with the Florida Department of Health (DOH) on issues related to public health and environmental control. DOH incorporates not only conventional public health functions but also environmental health programs. The latter entity is charged with managing a broad range of environmental issues, including septic tank inventory and regulation, water quality, and pollution control.

F. Department of Children and Families. The Town of Eatonville coordinates with the Florida Department of Children and Families on issues surrounding delivery of rehabilitative, social and medical services for children, family, and elderly, including services directed towards special needs.

G. Florida Fish and Wildlife Conservation Commission. The Town of Eatonville coordinates with the Florida Fish and Wildlife Conservation Commission (FWC) primarily through the review of projects which may have potential impacts on local fish and wildlife habitat or which may intrude on and disturb habitats of endangered species. The Town coordinates its comprehensive planning activities with the FWC to achieve professional fish and wildlife management perspectives on issues potentially impacting fish and wildlife habitat, particularly habits of endangered and threatened species.

Federal Agencies

A. Environmental Protection Agency. The Environmental Protection Agency (EPA) is the federal agency responsible for protection of the environment. The EPA administers a variety of programs ranging from air and water quality protection to noise abatement. EPA exerts authority through the issuance of grant monies and through its power to fine violators. The agency establishes national drinking water and air quality standards with which all local agencies must comply. EPA standards are generally administered at the local level through the Florida Department of Environmental Protection. The EPA coordinates issues involving hazardous waste, including clean-up efforts and advises the Department about safety measures for handling unusual materials.

B. Department of Agricultural, Natural Resource Conservation Service. The Natural Resources Conservation Service has responsibility for mapping soils per type, including soils that define wetlands, and this information is used to assist in locating areas that deserve special attention. In addition, the educational and informative information concerning prevention of soil erosion is disseminated to the public, development industries, and agricultural operations.

C. Federal Emergency Management Agency. Although not specifically related to the issue of environmental conservation, the 100-year flood zone mapping effort carried out by the Federal Emergency Management Agency, Flood Insurance Administration provides useful information in defining sensitive areas.

D. US Fish and Wildlife Service. US Fish and Wildlife Service (FWS) is responsible for providing expert leadership in the conservation of fish and wildlife affected by federally funded or licensed land development actions. FWS reviews permits that affect wetlands, endangered species, and other environmental issues. FWS regulates compliance review for the Endangered Species Act, Fish and Wildlife Coordination Act, and other Federal laws. FWS works in cooperation with state and local agencies to achieve its mission.

Franchise Agreements and Related Services. The Town of Eatonville coordinates with providers of utilities, including electric, telephone, and television cable services. The Town also coordinates with contractors providing solid waste collection to the Town based through contracts with the Town.

CHAPTER 11: INTERGOVERNMENTAL OORDINATION INVENTORY AND ANALYSIS

Intergovernmental Coordination Analysis

This section provides an analysis of the Intergovernmental Coordination mechanisms, problems and needs within the Town of Eatonville.

Effectiveness of Existing Coordination Mechanisms. This subsection provides an analysis of the effectiveness of the existing intergovernmental coordination mechanisms. This analysis has been separated by the individual mechanism to ensure proper coverage of the coordination mechanisms that are utilized within the Town of Eatonville.

Specific Problems and Needs Requiring Improved Intergovernmental Coordination. The Town of Eatonville has identified several intergovernmental issues that are currently the subjects of discussion between the Town and respective public agencies. Most of these issues have been addressed at the intergovernmental coordination meetings sponsored by the Bureau of Community Planning within the Department of Economic Opportunity and the East Central Florida Regional Planning Council.

Joint-Use of School and Recreation Sites. The Town coordinates with the Orange County School Board to ensure that the Hungerford Elementary School site and facilities are available for use as parks and recreation activity, including the following issues:

1. **Use of Existing School Facilities**. The Town should coordinate with the School Board to promote wider application of the joint-use concept. Issues such as avoiding conflicts in activity schedules should be coordinated.
2. **Funding and Maintenance of New Facilities**. The Town should work with the Orange County School Board to determine responsibilities for funding of new recreation facilities on school and Town sites and maintaining these facilities. The two governmental entities also should coordinate the provision of new facilities to ensure that the facilities are necessary to meet the Town's level of service standards, while being appropriate to that school site.

Affordable Housing. As discussed in the Land Use and Housing Elements, affordable housing is an issue within the Town of Eatonville and Orange County. The Town Coordinates with Orange County in addressing housing needs and assists Orange County in providing information on local housing needs and issues involving Orange County grants assistance for housing. The Town of Eatonville coordinates with Orange County in developing, implementing and updating its Consolidated Plan which addresses neighborhood revitalization, housing activities, homeless activities, public services and related assistance programs.

Traffic Circulation. Traffic circulation on West Kennedy Boulevard, Wymore Road, and establishing connectivity along South Lake Destiny Road through Diplomat Circle to Lee Road are longstanding roadway improvement needs that the Town has coordinated with Orange County. Improvements to West Kennedy and Wymore Road are discussed in the Traffic Circulation Element. The Town has participated in discussions with Orange County regarding establishing connectivity along South Lake Destiny Drive through Diplomat Circle to Lee Road for several years and the discussions have continued during 2016-2017. The widening of West Kennedy is in the Orange County Five-Year capital improvement program. The Town of Eatonville should continue to coordinate with Orange County to implement the widening of Wymore Road and to establish connectivity of South Lake Destiny Drive through Diplomat Circle to Lee Road to enhance access to regional and local markets. The south segment of South Lake Destiny Drive is the spine of the Town's Interstate Industrial subdivision—a major contributor to the Town economic base.

Hurricane Evacuation and Disaster Preparedness. Hurricane evacuation and disaster preparedness are important considerations in placing priorities for the road improvements needs to protect life in time of disaster and need for evacuation. The above noted improvements would be major assets in promoting more efficient and effective hurricane evacuation. The Town of Eatonville should continue to coordinate with Orange County to promote the needs for timely improvements to above described roadway improvements. In addition, the Town should maintain continued participation in Orange County intergovernmental programs that address the County's disaster preparedness program, including hurricane evacuation plans, shelter space allocations, and post-disaster recovery management plans.

Actions Recommended to Address Issues Related to Conflict Mediation. Where the Town is unable to resolve intergovernmental conflicts, the Town Council shall use formal mediation processes provided by the East Central Florida Regional Planning Council.

CHAPTER 11: INTERGOVERNMENTAL OORDINATION INVENTORY AND ANALYSIS

Proposed Growth and Development and Regional Planning Implications

Previous sections of this Element have presented an inventory and analysis of entities with which Town of Eatonville coordinates multi-jurisdictional issues surrounding growth, development, and resource conservation. In addition, the Comprehensive Plan: Data Inventory and Analysis for each functional element of the Plan identifies and analyzes issues having multi-jurisdictional impacts. Finally, the Comprehensive Plan: Goals, Objectives, and Policies for each functional element of the Plan shall provide a pro-active approach for managing the governmental coordination process to promote and further the resolution of intergovernmental coordination issues and/or conflict.

The Town shall coordinate intergovernmental coordination issues surrounding land use, traffic circulation, housing, public facilities, and resource conservation shall be coordinated with Orange County. Inter-governmental coordination policy issues shall also be reviewed for consistency with the East Central Florida Regional Planning Council Strategic Policy Plan.

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

INTRODUCTION

Purpose. The CIE assists in measuring the Town's ability to provide the public services of the Comprehensive by assessing existing revenue sources, and considering new revenue sources, to fund capital and operating costs consistent with adopted levels of service required by state law.

- Traffic Circulation
- Recreation
- Potable Water
- Sanitary Sewer
- Solid Waste
- Storm Water Management

Relationship of the Comprehensive to the CIE. The CIE is important not only because it details the costs of needed public services, but it also translates policies of the Comprehensive and provide for the anticipated growth. The CIE established LOS standards for each of capital facilities necessary to carry out the Comprehensive Plan and the financial feasibility of implementing the plan. The Town shall continue to annually update a financially feasible Capital Improvement Program and Budget which will achieve the following:

- Consolidation of needed improvement on a town wide basis;
- Establish a system of procedures and priorities to evaluate proposed improvement based on need, the comprehensive plan relationship of other projects and cost requirements;
- Scheduling improvements;
- Maintain and implement level of service standards for public facilities per state law.

The Town must include and adopt the Capital Improvement Program and Budget, which includes funding for improvements that are programmed for a fiscal year into the framework of the regular budget adoption process.

FINANCIAL STATEMENTS

The Town of Eatonville maintains its accounting in accordance with generally accepted accounting principles (GAAP) applied to governmental units promulgated by the Governmental Accounting Standards Board (GASB), which endorsed the pronouncements of the National Council on Governmental Accounting (NCGA) in GASB Statement 1; the Financial Accounting Standards Board (GASB), and the American Institute of Certified Public Accountants. The following section summarizes significant accounting policies applied in the preparation of financial statements.

Reporting Entity. For financial reporting purposes, management has considered all potential component units of government. The decision to include a potential component unit in the reporting entity was made by applying the criterion set forth in GAAP. Based upon the application of the criteria, no potential component unit was included in the Town's financial statement.

Basis of Presentation: Fund Accounting. A governmental accounting system makes it possible to: 1) show that all applicable legal provisions have been complied with; and 2) determine fairly and with full disclosure, the financial position and results of the Town. To accomplish these objectives, the Town's accounting records are organized and operated on a fund basis. A fund is a fiscal and accounting entity, with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities, or balances, and changes therein, which are analyzed as separate units for the purpose of carrying on the specific activities, or attaining certain objectives, in accordance with special regulations, restrictions or limitations. The following types of funds and account groups are used in accounting for the financial operations of the Town:

Governmental Funds

The General Fund: Account for all financial resources except those accounted for in another fund.

Special Revenue Fund: Account for the proceeds of specific revenue sources (other than expendable trusts or for major capital projects.

Capital Projects Fund: Account for financial resources to be used for the acquisition or construction of major capital facilities (other than those financed by Proprietary Funds).

Debt Service Fund. The Debt Service Fund is used to account for the accumulation of resources to be used for long-term debt principal and interest, excluding operating lease payments. The Town's current long-term debt includes a 1999 bond issues and was partially refunded with Bond Series 2006B.

Fiduciary Fund: Account for assets held on behalf of outside parties, including other governments, or behalf of other funds within the government. When these assets are held under the terms of a formal trust agreement, a pension trust fund, a nonexpendable trust fund or an expendable trust fund is used. The terms "nonexpendable" and "expendable" refer to whether the government is under an obligation to maintain the trust principal. Agency funds generally are used to account for assets that the government holds on behalf of others as their agent.

Proprietary Funds

Enterprise Funds: Account for operations (a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

Account Groups

General Fixed Assets Account Group: to account for general fixed assets acquired principally for general purposes and excluded fixed assets of the enterprise Funds.

General Long-Term Account Group: to account for general long-term debt incurred principally for general purposes and excludes long-term debt of the Enterprise Funds.

Basis of Accounting. Basis of accounting refers to when revenues and expenditures or expenses are recognized in the accounts and reported in the financial statements. Basis of accounting relates to the timing of the measurements made, regardless of the measurement focus applied. The Governmental Funds are maintained on the modified accrual basis of accounting. Under this method of accounting, revenues are generally recognized when they become measurable and available. Revenues susceptible to accrual are as follow:

- Utility Taxes
- Charges for Services
- Franchise Taxes
- Interest on Investments
- Intergovernmental Revenue and Grants

The following revenues are not considered susceptible to accrual:

- Property Taxes
- Licenses and Permits

Expenditures are generally recognized as the liabilities are incurred, if measurable.

The Proprietary Funds are maintained on the accrual basis of accounting. This method of accounting is intended to provide an accurate matching of expenses with associated revenues. Revenues are recognized when they have been earned and are measurable; expenses are recognized when they are incurred, if measurable. Grants, entitlements and shared revenues are accounted for on the same basis as the fund type in which the transactions are recorded.

Budgets and Budgetary Accounting. The Town, in accordance with its Charter and State Law, follow the following procedures in establishing the budgetary data reflected in the accompanying financial statements.

Annual Operating Budget. An annual operating budget is prepared by the Town's Finance Department for the General, Special Revenue, Enterprise, and Capital Projects Funds. The Mayor submits to the Town Council this proposed operating budget for the ensuing fiscal year. This budget includes proposed expenditures and the means to finance them, including a proposed ad-valorem mileage rate. Public hearings are conducted to obtain the taxpayer comments on the proposed budget and ad-valorem millage rate. Prior to the third Monday in September, the Town Council legally enacts the operating budget and sets the ad-valorem millage rate by passage of an ordinance. The Mayor is authorized to transfer budgeted amounts between expenditure characterized within individual department; however, transfers between departments and revisions that alter the total expenditures of a Fund must be approved by the Town Council. The General and Enterprise Funds are subject to budgetary control on a department basis. The Special Revenue Funds are subject to budgetary control on an individual fund basis. Unencumbered appropriations in the annual operating budget lapse at fiscal year-end.

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

FINANCING CAPITAL IMPROVEMENT ANALYSIS

Purpose and Content. This section will examine whether there will be sufficient revenue available to finance the necessary capital projects in the future. The estimating and projection of future revenues is the first step of this assessment process. Once the estimation and projection are complete then these revenues must be balanced against the anticipated expenditures for capital improvement. These capital improvements must include costs of additional personnel and routine operation and maintenance activities. The final step will be to specify the amount of revenue is available for each public service and to analysis if this is adequate to fund the service. If the available revenue is insufficient to adequately fund the service as the adopted LOS, then new or enhanced revenue should be explored.

Timing and Location Policies. This section of the CIE describes and identifies the major tools used by Eatonville to direct and guide the timing and location of local constructed facilities. This section will discuss several tools currently or proposed by to be used by the Town to plan for the timing and location of public facilities. They are as follows:

1) Level of Service Standards;
2) The Capital Improvement Budget and Program;
3) User Charges;
4) Developer's Agreement;
5) Moratorium
6) Impact Fees; and
7) Special Taxing Districts

Level of service standards (LOS) are statements of desired public facility conditions. Public facilities inventoried in the Comprehensive Plan are required by Chapter 163, Florida Statues and Chapter 9J-5, Florida Administrative Code to adopt level of service standards. The Town of Eatonville adopted a LOS in conjunction with its comprehensive plan for traffic circulation, potable water, wastewater, solid waste, stormwater management and recreation.

Capital Improvement Budget: Major capital facilities and improvements accounted for by the Town within the Capital Projects Fund are subject to budgetary control on a project by project basis. Appropriations for a specific project do not lapse until completion of the project. The Town's finance department prepares the budget for projects based on engineering estimates and other factors. The Mayor submits the project budget to the Town Council and specifies the financing source to fund the project. The Council, in turn, sets a date for public hearings for citizen comments on the project. The project and its budget are approved through resolution by a majority of the Town Council. Amendments or revisions to the original project budget require a Town Council resolution.

Use Charges are levied by Eatonville to recoup the costs of public facilities or services by charging those who directly benefit from them. The Town presently levies user charges for water, wastewater and solid waste disposal.

Developer's Agreements are contracts between developers and the Town, which controls timing and location of developments by conditioning development approval upon existence of adequate facilities and services needed to remain adopted LOS Standards. The Town will use these agreements to ensure that adequate facilities and services are in place.

Moratoriums. The Town will reserve the right to enact Moratoriums to temporarily halt development activity for a specified period to allow for necessary planning activities in concert with comprehensive plan preparation, adoption or amendment.

Impact fees are used to supplement or fund the cost of providing infrastructure to the area where the project is being constructed. Impact fees are aimed to offset the impacts of capital needs directly relating to growth. The Town should be looking closely at the development of impact fees to provide funding for future growth in the next couple of years.

Special Taxing Districts (STD) are direct charges levied on an area which require special services or services that directly benefits the population of the area. If the Town is to provide police, fire, stormwater management and recreation services, it must use tools like STD's to fund them.

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

FINANCIAL NET POSITION

As reported by Cherry Bekaert, in the Town of Eatonville Annual Financial Report for Year Ended September 30, 2015 [i.e., latest available Financial Report], the Town's assets plus deferred outflows of resources exceeded liabilities by $9,709,993 at the close of the 2014-2015 fiscal year. Table XII-1 shows the net financial position of the Town at the end of FY 2015 compared with the net financial position in FY 2014. Governmental activities resulted in a decrease in net position before transfers in funds presented in Table XII-2. Table XII-3 shows FY 2015 Budgetary Highlights, while Table XII-4 shows the Financial Statement with description of activities and Table XII-5 presents the FY 2015 Governmental Funds Balance Sheet-—all as presented in the Cherry Bekaert FY 2015 Annual Financial Report for the Town of Eatonville.

Governmental Activities: Governmental activities resulted in a decrease in net position before transfers of $63,750. In fiscal year 2014 governmental activities had an increase in net position of $45,363 before transfers. The Town had a cash transfer of $295,000 from business-type activities to governmental activities in fiscal year 2015. After considering transfers, governmental activities reflect an increase in net position of $231,250, as compared to an increase of $196,363 in fiscal year 2014.

Business-type Activities: Revenues for business-type activities increased $44,054 for the year, and expenses for business-type activities decreased by $82,914. During fiscal year 2015, $295,000 in cash transfers were made from the Water and Sewer Fund to the General Fund, an increase of $144,000 from that of fiscal year 2014. In total, business-type activities net position decreased $213,258 in fiscal year 2015, as compared to a decrease of $196,226 in fiscal year 2014.

TABLE XII-1: FINANCIAL STATEMENT OF NET POSITION
TOWN OF EATONVILLE
AS OF SEPTEMBER 30, 2015

	Government Activities		Business Type Activities		Total	
	2015	2014	2015	2014	2015	2014
Assets:						
Current & Other Assets	$ 2,564,432	$ 1,793,982	$ (727,004)	$ (595,257)	$ 1,837,428	$ 1,198,725
Capital Assets	7,565,513	7,490,353	2,414,690	2,495,196	9,980,203	9,985,549
Total Assets	10,129,945	9,284,335	1,687,686	1,899,936	11,817,631	11,184,274
Deferred Outflow of Resources	64,098	--	--	--	64,098	--
Liabilities:						
Other Liabilities	$ 438,548	482,999	341,207	341,042	779,755	824,041
Long-term Liabilities	1,321,687	1,069,588	70,294	69,454	1,391,981	1,139,042
Total Liabilities	1,760,235	1,552,587	411,501	410,496	2,171,736	1,963,083
Net Position:						
Net Investment in Capital Assets	6,338,479	6,505,219	2,348,811	2,429,317	8,687,290	8,9934,536
Restricted for Debt Services & CRA	1,085,015	853,418	--	--	1,085,015	853,418
Unrestricted deficit)	1,010,314	373,111	(1,072,626)	(939,874)	(62,312)	(566,763)
Total Net Position	$ 8,433,808	$ 7,731,748	$ 1,276,185	$ 1,489,443	$ 9,709,993	$ 9,221,191

Source: Cherry Bekaert, Town of Eatonville, Florida: Annual Financial Report and Report of Independent Auditor, Year Ended September 30, 2015.

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

Governmental Activities: Governmental activities resulted in a decrease in net position before transfers of $63,750. In FY2014 governmental activities had an increase in net position of $45,363 before transfers. The Town had a cash transfer of $295,000 from business-type activities to governmental activities in fiscal year 2015. After considering transfers, governmental activities reflect an increase in net position of $231,250, as compared to an increase of $196,363 in fiscal year 2014.

Business-type Activities: Revenues for business-type activities increased $44,054 for the year, and expenses for business-type activities decreased by $82,914. During fiscal year 2015, $295,000 in cash transfers were made from the Water and Sewer Fund to the General Fund, an increase of $144,000 from that of fiscal year 2014. In total, business-type activities net position decreased $213,258 in fiscal year 2015, as compared to a decrease of $196,226 in fiscal year 2014.

FINANCIAL ANALYSIS OF THE TOWN OF EATONVILLE'S FUNDS

The Town uses fund accounting to ensure and demonstrate compliance with the legal requirements for financially related matters.

TABLE XII-2: FINANCIAL STATEMENT OF CHANGES IN NET POSITION: COMPARISON OF 2015 AND 2014
TOWN OF EATONVILLE
AS OF SEPTEMBER 30, 2015

	Government Activities		Business Type Activities		Total	
	2015	2014	2015	2014	2015	2014
Revenues:						
Program Revenues						
Charges for Services	$ 205,341	$ 263,442	$ 1,184,953	$ 1,140,899	$ 1,390,294	$ 1,404,341
Operating Grants & Contributions	583,917	170,942	--	--	583,917	170,942
Capital Grants & Contributions	11,528	7,800	--	--	11,528	7,800
General Revenues						
Property Taxes	1,655,576	1,491,222	--	--	1,655,576	1,491,222
Other Taxes	1,362,721	1,431,959	--	--	1,362,721	1,431,959
Other Revenues	76,034	69,042	--	-	76,034	69,042
Total Revenue	3,895,117	3,434,407	1,184,953	1,140,899	2,171,736	1,963,083
Expenses						
General Government	1,205,612	1,017,864	--	--	1,205,612	1,017,864
Public Safety	1,597,104	1,508,729	--	--	1,597,104	1,508,729
Physical Environment	340,415	308,021	--	--	340,415	308,021
Human Services	52,636	44,673	--	--	52,636	44,673
Culture & Recreation	50,613	108,058	--	--	50,613	108,058
Interest on Long-term Debt	264,836	331,812	--	--	264,836	331,812
Water and Sewer	--	--	695,493	764,702	695,493	764,702
Solin Waste	--	--	305,175	307,729	305,175	307,729
Stormwater	--	--	102,543	113,694	102,543	113,694
Total Expenses	3,958,867	3,389,044	1,103,211	1,186,125	3,958,867	3,389,044
Increase (decrease) in Net Position Before Transfers	(63,750)	45,363	81,742	(45,226)	17,992	137
Transfers	295,000	151,000	(295,000)	(151,000)	-	-
Change in Net Position	231,250	196,363	(213,258)	(196,226)	17,992	137
Net Position: Beginning	7,731,748	7,535,385	1,489,443	1,685,669	9,221,191	9,221,054
Restatement of Beginning Net Position	470,810	--	--	--	470,810	--
Position: Beginning as Restated	$ 8,433,558					
Net Position: End	$ 8,433,808	$ 7,731,748	$ 1,276,185	$ 1,489,443	$ 9,709,993	$ 9,221,191

Source: Cherry Bekaert, Town of Eatonville, Florida: Annual Financial Report and Report of Independent Auditor, Year Ended September 30, 2015.

Governmental Funds: The focus of the Town's governmental funds is providing information on near-term inflows, outflows, and balances of spendable resources. This information is useful in assessing the Town's financing requirements. The fund balance serves as a useful measure of a government's net resources available for spending at the end of the fiscal year.

The General Fund is the chief operating fund of the Town. At the end of the current fiscal year, the Town reported a positive fund balance of $647,707 for the General Fund. This compares to a fund balance of $440,781 at September 30, 2014. As of the end of the current fiscal year, the Town reported a combined ending fund balance of $1,730,839 for governmental funds, including a fund balance of $1,083,132 in the Community Redevelopment Agency Fund. This compares to $1,297,773 of fund balance for governmental funds at September 30, 2014, including $856,992 in the Community Redevelopment Agency Fund.

Proprietary Funds: The Town's proprietary funds provide the same type of information found in the governmentwide financial statements, but in more detail. The unrestricted net deficit of the Water and Sewer, Solid Waste and Stormwater Funds at the end of the year amounted to $1,072,626, with an unrestricted $2,370,433 deficit in the Water and Sewer Fund offsetting positive balances in the other funds. The Solid Waste Fund and Stormwater Fund increased net positions by $64,396 and $72,209, respectively, while the Water and Sewer Fund experienced a net deficit increase of $349,863. The Town intends to rebuild the fund balance of the Water and Sewer fund through future operations. Other factors concerning the finances of these three funds have already been addressed in the discussion of the Town's business-type activities. The Town experienced generally favorable budget variances during the fiscal year.

General Fund Budgetary Highlights: Table XII-3: FY 2015 Budget Highlights prepared by Cherry Bekaert in its FY 2015 Annual Financial Report for the Town of Eatonville presents budgetary highlights for the fiscal year ending September 30, 2015. The report states that: "The Town experienced generally favorable variances during the fiscal year."

TABLE XII-3: FY 2015 BUGETARY HIGHLIGHTS: TOWN OF EATONVILLE

	Budget		Actual	Positive/
	Original	Final	Amounts	(Negative)
General govemment	$ 1,180,300	$ 1,156,481	$ 1,086,735	$ 69,746
Public safety	1,581,129	1,604,394	1,391,829	212,565
Physical environment	208,470	209,373	208,747	626
Economic environment	541	25,315	25,315	-
Human services	45,765	52,636	52,636	-
Culture and recreation	223,720	256,277	203,880	52,397
Debt service				
Debt service interest	48,190	48,190	52,748	(4,558)
Debt service principal	105,000	105,000	154,579	(49,579)
Capital improvements	5,000	26,177	81,556	(55,379)
Total expenditures	$ 3,398,115	$ 3,483,843	$ 3,258,025	$ 225,818

Source: Cherry Bekaert, Town of Eatonville, Florida: Annual Financial Report and Report of Independent Auditor, Year Ended September 30, 2015.

TABLE XII-4: FINANCIAL STATEMENT
WITH STATEMENT OF ACTIVITIES
YEAR ENDED SEPTEMBER 30, 2015
TOWN OF EATONVILLE

		Program Revenues			Net (Expense) Revenue and Changes in Net Position		
Functions/Programs	Expenses	Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions	Governmental Activities	Business-type Activities	Total
Primary government:							
Governmental activities:							
General government	$ 1,205,612	$ 96,889	$ 107,812	$ 11,528	$ (989,383)	$ -	$ (989,383)
Public safety	1,597,104	8,050	414,843	-	(1,174,211)	-	(1,174,211)
Physical environment	340,415	22,810	-	-	(317,605)	-	(317,605)
Economic environment	50,613	-	-	-	(50,613)	-	(50,613)
Human services	52,636	-	52,637	-	1	-	1
Culture/recreation	264,836	77,592	8,625	-	(178,619)	-	(178,619)
Interest on long-term debt	447,651	-	-	-	(447,651)	-	(447,651)
Total governmental activities	3,958,867	205,341	583,917	11,528	(3,158,081)	-	(3,158,081)
Business-type activities:							
Water and sewer	695,493	640,630	-	-	-	(54,863)	(54,863)
Solid waste	305,175	369,571	-	-	-	64,396	64,396
Stormwater	102,543	174,752	-	-	-	72,209	72,209
Total business-type activities	1,103,211	1,184,953	-	-	-	81,742	81,742
Total	$ 5,062,078	$ 1,390,294	$ 583,917	$ 11,528	(3,158,081)	81,742	(3,076,339)
General revenues:							
Property taxes					1,655,576	-	1,655,576
Franchise fees based on gross receipts					378,158	-	378,158
Sales taxes					327,545	-	327,545
Local business tax					73,298	-	73,298
Utility taxes					583,720	-	583,720
Miscellaneous and other taxes					75,105	-	75,105
Unrestricted investment earnings					479	-	479
Gain on sale of capital assets					450	-	450
Transfers					295,000	(295,000)	-
Total general revenues and transfers					3,389,331	(295,000)	3,094,331
Change in net position					231,250	(213,258)	17,992
Net position - beginning, as previously reported					7,731,748	1,489,443	9,221,191
Restatement of beginning net position					470,810	-	470,810
Net position - beginning, restated					8,202,558	1,489,443	9,692,001
Net position - ending					$ 8,433,808	$ 1,276,185	$ 9,709,993

TABLE XII-5: GOVERNMENTAL FUNDS
BALANCE STATEMENT
YEAR ENDED SEPTEMBER 30, 2015
TOWN OF EATONVILLE

	General Fund	Community Redevelopment Agency	Total
Assets			
Cash and cash equivalents	$ 11,884	$ 813,944	$ 825,828
Accounts receivable, net	99,255	-	99,255
Due from other funds	1,066,783	269,497	1,336,280
Due from other governments	117,481	-	117,481
Prepaid items	41,998	-	41,998
Total assets	$ 1,337,401	$ 1,083,441	$ 2,420,842
Liabilities and fund balances			
Liabilities:			
Accounts payable	66,549	181	$ 66,730
Due to other governments	219,129	-	219,129
Accrued liabilities	77,989	128	78,117
Unearned revenue	34,160	-	34,160
Due to other funds	270,551	-	270,551
Other liabilities	21,316	-	21,316
Total liabilities	689,694	309	690,003
Fund balances:			
Nonspendable:			
Prepaid items	41,998	-	41,998
Restricted for:			
Special Events	1,883	-	1,883
Community Redevelopment Agency	-	1,083,132	1,083,132
Unassigned	603,826	-	603,826
Total fund balances	647,707	1,083,132	1,730,839
Total liabilities and fund balances	$ 1,337,401	$ 1,083,441	$ 2,420,842

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

ANALYSIS OF REVENUES

Revenue Sources. The ability of any agency to fund capital projects at a desired level depends upon the availability of revenue. The Town of Eatonville had total revenues ending FY 2015 ending September 30, 2015 of $4,683,140, including $3,193,371 from the General Fund, $304,813 from the Community Redevelopment Agency and $1,184,953 from Enterprise Funds as presented on Tables XII-6 below. Table XII-7 presents past and projected FY 2016 general fund revenues.

TABLE XII-6: FY 2015 TOTAL FY 2015 REVENUES FOR GENERAL FUND, INCLUDING CRA, AND TOTAL REVENUES FOR ENTERPRISE FUNDS
AS OF SEPTEMBER 30, 2015
TOWN OF EATONVILLE

Revenue Sources	GENERAL FUND REVENUES, INCLUDING CRA			ENTERPRISE FUND REVENUES			
	General Fund	Community Redevelopment Agency	Total General Government Fund	Water & Sewer	Solid Waste	Stormwater	Total Enterprise Funds Revenue
Ad valorem taxes	$ 1,355,582	$ 299,994	$ 1,655,576				
Utility taxes	657,018		657,018				
Franchise fees	378,158		378,158				
Sales tax	327,545		327,545				
Intergovernmental revenues	200,842		200,842				
Licenses and permits	60,200		60,200				
Charges for services	37,928		37,928				
Fines and forfeitures	35,255		35,255				
Interest income	34	445	479				
Rental and other income	140,809	4,377	145,186				
Operating Revenue							
Total revenues	3,193,371	304,816	3,498,187	$ 640,630	$ 369,571	$ 174,752	$ 1,184,953

Source: Cherry Bekaert, Town of Eatonville, Florida: Annual Financial Report and Report of Independent Auditor, Year Ended September 30, 2015

TABLE XII-7: GENERAL FUND REVENUES PER APPROVED BUDGET FOR FY 2012-FY 2016
TOWN OF EATONVILLE

Revenue	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Property Taxes	$1,271,247.25	$1,218,358,00	$1,242,185.00	$1,322,147.00	$1.391,576.00
Sales & Uses Taxes	80,078.00	72,911.00	66,866.00	74,605.40	70,489.00
Franchise Fees	383,332.00	385,161.00	404,169.00	424,127.00	449,275.00
Utility Service Taxes	523,963.00	536,878.00	566,349.00	596,719.00	573,039.00
License & Permit Fees	40,000	45,000	32,500.00	32,500.00	48,800.00
Intergovernmental Revenue	357,777.00	370,902.00	392,587.00	409,461.00	428,261.00
Post Office Property Revenue	22,440.00	22,440.00	48,510.00	22,440.00	22,440.00
Fines & Forfeiture Revenue	8,500.00	12,500.00	12,500.00	27,500.00	34,500.00
Miscellaneous Revenue	203,654.00	193,154.00	205,980.00	205,980.00	169,282.00

Source: Town of Eatonville website, 2017.

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

CAPITAL ASSETS AND DEBT ADMINISTRATION

General Fixed Assets. General fixed assets are not capitalized in the funds used to acquire or construct them. Upon acquisition, such assets are recorded as expenditures in the General Fund, Special Revenue, and Capital Projects, and are capitalized at cost when transferred to the General Fixed Assets Group of Account.

"Public Domain" (Infrastructure). General fixed assets consisting of roads, bridges, curbs and gutters, streets and sidewalks, drainage systems and lighting systems are not capitalized, as these assets are immovable and of value only to the government. Depreciation is not recorded on general fixed assets.

Proprietary Fund Fixed Assets. Property, plant and equipment acquired by Proprietary Funds are recorded at cost, and depreciation has been computed using the straight-line method over the estimated useful lives of the assets. Estimated useful lives for the major classifications of assets are as follows:

- Water distribution system: 10-50 years
- Sewer System: 50 years
- Equipment: 3-10 years

Capital Assets. The Town's net investment in capital assets for its governmental and business-type activities as of September 30, 2015, amounts to $9,980,203 (net of accumulated depreciation). This net investment in capital assets includes land, buildings, improvements, machinery and equipment, and recreational facilities Table XII-8: Capital Assets is a summary of changes in the Town's primary local government capital assets as of the end of FY 2015.

TABLE XII-8: CAPITAL ASSETS
TOWN OF EATONVILLE
AS OF SEPTEMBER 30, 2015

Capital Assets	Beginning Balance	Additions	Deletions	Ending Balance
Governmental Activities Capital Assets				
Capital assets not being depreciated:				
Land	$ 674,943	$ --	$ --	$ 674,943
Total capital assets not depreciated	674,943	--	--	674,943
Capital assets being depreciated:				
Infrastructure	5,179,416	--	$ --	5,179,416
Buildings & improvements	3,292,768	--	--	3,292,768
Improvements other than buildings	700,411	10,100	--	710,511
Equipment	1,451396	467,936	(2,600)	1,916,732
Total capital assets being depreciated	10,623,991	478,036	(2,600)	11,099,427
Less accumulated depreciation for:				
Infrastructure	(661,485)	(125,441)	--	(786,926)
Buildings & improvements	(1,165,111)	(79,472)	--	(1,244,583)
Improvements other than buildings	(582,941)	(26,571)	--	(609,512)
Equipment	(1,399,044)	(171,392)	2,600	(1,567,836)
Total accumulated depreciated	(3,808,581)	(402,876)	2,600	(4,208,857)
Total capital assets being depreciated, net	6,815,410	75,160	--	6,890,570
Government activities capital assets, net	$ 7,490,353	$ 75,160	$ --	$ 7,565,513
Business-type capital assets				
Capital assets not being depreciated:				
Land	$ 2,500	$ --	$ --	$ 2,500
Construction in progress	178,215	41,264	--	219,479
Total capital assets not being depreciated	180,715	41,264	--	221,979
Capital assets being depreciated				
Buildings & improvements	4,476,103	23,345	--	4,476,103
Equipment	412,402	--	--	412,402
Total capital assets being depreciated	4,888,505	23,345	--	4,911,850
Less accumulated depreciation for:				
Buildings & improvements	(2,202,529)	(143,078)	--	(2,345,607)
Equipment	(371,495)	(2,037)	--	(373,532)
Total accumulated depreciation	(2,574,024)	(145,115)	--	(2,719,139)
Total capital assets being depreciated, net	2,314,481	(121,770)	--	2,192,711
Business-type activities capital assets, net	$ 2,495,196	$ (80,506)	$ --	$ 2,414,690

Source: Cherry Bekaert, Town of Eatonville, Florida: Annual Financial Report and Report of Independent Auditor, Year Ended September 30, 2015

CHAPTER 12: CAPITAL IMPROVEMENTS ELEMENT DATA INVENTORY AND ANALYSIS

MANAGEMENT OF DEBT

The Town of Eatonville must develop detailed management policies to guide the issuance and management of debt. The policies should be developed from the following factors:

1. Financial condition of the Town;
2. Type of debt to be undertaken;
3. Type of improvements projects;
4. The Town debt capacity;
5. Legal constraints and alternative financing; and
6. Public opinions and willingness to pay.

Long-term Debt: Following is an account of the Town of Eatonville long-term debt as described in the Cherry Bekaert FY 2015 Annual Financial Report for the Town of Eatonville.

- **Florida Municipal Loan Council (FMLC) Loan:** The FMLC Loan is payable semi-annually on May 1 and November 1 through November 2029, with interest rates from 3.00% to 5.00% over the term of the loan as explained below in Table XII-9: Schedule of Florida Municipal Loan Council Loan Payment at end of FY 2015:

TABLE XII-9: SCHEDULE OF FLORIDA MUNICIPAL LOAN COUNCIL (FMLC) LOAN PAYMENTS AT END OF FY 2015

FY Year Payment Due	Principal	Interest	Total Payment
2016	$ 45,000	$ 42,400	$ 87,400
2017	45,000	40,375	85,375
2018	45,000	38,125	83,125
2019	45,000	35,250	85,750
2020	45,000	33,250	83,250
2021-2025	45,000	127,125	402,125
2026-2030	45,000	47,375	412,375
Totals	$ 875,000	$ 364,400	$ 1,239,400

Source: Cherry Bekaert FY 2015 Annual Financial Report for the Town of Eatonville.

- **State Revolving Fund Loan**: The State Revolving Fund loan with the State of Florida Department of Environmental Protection is for wastewater facilities improvement projects. The balance at the end of FY 2015 was $65,879.

- **Capital Leases**: The Town has entered into lease agreements as a lessee for financing the acquisition of police vehicles, radios and copiers. There were no down payments related to these acquisitions. These lease agreements qualify as capital leases for accounting purposes and have been recorded at the present value of their future minimum lease payments as of their inception dates. The assets acquired through capital leases are as follows:

Copier	$ 14,705
Vehicles	467,936
Less: accumulated depreciation	(170,684)
Total:	$ 311,957

- **Compensated Absences** account for the remaining Business-type debt.

Long-term Liabilities: The following Table XII-10 presents changes in long-term liabilities of governmental activities for FY2015.

TABLE XII-10: FY 2015 Long-Term Government Liabilities ending September 30, 2015

Government Activities	Beginning Balance	Additions	Reductions	Ending Balance	Due within One Year
FMLC Series 2005B	$ 980,000	$ --	$ (105,000)	$ 875,000	$ 45,000
Total note payable	980,000	--	(105,000)	875,000	45,000
Other Liabilities					
Capital Leases					
Compensated absences	5,134	396,480	(49,580)	352,034	81,105
Total other liabilities	84,454	50,067	(39,868)	94,653	75,286
	89,588	446,547	(89,448(	446,687	
Governmental activities					
Long-term liabilities	$ 1,069,588	$ 446,547	$ (194,448)	$ 1,321,687	$ 201,391

Source: Cherry Bekaert FY 2015 Annual Financial Report for the Town of Eatonville.

Table XII-11 present the net position of total Business-type Long-term Liabilities, including the State Revolving Fund Loan and Compensated Absences.

TABLE XII-11: FY 2015 Long-Term Business-Type Liabilities ending September 30, 2015

Business-type Activities	Beginning Balance	Additions	Reductions	Ending Balance	Due within One Year
State Revolving Fund Loan	$ 65,879	$ --	$ --	$ 65,879	$ --
Total loans payable	65,879	--	--	65,879	--
Other Liabilities					
Compensated absences	3,575	6,613	(5,773)	4,415	4,415
Total other liabilities	3,375	6,613	(5,773)	4,415	4,415
Business-type activities					
Long-term liabilities	$ 69,454	$ $6,613	$ (5,773)	$ 70,294	$ 4,415

Source: Cherry Bekaert FY 2015 Annual Financial Report for the Town of Eatonville.

Levels of Service Standards and Planned Capital Improvements. This analysis will present adopted LOS Standards and proposed capital improvements to maintain levels of service standards in the future.

Streets. The Town enforces the following minimum levels of service standards on all roads within the incorporated area.

Street Classification	Peak Level of Service Standard
Principal Arterial:	E [Town has no Principal Arterial Roads]
Minor Arterial:	E [Town has no Principal Arterial Roads]
Collector Roads:	E [All Collector Roads are Orange County maintained County roads designated LOSE in the Orange County Comprehensive Plan]
Local Roads:	C

Presently all local roads that are operated and maintained by the Town are operating at an acceptable level of service. Kennedy Boulevard and Wymore Road are roads that are maintained by the County and I-4 is maintained by the State. Table XII-12: "MetroPlan Orlando Cost Feasible Projects: Year 2040 Long Range Transportation Plan" describes planned funding for roadways located in the town of Eatonville. Each of these facilities are collector roadways maintained by Orange County.

TABLE XII-12: METROPLAN ORLANDO COST FEASIBLE PROJECTS: YEAR 2040 LONG RANGE TRANSPORTATION PLAN
Orange County Project Costs ($000's) by Plan Year

Collector Roadways	Segment From	Segment To	Improvement	Distance	2013	2020	2025	2030	2040
Wymore Rd.	Lee Rd.	E. Kennedy Blvd.	Widen to 4 Lanes	0.89 mile	$6,000	$7,200	$8,100	$9,540	$12,180
W. Kennedy Blvd.	Forest City Rd.	Keller Rd.	Widen to 4 Lanes	1.02 miles	$6,800	$8,228	$9,180	$10,812	$13,804
W. Kennedy Blvd.	Keller Rd.	Wymore Rd.	Widen 4 Lanes	0.74 mile	$5,000	$6,050	$6,750	$7,950	$10,150

Source: Technical Report 3: Plan Development & Cost Feasible Projects: Adopted—January 2016; Updated August 2016, MetroPlan Orlando "A Regional Transportation Partnership"

Table XII-13: "MetroPlan Orlando MetroPlan Orlando Year 2040 Long-Range Transportation Plan Prioritized Project List" presents the MetroPlan Orlando prioritized schedule for roadway projects within the Town of Eatonville adopted by the MetroPlan Board on September 14, 2016. The Table indicates that the right-of-way acquisition and construction for the 4-lane widening of W. Kennedy from Forest City Road east to Wymore Road is scheduled to be completed by 2019.The improvements are also included in the Or Orange County Five-Year Capital Improvements Program.

TABLE XII-13: METROPLAN ORLANDO YEAR 2040 LONG-RANGE PRIORITIZED PROJECT LIST
W. Kennedy Blvd R/W Acquisition and Construction Program: Candidate Projects for Transportation Regional Incentive Program (TRIP) Funds

Collector Roadways	Segment From	Segment To	Improvement	Distance	Project Phases	Fiscal Yr.	Estimated Cost Present Day	TRIP Funds Requested	Total Matching Funds To Be Provided
W. Kennedy Bld.	Forest City Rd.	Wymore Rd.	Widen to 4 Lanes	1.8 miles	R/W	2015-16	$12,000,000	$6,000,000	$6,000,000
					Construction	2018-2019	$15,000,000	$7,500,000	$7,500,000
					Total		$27,000,000	$13,500,000	$13,500,000

Source: Orlando Urban Area FY 2021-22 through 2030-40 Prioritized Project List, Adopted by MetroPlan Orlando Bd 9/14/2016; MetroPlan Orlando "A Regional Transportation Partnership", p. 25. However, this segment of W Kennedy from Forest City Road to Wymore is included in the Orange County Five-Year Capital Improvements Program.

Potable Water and Wastewater. The Town adopted a level of service of 350 gallons per day (gpd) per equivalent residential connection. The LOS Standard for wastewater is 300 gpd per equivalent residential unit. The Town will use these LOS Standards to establish water and wastewater rates. Planned expansions in water and sewer lines are included in the Public Facilities Sub-Elements for Potable Water and Sanitary Sewers, respectively. The capital outlay is recorded in the Capital Improvement Program.

The FY 2016 through FY 2020 Capital Improvements Projects to the potable water system are listed below in Table XII-14.

TABLE XII-14: FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Master Water Utility Plan	$ 53,000	0.00	0.00		
West Side Water Improvement Project	2,600,000	0.00	0.00		
Water Main Replacement				$150,000	
Water Distribution Systemwide Upgrade & Improvement					2,045,000
Meter Replacement Program					100,000
Totals:	$2,653,000		0.00	$150,000	$2,145,000

The FY 2016 through FY 2020 Capital Improvements Projects to the potable water system are listed below in Table XII-15.

TABLE XII-15: WASTEWATER SYSTEM FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Engineering Report: Improvement to Park Place Lift Station	$ 25,000				
Vereen Lift Station: Prevent Inflow and Infiltration	2,600,000				
Wastewater System-wide Upgrade and Improvement					$1,020,000
Bethune Lift Station Replacement					350,000
Totals:	$2,625,000	0.00	0.00	0.00	$1,370,000

Solid Waste. The Town has adopted the level of service LOS Standard for solid waste service at 6.0 pounds per person per day. Solid waste services operate as an enterprise funds, therefore, users pay 100 percent of the cost. The County is required by law to provide landfill facilities for all citizens of the County. Presently the County's solid waste facilities have no capital deficiencies. The Town presently contracts the collection and transportation of solid waste out to a local provider. This relieves the Town of most of the capital improvements needed to operate and maintain the local solid waste service. This makes it possible for the Town to provide the adopted LOS Standard throughout the planning period.

Recreation. The LOS Standard for recreation is 2.5 acres per 1,000 persons. Table XII-16 presents the FY 2016 through FY 2020 proposed capital improvements for recreation land acquisition and facilities.

TABLE XII-16: RECREATION LAND AND FACILITIES FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Historic Trail		$70,000.00			
Elizabeth Park Improvements		50,000.00			
LLP Pavilion			50,000.00		
Frances Jerry Park Fishing Pier Renovation			50,000.00		
Frances Jerry Park Playground Expansion			50,000.00		
Denton Johnson Fishing Pier Renovation			50,000.00		
Denton Johnson Playground Expansion & Repair			50,000.00		
Totals:	0.00	$ 120,0000.00	$ 250,000.00	0.00	0.00

Stormwater Management. Table XII-17 shows the adopted level of service for stormwater management:

Table XII-17: Stormwater Management Level of Service Standards	
Facility	Design Storm
Bridges	50 years
Canals, ditches or culverts (for ditches external to the development)	25 years
Crossdrain, Storm Sewers	10 years
Roadside Swales (for drainage internal to development)	10 years
Detention basins	25 years
Retention basins (no positive outfall)	100 years

- Finished floor (not final slab) Elevations one foot above 100-year flood elevation. Increase pollutant abatement loading through implementation of best management practices as established by the Florida Department of Environmental Protection (FDEP) and meet the water quality standards of Ch 62-302, §62-302.500, FAC.
- New development must include drainage improvements that require pre- and post-development or redevelopment peak flows to be similar but not exceed 10% for a 25-year storm. In addition, the first inch of rainfall must be retained on-site and natural vegetation should be used as a component of drainage design. Best management practices are required for stormwater runoff prior to discharge to natural or artificial drainage systems. Exceptions are allowed for single family dwellings and accessory structures, alterations or improvements to existing structures that do not change or affect the rate or volume of runoff; and construction that is on or parallel to the ground, less than or equal to 1,000 square feet of impervious surface.

Table XII-18 presents the FY 2016 capital improvements planned for stormwater managements improvements.

TABLE XII-18: STORMWATER MANAGEMENT FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS					
CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Stormwater System-wide Upgrade and Improvements					$1,600,000.00
Park Place Stormwater Outfall Repair					500,000.00
Totals:	0.00	0.00	0.00	0.00	$2,100,000.00

CAPITAL IMPROVEMENT BUDGET

The Town's capital improvement program must establish a sound, cost-effective plan for investing in needed capital facilities. The CIP reflects a conservative approach because of several factors. The first factors relate to the overall condition of the local, State, and Federal economics. The second factor is the decrease of available Federal and State grants and other revenue sharing programs to fund capital improvements. The third factor is the need for the Town to develop policies and programs aimed at identifying and stabilizing the conditions of existing capital facilities.

Capital Improvement Funding. The Town of Eatonville will use several sources to finance the Facility and Services listed in the Capital Improvement Program of the Comprehensive Plan. The funding of this program will reflect the goals, objectives and policies outlined in the Comprehensive Plan. The Town will use all available funds to finance capital improvements and use sound planning techniques to project future needs.

The Town shall attempt to reserve twenty-five percent or less of its general funds to finance capital improvements. The Town will use the first two year of the planning period to stabilize the conditions of existing facilities and develop the plans and studies outlined in the Capital Improvement Program to provide for the capital needs of future populations and developments.

Concurrency. The Town of Eatonville will annually update its five-year Capital Improvement Program, will ensure that the Capital Improvement Program is financially feasible, and will incorporate the recommendations of CIP into a yearly Capital Improvement Plan to address the capital facilities to be funded for that fiscal year. The Town shall continue to include policies in the Town's adopted site-plan review process which reviews the impact of new developments on existing facilities and. ensure that all developments meet adopted levels of service. The Town shall implement its Concurrency Management System that ensures that facilities and services, at least, meet the standards established and they are available concurrent with the impacts of future developments. The Concurrency Management System shall not allow the issuing of any development order or development permit which results in the reduction of the level of service below those levels established in the Town's Comprehensive Plan. The Capital Improvement Element Goals, Objectives and Policies address concurrency, including levels of service.

Monitoring and Evaluation. In accordance with Chapter 93-5.005 (7) of the Florida Administrative Code, the Town of Eatonville must undertake specific monitoring, updating and evaluation procedures which will lead to the drafting and submitting of the state mandated five-year evaluation and appraisal reports. The Town of Eatonville will utilize the local Planning and Zoning Board to assist the Town Council and local staff in drafting the necessary evaluation and appraisal reports. This board will hold public hearings to receive input in the developing of the evaluation and appraisal reports. Items to be addressed in this report shall include, but not be limited to:

1. Updating appropriate baseline data and measurable objectives to be accomplished in the first five-year period, and the second five-year period of the plan.
2. Describe the degree of accomplishments of goals, objectives and policies of the plan periods.
3. Highlight obstacles, and problems which resulted in under achievement of goals, objectives or policies; and
4. New or modified goals, objectives or policies needed to correct discovered problems.

To ensure the continuous monitoring, and evaluation of the Town's plan during the five years leading to the State mandated evaluation report, the Town of Eatonville will consider amendments twice yearly. This process will ensure that the elements required by the five-year process are uncovered and addressed prior to the five-year evaluation. This will ensure that problems discovered early on the plan implementation be resolved immediately versus waiting to be addressed during the five-year evaluation.

The Town should prioritize its needs for capital facility based on the following factors:
1. Elimination of health hazard
2. Maintenance of existing level of service
3. Elimination of existing deficiencies
4. Available funding resources
5. Economic feasibility
6. Physical need

Table XII-19 presents the proposed FY 2016 Capital Improvement Program on the following page:

Table XII-19 presents the proposed FY 2016 Capital Improvement Program:

TABLE XII-19: FY 2016 THROUGH FY 2020 CAPITAL IMPROVEMENT PROJECTS

CAPITAL PROJECTS	COMMITTED FUNDS	UNCOMMITTED FUNDS			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Master Water Utility Plan	$ 53,000				
West Side Water Improvement Project	2,600,000				
East Side Waste Water Improvement Project	1,800,000				
Engineering Report: Park Place	25,000				
Gateway Project		$1,300,000			
Town Hall Improvement with ADA Accessibility		250,000			
Hungerford Prep Development		200,000			
Historic Trail		70,000			
ADA Improvement Program		65,000			
Elizabeth Park Improvement		50,000			
Police Security Compound		32,500			
Town Boundary and Facility Survey		25,000			
Town Hall Office Renovation-Repair Plumbing/Electrical		25,000			
Kennedy Blvd. Streetscape--CRA		25,000			
Town Hall Roof Repair-New Roof		20,000			
Town Hall Parking Lot Repair		15,000			
Vereen Lift Station Inflow and Infiltration			$1,600,000		
Storm Water System Wide Upgrade and Improvement			100,000		
LLP Pavilion Landscaping			50,000		
FJP Fishing Pier Renovation			50,000		
FJP Playground Expansion			50,000		
Denton Johnson Fishing Pier Renovation and Repair			50,000		
Denton Johnson Playground Expansion and Repair			50,000		
Post Office Improvements			25,000		
Roadway Improvements				$1,025,000	
Water Main Replacement				150,000	
Town Hall IT Upgrade				100,000	
Citywide Sidewalk Repair and Replacement				100,000	
Water Distribution System-wide Upgrade and Improvement					2,045,000
Waste Water System-wide Upgrade and Improvement					1,020,000
Park Place Storm Water Outfall Repair					500,000
Bethune Lift Station Replacement					350,000
Meter Replacement Program					100,000
Totals:	$4,478,000	$2,077,500	$1,975,000	$1,375,000	$4,015,000