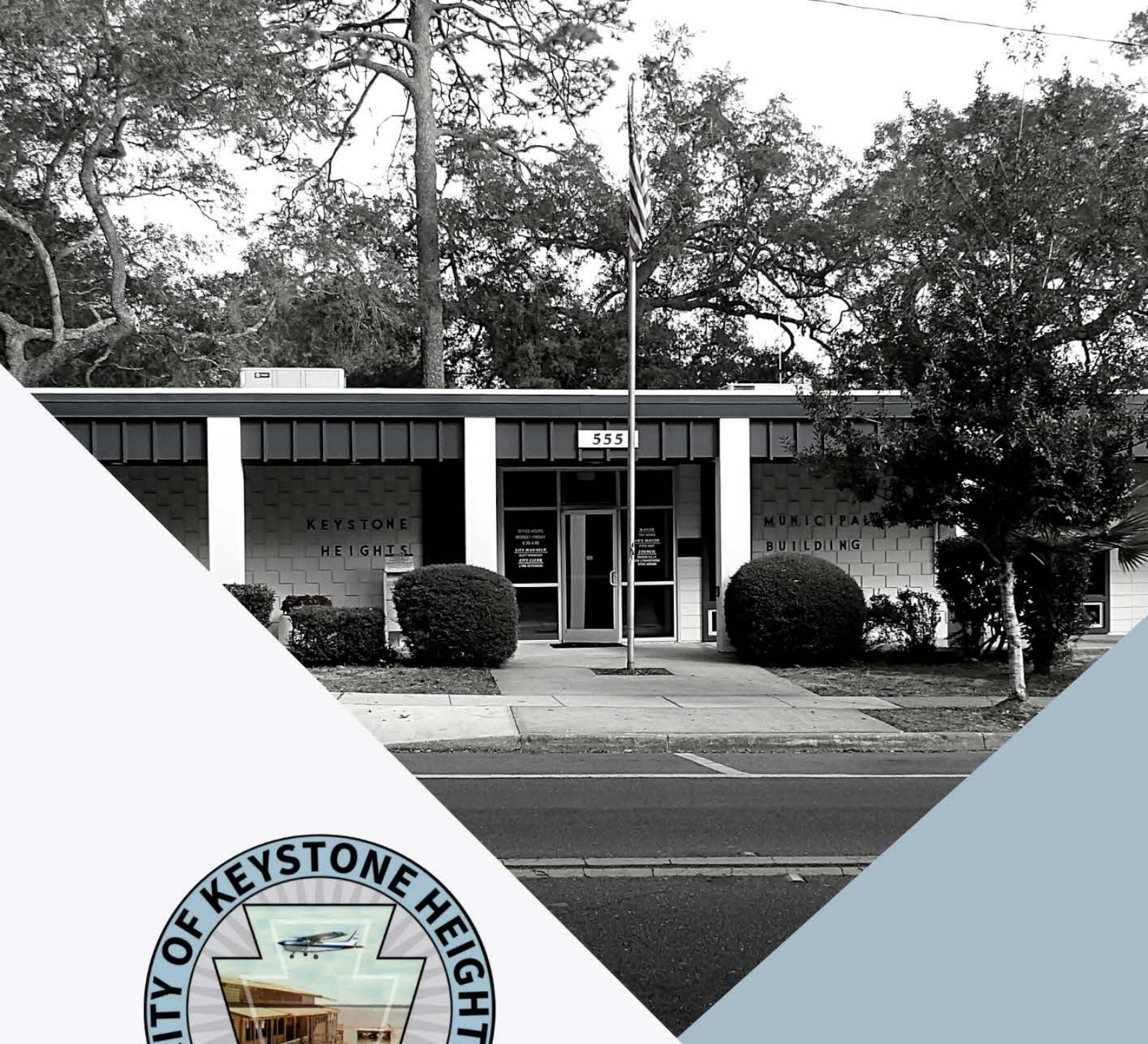

COMPREHENSIVE PLAN

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		Adjusted Fiscal Year 10/11 Budget	Fiscal Year 2011/2012	Fiscal Year 2012/2013	Fiscal Year 2013/2014	Fiscal Year 2014/2015	Fiscal Year 2015/2016	TOTALS
REVENUES:								
Fund Balance October 1, 2009		$21,502,806						$21,502,806
Funds Spent on Jobs Prior to FY 2009/2010		25,050,592						25,050,592
Renewal & Replacement Transfer		1,686,901	1,752,935	1,752,935	1,752,935	1,752,935	1,752,935	10,451,576
Environmental Reuse Capital Fund Transfer		794,321	777,374	777,374	777,374	777,374	777,374	4,681,191
Connection Fees Transfer		351,781						351,781
Departmental Capital Transfer		1,563,211	1,397,890	1,397,890	1,397,890	1,397,890	1,397,890	8,552,661
Surplus Transfer (Operating Contingency Utility & Construction)		1,127,088	**1,504,442**	1,151,981	1,151,981	1,151,981	1,151,981	7,239,454
Tap-In Construction Funds		57,028						57,028
Grant Money		3,419,085						3,419,085
Restricted Interest Earnings		15,647	25,086	25,086	25,086	25,086	25,086	141,077
Borrowing if needed/Surplus Funds		(5,514,884)	**919,023**	6,634,090	7,276,884	1,204,984	711,984	11,232,081
Fund Balances After Transfers		$50,053,575	$6,376,750	$11,739,356	$12,382,150	$6,310,250	$5,817,250	$92,679,331
CAPITAL EXPENDITURES:								
99 "Tap-In" Construction Assets		$33,778	$25,000	$25,000	$25,000	$25,000	$25,000	158,778
100 Departmental Capital		1,562,221	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,562,221
INFILL PROJECTS BUDGET		997,899						997,899
Unidentified System Renewal & Replacement		-	107,250	107,250	107,250	107,250	107,250	536,250
General Capital Projects Contingency		94,259	80,000	80,000	80,000	80,000	80,000	494,259
WATER TREATMENT PLANTS:								
Orange Park Grid Water Treatment Plants:								
Lucy Branch WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Lucy Branch WTP - Paint and Rehab GST				150,000				150,000
Meadowbrook WTP - Add 16 x 12 Well #5		-				200,000		200,000
Meadowbrook WTP - Refurbish Ground Storage Tanks & Wells		50,000	150,000					200,000
Meadowbrook WTP - Refurbish Electric Weatherhead, and 3 Soft Starts		40,000						40,000
Meadowbrook WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Meadowbrook WTP - Refurbish Well # 2		50,000						50,000
734 Ridgecrest WTP - Refurbish ground storage tanks		250,000				150,000		400,000
Orange Park South WTP - Miscellaneous Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Orange Park South WTP - New Garage Door on Generator Room		10,000						10,000
Greenwood/Tanglewood - Refurbish Ground Storage Tanks		-	10,000	10,000	5,000	5,000	5,000	35,000
Old Jennings Road WTP - Refurbish Hydro Tank		-			50,000			50,000
Old Jennings Road WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Ridaught WTP - Miscellaneous Plant Upgrades		5,000	5,000	5,000	5,000	5,000	5,000	30,000
Ridaught WTP - Ground Storage Tank Repairs		-				25,000		25,000
Fleming/Pace Grid Water Treatment Plants:								
Fleming Oaks WTP - Refurbish Ground Storage Tanks		85,000						85,000

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Fleming Oaks WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Pace Island WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Pace Island WTP - New 10,000 Gal. Hydro Tank		-		50,000				50,000
Other Water Treatment Plants:								
Peters Creek WTP -Plant Expansion & #3 Well		-	100,000	390,000	1,000,000			1,490,000
Peters Creek WTP - Land Costs		75,000						75,000
Peters Creek WTP - Refurbish Tank and Hydro Tank		-			60,000			60,000
Meadow Lake WTP - Refurbish Exist Hydro Tank		50,000	50,000					100,000
Meadow Lake WTP - #2 Ground storage tank & Electric Service upgrade		-			500,000			500,000
Mid Clay WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Oakleaf WTP - Refurbish Hydro Tank		-			40,000			40,000
Oakleaf WTP - Misc. Plant Upgrades		-	10,000	10,000	10,000	10,000	10,000	50,000
Spencers WTP - Miscellaneous Plant Upgrades		10,000	10,000	10,000	10,000	10,000	10,000	60,000
Spencers WTP - Ground Storage & High Service Pump		-	100,000	440,000				540,000
Spencers WTP - Replace 2- 2,500 gallon Chlorine Tanks		11,000						11,000
Spencers WTP - Refurbish Hydro Tank		-		50,000				50,000
Pier Station - Miscellaneous Plant upgrades		5,000	5,000	5,000	5,000	5,000	5,000	30,000
Pier Station WTP - Relocate Mid Clay Generator to Pier Station		0		10,000				10,000
Ravines WTP - Ground Storage Tank		-				350,000		350,000
Ravines WTP - Miscellaneous Plant Upgrades		10,000	5,000	5,000	5,000	5,000	5,000	35,000
Branscomb Road WTP - Paint Tank		-		25,000				25,000
Tanglewood WTP - Refurbish Hydro Tank		-		25,000				25,000
Tanglewood WTP - Miscellaneous Plant Upgrades		10,000	5,000	5,000	5,000	5,000	5,000	35,000
583 Keystone WTP (Postmasters Village) And Distribution Plant Expansion-2007		1,604,889						1,604,889
Keystone WTP - Postmasters Village Refurbish Storage Tanks and Hydro		-	65,000					65,000
Keystone WTP - Refurbish Tanks		-	60,000	40,000				100,000
Keystone - Geneva Lake Estates WTP - Miscellaneous Plant Upgrades		10,000	5,000	5,000	25,000	10,000		55,000
561 Keystone Ground Water Modeling		118,500						118,500
CR218 & 301 Industrial Park - Phase I Plant (Highlands DRI)		-		250,000	300,000	700,000		1,250,000
WTP - Industrial Development and Prison south of GCS, net of CIAC		-	225,000	1,500,000	100,000			1,825,000
Sundew Industrial Development and Frank Yong Development and Warner Rd Industrial		-	100,000	750,000				850,000
Kingsley Lake WTP - Miscellaneous		-	20,000					20,000
666 Painting - Rehab Various Tanks - Bid 08/09 - A6		168,295						168,295
RECLAIMED WATER PLANTS:								
Fleming Island Regional - Reclaimed Water Plant Misc Plant Upgrades		10,000	5,000	5,000	5,000	5,000	5,000	35,000
Flem Isl. Reg. - Reclaimed WP Pumping & Piping Upgrade		-	300,000					300,000
Mid Clay Reclaimed Water Plant, Upgrade Pumping Capacity		-	65,000					65,000

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735	Mid Clay.5 mg Reclaimed Ground Storage Tank_Old Jennings Reclaimed Wtr upgrade		500,000						500,000
	Mid Clay WWTP - Reclaimed Regional Storage Pond			350,000	350,000	2,723,900			3,423,900
544	Oakleaf Reclaimed Plant - .75 GST and High Service pumping		499,120		50,000				549,120
	Old Jennings Road Reclaimed Water Plant		-	400,000					400,000
	Green Cove Regional Reclaimed WTP		-		200,000	500,000	300,000		1,000,000
	Spencer's Reclaimed WP - Upgrade Pump		-	14,500					14,500
WASTE WATER TREATMENT PLANTS:									
Miller Street WWTP:									
	Miller St. WWTP - Replace Magna Rotors		50,000						50,000
	Miller St. WWTP - Complete Paving of Loop Road		30,000						30,000
669	Miller St. WWTP - Replace Sludge Facility		2,203,817						2,203,817
718	Vac-Con Dumping Station-Miller St WWTF		33,973						33,973
	Miller St. WWTP - Miscellaneous Plant Upgrades		20,000	20,000	20,000	20,000	20,000	20,000	120,000
634	Miller St. WWTP - Filters, Pump Out Station, Plant upgrades		6,074,150						6,074,150
	Miller St. WWTP - Install mixers in surge tank for odor control		-		100,000				100,000
684	Miller St. WWTP - #2 Clarifier Rehab		47,300						47,300
	Miller St. WWTP - Paint #2 and #3 Clarifier		-	30,000				30,000	60,000
	Miller St. WWTP - Paint Lime Silo		-				40,000		40,000
	Miller St WWTP - Paint- Sludge Press Canopy and Thickner Structure		-				8,000	5,000	13,000
702	Miller St. WWTP - Repair walls on sludge beds		9,650						9,650
	Miller St. WWTP - Enclosure for Roto Screens for Odor Control		10,000						10,000
	Miller St. WWTP - 2 Way Screw Conveyor for Centrifudge		10,000						10,000
733	Miller St. WWTP - Remove Sludge Facility Roof		10,000						10,000
	Miller St. WWTP - Clean Sand and Debris from Aeration Tanks		-		150,000				150,000
Ridaught WWTP:									
	Ridaught WWTP - Miscellaneous Plant Upgrades And Improvements		20,000	20,000	20,000	20,000	20,000	20,000	120,000
605	Ridaught WWTP - Replace Sludge Facility		1,619,541						1,619,541
	Ridaught WWTP - New Storage Tank and Shelter for SO2 Storage		6,000						6,000
	Ridaught WWTP - Paint #2 Digester/ Reject Tank		-					60,000	60,000
Fleming Island Regional WWTP:									
	Fleming Island Reg. WWTP - Install #4 Effluent Pump		66,000						66,000
	Fleming Island Reg. WWTP - Convert CL2 tanks to Storage Building		-		25,000				25,000
589	Fleming Island Reg. WWTP - Install BioChem Class A Sludge Treatment System		2,332,312						2,332,312
680	Fleming Island Reg. WWTP - Relocate Spencer's Generator to the effluent pump station area and new Electric Bldg.		415,131						415,131
	Fleming Island Reg. WWTP - Replace Odor Control system w/sponge		-		50,000				50,000
	Fleming Island Reg. WWTP - Convert digester to surge after BioChem installed		10,000						10,000
	Fleming Island Reg. WWTP - #4 Clarifier		-			700,000			700,000

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	Fleming Island Reg. WWTP - Paint Clarifier #1	-					40,000	40,000
	Fleming Island Reg. WWTP - 2 way Screw Conveyor for Centrifuge	10,000						10,000
	Fleming Island Reg. WWTP - Eimco DO Control in Aeration Tank	80,000						80,000
	Fleming Island Reg. WWTP - Elec and Gen Bldg/Roof Rehab		7,500					7,500
	Fleming Island Reg. WWTP - Miscellaneous Plant Upgrades	40,000	20,000	20,000	20,000	20,000	20,000	140,000
Fleming Oaks WWTP:								
	Fleming Oaks WWTP - Outfall Dock Repair	-		100,000				100,000
Mid Clay WWTP:								
685	Mid Clay WWTP - Relocate Spencer's filter to Mid Clay	24,941						24,941
	Mid Clay WWTP - paint clarifier, aeration tank and digesters	-	50,000					50,000
	Mid Clay WWTP - Miscellaneous Plant Upgrades	20,000	10,000	10,000				40,000
Ravines WWTP:								
	Ravines WWTP - Misc. Plant Upgrades	10,000	10,000	10,000				30,000
Spencers WWTP:								
	Spencers WWTP - Miscellaneous Plant Upgrades	35,000	35,000	35,000	35,000	35,000	35,000	210,000
	Spencers WWTP - Paint Reject Tanks	-				100,000		100,000
	Spencers WWTP - 2 Way Screw Conveyor for Centrifuge	10,000						10,000
	Spencers WWTP - Paving	70,000						70,000
721	Spencer WWTP - BCR Solids Meter	32,663						32,663
	Spencer WWTP - Reject Storage Ponds			368,606				368,606
	Spencer WWTP - Paint 12'x40' Digester	-	15,000					15,000
Peters Creek WWTP:								
	Peters Creek WWTP - Land Acquisition	634,050						634,050
	Peters Creek WWTP - Phase II	-				500,000	750,000	1,250,000
	Peters Creek WWTP - BCR Sludge Treatment Plant	-					2,200,000	2,200,000
	Peters Creek WWTP - Phase III Expansion	-					50,000	50,000
	Peters Creek WWTP - Miscellaneous Plant Upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
CR 218 & 301 - Industrial Park:								
	CR 218 & 301 - Industrial Park - Phase 1 Plant/ Highland DRI	-		250,000	300,000	750,000		1,300,000
Keystone WWTP Plant And Collection System								
	Keystone WWTP and Collection System Misc Expansion	50,000						50,000
	Keystone Wastewater Treatment Plant - Phase II Construction	-	100,000	650,000	300,000			1,050,000
	Keystone WWTP - Relocate Fleming Island Generator to Keystone	10,000						10,000
	Keystone WWTP - Paint Clarifier (30'Dx16'H)	-				35,000		35,000
Other:								
722	Painting of Steel Tanks & Structures- Multiple Wtr & WWtr Facilities	475,000						475,000
	WWTP - Industrial Development and Prison south of GCS, net of CIAC	-	150,000	1,800,000	100,000			2,050,000

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	Sundew Industrial Development and Frank Yong Development and Warner Rd Industrial	-	125,000	750,000				875,000
715	Tara Lane-Sigsbee Dr. Moody Rd - WWtr Rehab Task Authorization #20	239,286						239,286
	BCR Facilities Process Tank Containment Improvement		10,000					10,000
	BCR Simplex Basket Strainers		12,000					12,000
	BCR Process Vessel Ladders, Platform and Handrail		60,000					60,000
	BCR Exhaust Fans for Buildings		8,000					8,000
	BCR Tank Rehab at Various Plants	164,704	75,000	75,000	100,000			414,704
DISTRIBUTION & COLLECTION SYSTEM:								
All Systems:								
	Water & Wastewater System Rehab - 2007-2008	3,684,416	500,000	500,000	500,000	500,000	500,000	6,184,416
677	Lakeside Estates Unit 1-2-3 Woodland-Cedarcrest-Hollyridge WM & Service Rehab	46,461						46,461
	Miscellaneous Trunk Main Upgrades	164,563	50,000	50,000	50,000	50,000	50,000	414,563
	Various Relocations & ROW Acquisitions	216,398						216,398
726	Wtr & FM relocation New Castle Drive	34,241						34,241
729	Wtr & WWtr System Rehab	85,000						85,000
610	Inventory- WWtr System Rehab 2008	75,297						75,297
717	Replace Hydro Tanks	232,000						232,000
723	Sonora Drive Water Rehab	88,835						88,835
	Upgrade Various Lift Stations, including hydro tanks	383,860						383,860
710	Brighton Ave and Clermont Dr West Wtr Rehab	222,650						222,650
736	Black Creek Hills Water Main Rehab	72,130						72,130
526	Lift Station Back up Generators Phase III & IV	872,953						872,953
668	Lift Station Back up Generators Phase V & VI	794,575						794,575
	Fire Hydrant Replacement and Rehab	-	250,000	250,000	250,000	250,000	250,000	1,250,000
Kingsley System Distribution & Collection:								
	Hollycrest-Repair Manhole near Lift Station	15,000						15,000
	Collection System Hydro tank upgrades	50,000	50,000	50,000	50,000	50,000	50,000	300,000
641	Lift Station 18 - Wells Ridge Rehab	29,333						29,333
659	Loch Rane Storm Pond - Relocation of Wtr and WWtr Utilities	276,044						276,044
	US 17 Loop Water Main on the East Side Raggedy Point to Allegro	-			150,000			150,000
696	Parliment Court-Refurbish Gravity Sewer	70,017						70,017
	Lakeshore & White Owl - Loop 8" Water Main	30,000						30,000
712	Bartlett LS#28-Miller St 12-16-18" WWtr FM Rehab	155,991						155,991
528	Heritage Hills to Spencer WWTP - Trunk FM & LS Upgrade	7,376,052						7,376,052
704	Rehab LS # 7 - Pine Island	11,024						11,024
	Doctors Lake Dr. - Utility adjustment due to bike path renovation	150,000						150,000
612	Upgrade Liftstation 37 - SouthLake	60,000						60,000

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	LS # 9- Relocation and Rehab		-	100,000					100,000
	Raggedy Pt. Rd. - Gravity Extension to Eliminate LS 8		-	75,000					75,000
Spencers System Distribution & Collection									
	Spencers 12" Water Main To Backfeed Orange Park Country Club		-			190,000			190,000
	Miscellaneous Trunk Main Upgrades		295,116						295,116
725	Oakleaf Regional Park Ph I Off-Site FM Extensions		35,868						35,868
	Eagle Landing #6 - Estimated Cost Share		125,000						125,000
Clay System Distribution & Collection:									
	Brannanfied CR220 Trunk Main inter connects		141,674						141,674
	Maverick Trails Apts.-Sewer Repair		25,000						25,000
	Maverick Trails Apts.-Refurbish Pump Station		40,000						40,000
678	CR209 - Relocate Mains Due to Road Construction		25,000						25,000
	Cost Share - Extension from Mayfield Annex to Blanding		37,800						37,800
	College Drive- W&S Extension to Intersection of Old Jennings Road		75,000						75,000
	CR 220 & Baxley - Utility adjustments accommodate road work		5,000						5,000
	CR 220, 220A, SR21, Long Bay Water and FM Extensions		300,000						300,000
701	CR 220 Wtr & WWtr interconnection - Salvation Army to Pinecrest Manor		97,609						97,609
	Old Jennings Rd. Widening - Relocate or Adjust Mains		-	100,000					100,000
	College Drive - Uitility Relocations due to FDOT Signalization Project			**25,000**					**25,000**
Mid Clay System Distribution & Collection:									
	Sandridge To Meadowlake 12" Water Loop		75,900						75,900
	Development South of Royal Point - Cost Share Force Main & Liftstation		220,000						220,000
	Lake Asbury Dr. to Cokesbury - Water main loop		162,500						162,500
	Mid Clay to Ridaught Trunk Reclaim		3,275,000						3,275,000
	Bradly Creek Crossing Cost Share		-		129,500				129,500
	Asbury Preserve and Plantation - Install Wtr & WWtr stubs to south and secure other stubs		21,000						21,000
	Henley Road Widening - Relocate or Adjust Mains		-	100,000					100,000
Ravines System Distribution & Collection:									
	Ravines Off Site Mains - Middleburg W&S Extensions		1,708,301						1,708,301
724	Black Creek Hills Water System		140,000						140,000
719	Episcopal Children Services Wtr & WWtr Extension		30,036						30,036
Peters Creek System Distribution & Collection:									
	GCS Trunk Water Main To Proposed School Area and other interconnections		250,000						250,000
	GCS Trunk Force Main & Water Mains From Development Area To Phase I WWTP		150,000						150,000
Keystone Distribution System:									
	Keystone - Water Distribution System Miscellaneous		125,805						125,805
606	Keystone - Water Distribution System - Postmaster to Keystone		825,000						825,000

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	Keystone Water Distribution System - Keystone Club to Geneva Lake Estates	-				460,000		460,000
	Keystone WWtr Collection System Expansion	50,000						50,000
RECLAIMED WATER TRANSMISSION & DISTRIBUTION SYSTEMS:								
Clay System Reuse Transmission & Distribution System:								
	Clay System- Old Jennings Rd Tynes Elementary to Allie Murray Rd - Reclaim Main	135,000						135,000
	Old Jennings Rd- Estimated Cost Share on oversizing to Commercial stub		**40,000**					**40,000**
	Old Jennings Rd. Reclaimed Ext. -Allie Murray to Jennings Est.	-	150,000					150,000
	Old Jennings Rd. Reclaimed Ext. St. Vincents - CCUA Cost Share	-	47,500					47,500
	Old Jennings Rd. Widening - Relocate or Adjust Mains	-	70,000					70,000
	Pine Ridge/Two Creeks-Reclaimed Interconnection		**40,000**					**40,000**
Mid Clay System Reuse Transmission & Distribution System:								
	Development South of Royal Point - Cost Share Reclaimed Main	100,000						100,000
	Bradley Creek Crossing - Cost Share	-		79,000				79,000
	Install 20" Reclaimed Water Transmission Main From Ridaught to Mid Clay-Black Creek Bridge Crossing	2,775,000						2,775,000
Kingsley System Reclaimed Water Transmission & Distribution System:								
529	OP Reclaimed Water Main Transmission	1,716,976						1,716,976
	Orange Park Country Club Reclaimed Main extension	-		170,000				170,000
	Spencer's WWTP to lower St. Johns River Flow Diversion	-		50,000	671,000			721,000
	Old Hard Rd - Reclaimed & Relocation due to County Paving Project		**25,000**					**25,000**
All Systems:								
	Miscellaneous Reclaimed Mains	-	100,000	100,000	100,000	100,000	100,000	500,000
	Miscellaneous Reclaimed Mains Upgrades	166,823	50,000	50,000	50,000	50,000	50,000	416,823
714	Plant Fencing Upgrades	41,944						41,944
	Arc Flash Analysis, Field Labeling, and As Built Update for all Plants and LS		250,000					250,000
GENERAL & ADMINISTRATIVE								
	Maintenance Facility Phase II & Paving	-			870,000			870,000
	Equipment Storage Facility, Pond & Fencing	-			1,020,000			1,020,000
599	GIS Mapping & System Integration	205,986						205,986
	Meters - Growth Potable and Reuse	150,000	250,000	250,000	250,000	250,000	250,000	1,400,000
234	Meters - Retrofit for Radio Read	119,919						119,919
	TOTAL CAPITAL EXPENDITURES	$50,053,575	$ 6,376,750	$ 11,739,356	$ 12,382,150	$ 6,310,250	$ 5,817,250	$92,679,331
Fund Balance September 30, 2011-2012-2013-2014-2015-2016		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Note: Capital Projects for FY 2010/2011 not finished have been added to this year's budget along with their funding sources.

COMMUNITY FACILITIES ELEMENT

Analysis

This element describes the existing condition of sanitary sewer, solid waste, drainage, and potable water services and facilities and aquifer recharge protection within the City of Keystone Heights. Further, it addresses ways to provide for future demands for these services and facilities to meet future growth as well as addressing existing problems.

Three main sections follow: The first section describes existing and future conditions. The second is the inventory and analysis. The third section is the projection of need based on the future land use plan. The fourth section contains the goals, objectives and policies to guide future actions.

Existing Conditions

Background

In order to formulate future plans for sanitary sewer, solid waste, drainage, potable water and natural groundwater aquifer recharge, it is essential to understand the geography of the area in which the City is located.

Keystone Heights is located on Trail Ridge, an old remnant shoreline formation. Natural elevations in the area range from over 175 feet to less than 100 feet mean sea level (MSL). The most prominent scarp or remnant dune ridge lies north of the City.

The basin is characteristically karst terrain which evolved through the dissolution of the underlying limestone and dolomite resulting in numerous swamps, lakes, and shallow sinkholes. Surface drainage is poorly developed with subterranean drainage to lakes or creeks, fifty of which flow into the lakes in Keystone Heights City limits. The lakes located in the City (Keystone, Geneva and Brooklyn) are several of the more prominent lakes in the area.

The geology, topography and drainage in the basin are all interdependent with percolation and erosion shaping the limestone chemically and mechanically. The karst nature of the limestone results in solution features redirecting runoff underground. The sand and soft limestone supporting the flat to hilly topography was first shaped by beach erosion terracing the sand and stone. Afterwards, weak limestone caverns collapsed and surface erosion reshaped the highland sands.

Nutrients and fresh water entering the lakes support the vegetation which in turn supports the lakes and animal life.

Some rainfall normally occurs during each month. The rainy season extends from June through September and a low rainfall period extends from October through May. The average

annual rainfall in the basin is fifty inches per year. Over sixty percent of the annual rainfall occurs during the rainy season and is derived principally from convectional thunderstorm activity.

The Floridan Aquifer is the principal source of potable water for Keystone Heights and most of Northeast Florida. Recharge to the upper layers of the Floridan Aquifer is direct from the groundwater. Direct discharge from the Floridan Aquifer occurs via solution features and other direct hydraulic connections such as rivers, streams and swamps.

Water quality in the Upper Floridan Aquifer is affected by the chemical nature of precipitation that infiltrates the land surface, the composition of the material coming in contact with the water and the certain properties and characteristics that the earth imparts to the surface water.

Sanitary Sewer

In 1991, there was no central wastewater treatment within the City limits. The City and the Clay County Utility Authority secured a grant to construct a wastewater treatment plant within the City to serve the businesses in 2003. The grant funds were supplemented by the CCUA and the plant became operational in 2005. Central service has been extended to the non-residential development within the City and there is adequate capacity to extend service to residential properties upon request. In 2007, the average flow in the Keystone Heights Wastewater treatment plant was 0.030 MGD; the plant capacity is 0.074. Currently the plant serves 635 ERUs, the majority of which are non-residential connections. In May 2009, the CCUA was permitted to expand the Keystone Heights WWTP to a design capacity of 0.30 MGD, with permitted capacity limited to 0.099 MGD AADF while flows are low (at the request of the CCUA). The CCUA plans to commence construction of the expanded facilities in December 2010 with completion in December 2012.

The expansion is included in the Five Year Capital Budget of the CCUA.

Because the residential properties in the City are each served by on-site septic systems, wholesale extension of central wastewater service to any significant percentage of the existing development in the City is unlikely. Continued use of on-site systems is anticipated for the majority of the residential properties in the City unless there are financial incentives made available to residents to connect to central services.

The majority of the soils within the City are suitable for septic tank drain fields. Only Mandarin fine sand is rated severe for septic tanks due to the high water table. Mandarin fine sand occupies the slopes immediately adjacent to Lakes Keystone and Geneva and a portion of Lake Brooklyn.

There is one sewage package treatment plant and one evaporator system in the City. The package plant is at the Keystone Heights High School and also serves the elementary school. The plant capacity is 40,000 gallons per day and it discharges into 4 drainfields located onsite.

The School District and CCUA are working to connect the two schools within the City to the CCUA wastewater treatment facility; the connection to CCUA facilities is anticipated to occur in 2012/13. Clay Electric has a 100 gallon per day evaporator for oil and grease. The hydrocarbon residues are disposed of through a DEP Certified disposal organization. Both systems are currently operating under permits by the Department of Environmental Regulation. The two facilities are currently operating below the level of service standards with no impact on the surrounding area or aquifer.

Septic tanks are used by residents to serve residential units. No immediate plans exist for the city to serve existing residential development with central sewer. However there is a growing concern relative to the potential for pollution of the area lakes from a number of sources including the proliferation of septic tanks within the City as well as in the unincorporated areas surrounding the City. This concern is heightened by the fact that the City lies within the recharge area for the Floridan Aquifer. The City has partnered with the Clay County Utility Authority to apply for a grant under the Small Community Wastewater Facility Grant program administered by the Department of Environmental Protection in order to provide central service to existing residential units in the City. The schedule in the grant application identifies completion of construction if the grant is awarded to occur in mid-2013.

Future Demand

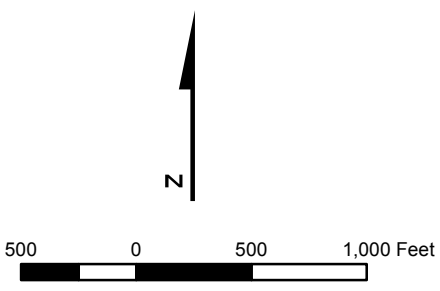
Existing residential units are anticipated to remain on individual on-site wastewater treatment systems. New residential development that occurs on individual vacant lots that are scattered throughout the existing homes in the City (74 lots) are able to apply for on-site systems despite the lot size because all were created prior to 1974; wastewater treatment to these individual lots will continue to be from on-site facilities unless they are located immediately adjacent to existing wastewater gravity line because the cost to extend for a single lot is prohibitive.

New residential development within two planned subdivisions must be served by central wastewater treatment facilities. All new non-residential development must be served by central wastewater. Within the City limits there are 7.95 acres of vacant land in the Commercial Land Use category and 76.20 acres of vacant land in the Residential Land Use category. Of the vacant residential lands, 52.25 acres lie within parcels greater than 1 acre in area; 23.95 acres are contained within 55 vacant scattered lots throughout the City. The scattered lots are not anticipated to be served by central wastewater during the planning period because extension of lines to serve these isolated lots is not financially feasible. At a maximum development potential of 6 units per acre, the vacant residential land associated with parcels greater than 1 acre in area has a maximum development potential of 313 residential units. The vacant commercial lands are located outside the City Core and are subject to a maximum FAR of 0.4. The vacant acres could be developed at a maximum of 138,521 square feet of non-residential use.

Table 1 identifies the future demand for wastewater treatment through 2015, based on the assumption that 50 percent of the vacant land will be developed in the next five years (by type).

Soils

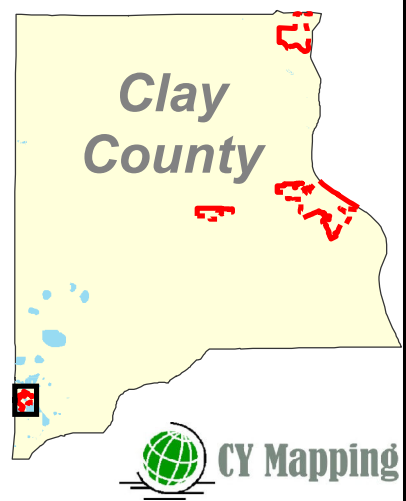
City of Keystone Heights



Soils

- ALLANTON
- MANDARIN
- ORTEGA
- PENNEY
- RIDGEWOOD
- SCRANTON
- TROUP
- URBAN LAND

Source:
Soils - SSURGO



CY Mapping

Map Date: March 13, 2011

Table 1
2015 Wastewater Generation

	Residential Units	WW Generation	Total Residential Demand	Non-Residential Development	WW Generation	Total Non-Residential Generation
City of Keystone Heights	156	250 gpd/ unit	0.039	69,260 SF	100 gpd/ 1,000 SF	0.007 mgd
	TOTAL		**0.039 mgd**			**0.007 mgd**

The average daily treatment volume for the Keystone Heights WWTP in 2009 was 0.074 mgd. The potential increase in demand of 0.046 mgd in 2015 represents a total demand in 2015 of 0.12 mgd, less than the permitted capacity of 0.30 mgd permitted under the 2009 permit, but greater than the self imposed limit of 0.099 mgd placed on the 2009 permit at the request of the CCUA. The CCUA has funded the improvements to 0.099 mgd in its CIP and will fund and initiate construction as demand for treatment increases, up to the permitted treatment volume of 0.,30 mgd.

Table 2 identifies the future demand for wastewater treatment through 2025, assuming buildout of all the vacant land in the City during the planning period.

Table 2
2025 Wastewater Generation

	Residential Units	WW Generation	Total Res Demand	Non-Residential Development	WW Generation	Total Non-Residential Generation
City of Keystone Heights	313	250 gpd/ unit	0.078 mgd	138,521 SF	100 gpd/ 1,000 SF	0.014 mgd
	TOTAL		**0.078 mgd**			**0.014 mgd**

Demand for wastewater treatment is projected to be 0.092 mgd through the 2025 planning horizon. The projected total demand is 0.166 MGD, less than the expansion to 0.30 mgd permitted in May 2009 by the DEP.

Solid Waste Disposal

The City contracts with a private hauler to collect solid waste, yard trash and recyclables from the residents and businesses within the City. The City anticipates continuing with a private hauler contract arrangement for the collection of these wastes throughout the planning period.

The solid waste facilities that handle the disposal of solid waste generated within the City is managed by Clay County. In 1993 the County converted from a fee based system of financing solid waste facilities to a system based on a solid waste assessment for all residents of the unincorporated county; the City assesses its residents the same fee, collects the funds and makes payment to the County directly. The City collects a solid waste disposal fee from the businesses in the City and pays the applicable tipping fees to the County.

The disposal fees paid to Clay County for the disposal of solid waste collected within the City includes funding of the following:

- transfer station /disposal operations and facilities to manage the disposal of Class I, construction debris, yard trash and tires;
- recovered materials processing and sale of materials in support of the curbside collection, public buildings recycling and drop- off center operations (recycling);
- post closure monitoring and maintenance of the ten closed landfills within Clay County;
- operation of drop-off centers for collection of household hazardous waste and special waste, including three outreach collection days annually; and,
- the operation of five Environmental Convenience Centers.

The solid waste generated in the City is transported to the Rosemary Hill Transfer station. The County contracts with a private operator to manage its Class I waste and transfer it to an out-of-County facility. In 2009, waste collected in Clay County was transferred to the Chesser Island Road Landfill Area. As of November 2008, there was 3,369,940 cubic yards of available airspace at the Chesser Island Road facility with an additional 6,480,130 cubic yards of future airspace available. The total available airspace is 9.8 million cubic yards, representing 7.88 million tons of available capacity. Based on the tonnage accepted monthly from all sources, there was 8.75 years of life available at the Chesser Island Road facility. Expansion plans are underway to permit an additional 150 acres of horizontal area, adding 40 years to the site life.

The City generates an average of 3.99 lbs per capita per day of Class I waste. Population increases in the planning period indicate only a small increase in solid waste generated by the residents and businesses of the City through 2025:

TABLE 3
CLASS I SOLID WASTE GENERATION PROJECTIONS

	Population	**Solid Waste Generation (annual)**
2005 Population	1,386	1,009 tons
2010 Projection	1,413	1,029 tons
2020 Projection	1,450	1,056 tons
2025 Projection	1,462	1,064 tons

Clay County includes the population of the municipalities when projecting the solid waste generated annually. Throughout the planning period, the City represents less than one percent of the total Class I waste stream projected for Clay County and its municipalities, falling to just over one half of one percent of the total waste stream in 2025.

Future Disposal Needs

The City is obligated to secure adequate capacity to meet the projected need for solid waste disposal facilities for its population through the planning period. The City will continue to rely on a third party to manage and operate the disposal facilities necessary to meet its projected need. The analysis performed by Clay County identifies that the County will begin a study in 2009 to review its current contracts and approach of shipping solid waste out of the County for disposal. The City will coordinate with the County to ensure that the City's solid waste demand is recognized in any study undertaken by the County related to solid waste disposal options.

Clay County has undertaken the request for proposal process for a waste hauler/ provider in late 2010. The selected provider may partner with the County to provide landfill capacity within Clay County or at a location outside the County. The City plans to continue to contract with the County's waste disposal provider.

Drainage

Keystone Heights is located along a series of ridges that stretch North and South through the North Central area of Florida. Drainage is poorly defined. Rainfall averages 50 inches per year. Eventually the water moves downward through the soil to the zone of saturation referred to as the groundwater table. Groundwater continues to move laterally within the limestone recharge area to areas of lower elevation. Some is discharged by evapotranspiration, seepage, springs or wells. Groundwater in Keystone Heights occurs in the water table aquifer and in the Floridan Aquifer which is directly connected to the water table.

The historical drainage problem in the City was surface drainage on many of the aggregate streets. Prior to 1991, there were six miles of unpaved streets; since 1991, the City completed a paving program using CDBG funds. All streets within the City with the exception of a portion of Forest Street and Fox Run are now paved. The remaining drainage issue in the City is runoff from the impervious parking area serving Keystone Beach, a public recreation facility. The erosion has been addressed and steps are underway to improve drainage.

Water Quality

The discharge of untreated stormwater is reasonably expected to be a source of pollution of the lakes within the City (as waters of the state). As such the quality of water discharged from stormwater management facilities is regulated, with standards established in Chapter 62-25 of the Florida Administrative Code. The City shall review development and redevelopment plans that include new stormwater discharge facilities for compliance with the Florida Administrative Code standards and will require all stormwater management facilities to be permitted by the St Johns River Water Management District unless otherwise exempt.

Potable Water

The City has been served by central water since before adoption of the original comprehensive plan in 1991. All development within the City must connect to central water service. Southern States Utilities owned and operated the system prior to its acquisition by the Clay County Utility Authority in 2005.

Water Supply

The CCUA system serving the City and surrounding unincorporated Clay and Bradford counties serves primarily residential customers; in 2008, only 27 percent of the customer base of 1585 active ERCs represented non-residential connections. The residential customers are almost exclusively single family homes; the non-residential customers are primarily small service businesses. Except for the Clay Electric Cooperative's offices within the service area, the non-residential customers are service and retail establishments that serve the needs of the community.

One way the SJRWMD manages water supply is through its Consumptive Use Permitting (CUP) process. For the City, the Clay County Utility Authority holds the CUP for the public water supply. In recent CUP permitting efforts, the CCUA evaluated the water supply in its service area, including the Keystone Heights area. The results of that analysis and projected demand for water are presented below.

The Florida Aquifer is recognized as one of the most productive aquifers in the world. It has been estimated that, under the region, the Floridan Aquifer stores far more fresh water than is stored in all of the Great Lakes combined. However, there are restraints on the amount of fresh water that may be withdrawn from this aquifer.

The St Johns River Water Management District has identified Priority Water Use Caution Areas in which potential water shortages, considerable reductions in water levels, saltwater intrusion or other water degradations to the water supply may occur in the next 20 years. The City does not fall within a designated Priority Water Use Caution Area. The SJRWMD has indicated that it will initiate a regional study in mid- 2009 with the Suwannee Water Management District to review the status of the area with regard to designation as a Priority Water Use Caution Area.

Potable Water Treatment

In 2005 the CCUA took over operation of the two water treatment plants that serve the City. The CCUA serves the City from two wells within the City limits. The WTP that serves the City (Keystone Heights) is looped with the Keystone Heights Club WTP, creating a combined service area that extends beyond the City limits. While the combined capacity for these two plants is 1.376 mgd, the Consumptive Use Permit (CUP) for this system authorizes withdrawals of 0.6499 mgd (236.747 MGY):

Household Use	0.0385 mgd
Commercial	0.1721 mgd
Irrigation Use	0.0019 mgd
Utility and Unaccounted	0.0828 mgd
Essential Use (fire)	0.0081 mgd
Total	0.6499 mgd

The average daily flow in the Keystone Grid in 2008 was 0.5284 mgd. The CCUA applied for a modification of its CUP in December 2006; the modification will consolidate the permits for the Keystone Grid, Postmasters Village (located in unincorporated Clay County) and Geneva Lakes Estates (located in unincorporated Bradford County) and increase the permitted withdrawals to 2.00 mgd.

Two new production wells were constructed in 2010 at the Postmasters' Villages site and extensive aquifer performance testing submitted to the SJRWMD on these new wells. Because the SJRWMD is updating its regional groundwater model it has requested the CCUA wait until it is available to utilize for the final permitting of the consolidation of the CCUA wells that serve the City. The CCUA is currently operating under the previous permits. The SJRWMD has agreed to issue Temporary CUPs until the modeling can be completed and final review of the CUP application occur.

Based on average demand per equivalent residential unit of 294 gallons per day, the City's daily consumption of potable water in 2008 is approximately 0.1402 mgd. In 2009, Clay County adopted a Centralized Water and Sewer Service Area Map that does not include any unincorporated lands adjacent to the City as lying within a service area; therefore no potable water demand associated with vacant land within unincorporated Clay County is included in calculations of future demand associated with the CCUA system that serves the City. The

CCUA does serve the Keystone Club Estates area which is located within the urban service area for Bradford County. In Bradford County, vacant land is in the Residential Low density (< 2 units per acre) Land Use Category, but the land within the service area is platted. Vacant Land within the CCUA service area and not within the City is available for development as follows:

Residential Low Density (Bradford) 52 vacant platted lots 52 DU

The maximum development potential associated with these non-City vacant lands is shown in Table 4.

Within the City limits, there are 55 vacant residential, platted single family lots, 7.95 acres of vacant land in the Commercial Land Use category and 52.25 acres of vacant land in the Residential Land Use category associated with non-platted lots. At a maximum development potential of 6 units per acre, the vacant residential non-platted land has a maximum development potential of 313 residential units for the 55 vacant lots and 313 potential units within the non-platted residential vacant lands. The vacant commercial lands are located outside the City Core and are subject to an maximum FAR of 0.4. The vacant acres could be developed at a maximum of 138,521 square feet of non-residential use.

Table 4
2015 Potable Water Demand
CCUA Keystone Grid

	Residential Units	Potable Water Demand	Total Residential Demand	Non-Residential Development	Potable Water Demand	Total Non-Residential Demand
City of Keystone Heights	184	294 gpd/ unit	0.054 mgd	69,260 SF	100 gpd/ 1,000 SF	0.007 mgd
Bradford County	26	300 gpd/unit	0.008 mgd	0 SF	100 gpd/1,000 SF	0
	TOTAL		**0.062 mgd**			**0.007 mgd**

The peak daily flow in the Keystone Grid in 2009 was 0.5284 mgd. Then potential increase in demand of 0.069 in 2015 represents a total demand in 2015 of 0.597 mgd, less than the available capacity of 0.6499 permitted under the current CUP.

Table 5
2025 Potable Water Demand
CCUA Keystone Grid

	Residential Units	Potable Water Demand	Total Residential Demand	Non-Residential Development	Potable Water Demand	Total Non-Residential Demand
City of Keystone Heights	368	294 gpd/ unit	0.108 mgd	138,521 SF	100 gpd/ 1,000 SF	0.014 mgd
Bradford County	52	300 gpd/unit	0.016 mgd	0 SF	100 gpd/1,000 SF	0
	TOTAL		**0.124 mgd**			**0.014 mgd**

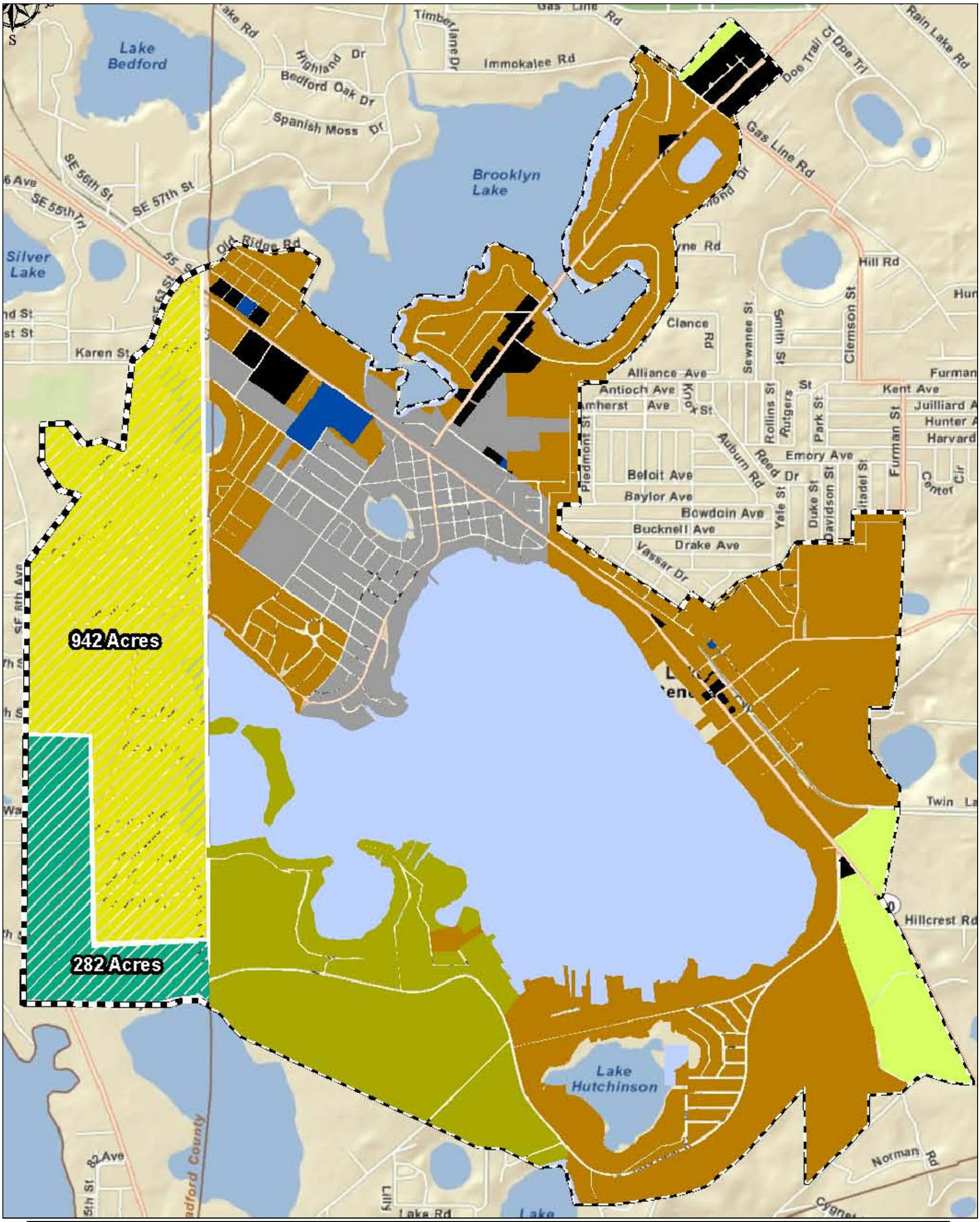
The projected demand for 2025, representing an additional demand of 0.069 over the 2015 projected demand will increase the demand for potable water to 0.666 mgd, which just exceeds the 0.6499 mgd permitted withdrawals in the current CUP. The consolidated CUP under review by the SJRWMD, increasing the permitted withdrawals to 2.0 mgd, includes in the service area portions of Clay County that are not within its Centralized Service Areas and as such, the requested withdrawal amounts are in excess of the projected demand associated with vacant land that can be served with central water.

While the City has designated a Community Redevelopment Area that addresses blight in the City, redevelopment of properties within the CRA boundary is not anticipated to be of a higher intensity than the existing use. New development within the City is subject to the land development regulations applicable at the time of development /redevelopment and the standards for parking, stormwater management and landscaping are higher than the standards under which existing development in the City was constructed. While modifications to existing structures occur in the City, there has not been wholesale redevelopment of properties or areas so it is anticipated that the CRA will increase the economic vitality of the City overall and the properties within the CRA, but will not increase the demand for potable water. Redevelopment within the City must meet concurrency management requirements which provide the review for adequate capacity prior to issuance of a final development order.

The average water demand rates within the City are low in comparison to demand rates in unincorporated Clay County. The total demand on the water supply by City residents and businesses is a very small percentage of the overall demand in the County. These attributes of the CCUA system within the City are projected to continue. The City will focus on efforts to educate its residents and businesses on water conservation opportunities and to work with the CCUA to implement any initiatives it undertakes.

Central Service Area

City of Keystone Heights



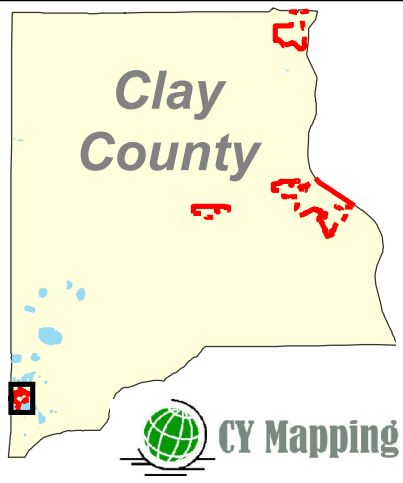
N

(Not to Scale)

Central Water Service Area

Central Wastewater Service Area

Source: Clay County Utility Authority, 2010



Map Date: March 11, 2011

The CCUA adopted tiered rates for potable water in 2010; the rate structure increases quickly when consumption exceeds the average established for an equivalent residential unit. The application of tiered rates has been shown to be effective in maintaining or reducing potable water demand when implemented in other communities in Florida.

Aquifer Recharge

The projected growth of the City's population will not substantially affect water resources. With less than 87 acres of vacant land within the City, development in the City in the future will not be a significant factor in the quantity of water retained in the Floridan Aquifer, however all development represents a threat because of the increased runoff from impervious area which reduces the amount of water percolation into the aquifer. The introduction of pollutants to the water supply, some of which may be hazardous wastes, is also a concern.

The Floridan Aquifer is the deep freshwater aquifer that supplies much of Northeast Florida with its potable water supply. In this area, rainwater percolates directly into the limestone formation that is the aquifer. Reduction in the amount of percolation would have a direct effect on the aquifer's potential to supply future growth in Keystone Heights as well as all the counties in Northeast Florida. Urban ground coverage (buildings, parking lots, etc.) should be minimized so that this natural percolation continues in order to safeguard the common source of potable water.

The City implemented land development regulations in 1992 consistent with its adopted goals, objectives and policies that address protection of the prime and high recharge areas of the Floridan Aquifer that are located within the City limits. Because the City is essentially built-out, there is little opportunity for new development that would impact the Floridan Aquifer from a water quality or recharge perspective. Redevelopment activities and the intensification of uses on existing properties within the City do however represent a threat to the Floridan aquifer if not properly regulated.

Policies adopted in 2010 establish setbacks for septic tanks and drain fields for waterfront lots, limit the maximum impervious surfaces to 20 percent of the total lot area, limit the storage or use of hazardous materials, and prohibit certain uses. Redevelopment within the high recharge area must meet the adopted standards at the time of redevelopment.

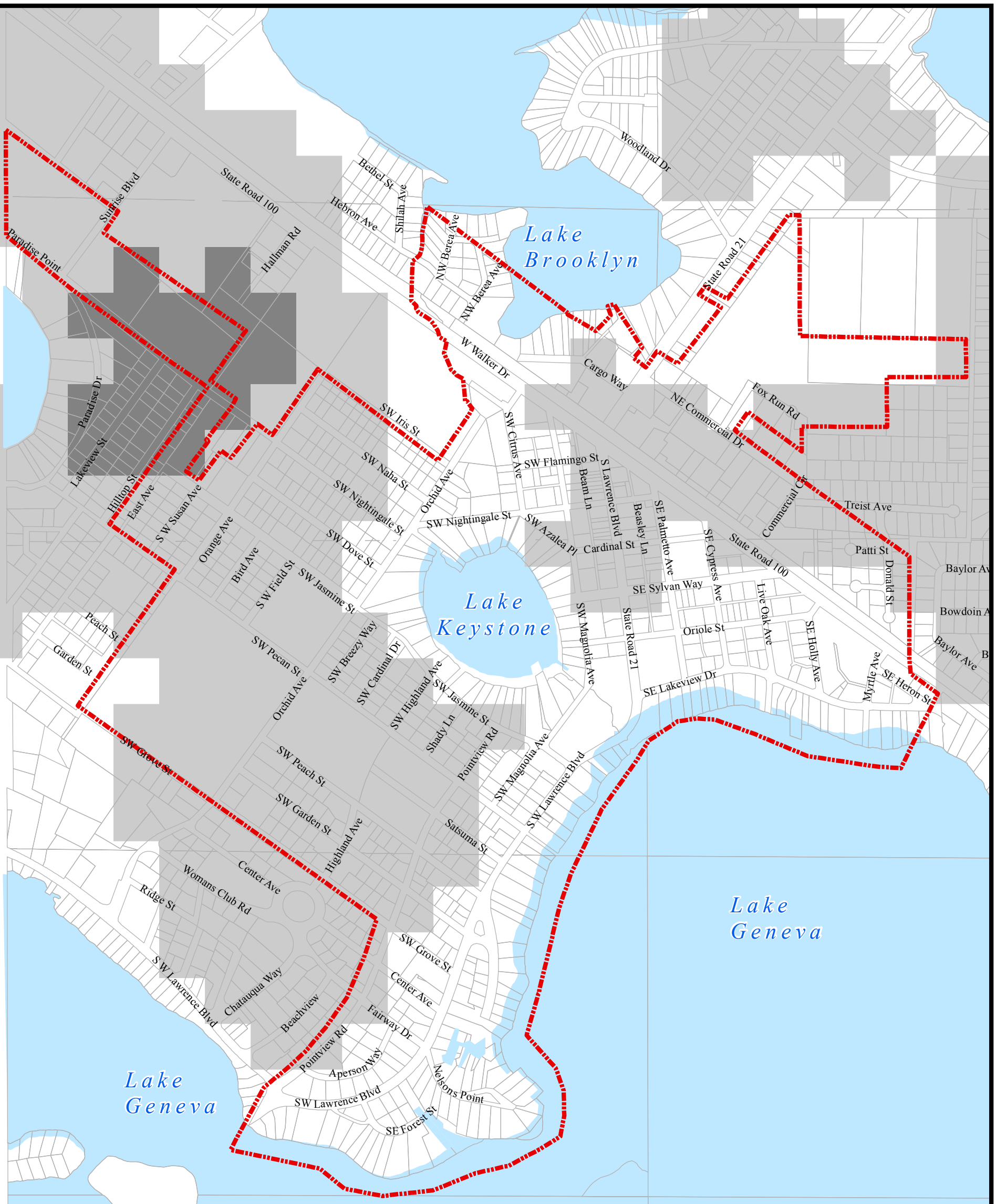
Future Needs

Sanitary Sewer

Because existing residential development is not anticipated to connect to central wastewater services unless a significant financial incentive is provided to offset the cost to the individual, the greatest future issue related to sanitary sewer in the City is to monitor the maintenance of existing septic tanks that serve residential lots. The City has partnered with the Clay County Utility Authority to apply for a grant under the Small Community Wastewater Facility Grant program administered by the Department of Environmental Protection in order to provide

Aquifer Recharge

City of Keystone Heights



Recharge Range

- 4.001 - 8 In/Yr
- 8.001 - 12 In/Yr

Source:
Aquifer Recharge - SJRWMD, 2005

CY Mapping

Map Date: March 13, 2011

central service to existing residential units in the City. The schedule in the grant application identifies completion of construction if the grant is awarded to occur in mid-2013.

Solid Waste

Clay County is presently planning to expand its solid waste facility capacity. The City will continue to insure that the demand represented by its citizens and businesses is represented accurately in the calculation of future capacity needs for the County and the municipalities it serves.

Drainage

The City has completed a road paving program which addresses the major source of runoff and pollutants to surface water bodies within the City. Future efforts consist of the enforcement of stormwater management standards and level of service for new development and redevelopment within the City. The remaining drainage issue in the City is runoff from the impervious parking area serving Keystone Beach, a public recreation facility. The erosion in this area has been addressed and steps are underway to improve drainage.

The discharge of untreated stormwater is reasonably expected to be a source of pollution of the lakes within the City (as waters of the state). As such the quality of water discharged from stormwater management facilities is regulated, with standards established in Chapter 62-25 of the Florida Administrative Code. The City shall review development and redevelopment plans that include new stormwater discharge facilities for compliance with the Florida Administrative Code standards and will require all stormwater management facilities to be permitted by the St Johns River Water Management District unless otherwise exempt.

Potable Water

The Clay County Utility Authority manages and operates the potable water supply facilities that serve the City. The CCUA continues to operate its facilities in a manner consistent with its permits and to expand the system to meet projected need within the City and areas outside the City but within the CCUA service area. There are no future needs of the City that are not anticipated by the CCUA; continued communication of annexation plans or efforts between the City and the CCUA is the most effective means for meeting the future needs related to potable water.

Aquifer Recharge

Implementation and enforcement of policies adopted in 2010 that establish setbacks for septic tanks and drain fields for waterfront lots, limit the maximum impervious surfaces to 20 percent of the total lot area, limit the storage or use of hazardous materials, and prohibit certain uses within the high aquifer recharge areas within the City represent the future actions to be undertaken by the City to protect the water quality and quantity of the recharge area of the Floridan Aquifer.

COMMUNITY FACILITIES ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal U 4 Continue to support the provisions of safe and sanitary potable water, sewer treatment, drainage and solid waste disposal to current and future residents of the City and to protect the aquifer recharge function of the lakes and land in the City.

SANITARY SEWER OBJECTIVE

U 4.1 The City shall coordinate the extension and expansion of capacity for sewage treatment plant facilities with the Clay County Utility Authority to meet the needs of future development and existing uses within the City.

Policies

U 4.1.1 New development and redevelopment including residential uses not constructed on lots within a subdivision platted prior to 1991 shall be required to be served by central sewer.

U 4.1.2 Annually, representatives of the City and the Clay County Utility Authority (CCUA) shall meet to confirm the adequacy of the capacity of the wastewater treatment facilities that serve the City to meet the projected demand within the CCUA service area and coordinate the schedule of permits, construction projects, and facility expansion plans required to provide adequate capacity for the five year period.

U 4.1.3 The City will coordinate with the Clay County Utility Authority for the provisions of sanitary sewer service within the City by requesting review comments on development plans and amendments to its comprehensive plan. Comments received will be provided to the applicants with the requirement that issues raised by the CCUA to be addressed prior to development approval

SANITARY SEWER OBJECTIVE

U 4.2 The City will require connection to the central wastewater system for non-residential development and connection of existing residential development when service is available. A Health Department permit and inspection to install, modify or repair a septic tank on residential property within the City shall be required when central service is determined not to be available.

Policies

U 4.2.1 Connection to the central wastewater system will be required for existing residential platted lots when service is available as defined by Chapter 3181, Florida Statute:

"Available" (Chapter 318.0065(2)(a), F.S.) as applied to a publicly owned or investor-owned sewerage system, means that the publicly owned or investor-owned sewerage system is capable of being connected to the plumbing of an establishment or residence, is not under a Department of Environmental Protection moratorium, and has adequate permitted capacity to accept the sewage to be generated by the establishment or residence; and:

a. For a residential subdivision lot, a single-family residence, or an establishment, any of which has an estimated sewage flow of 1,000 gallons per day or less, a gravity sewer line to maintain gravity flow from the property's drain to the sewer line, or a low pressure or vacuum sewage collection line in those areas approved for low pressure or vacuum sewage collection, exists in a public easement or right-of-way that abuts the property line of the lot, residence, or establishment.

b. For an establishment with an estimated sewage flow exceeding 1,000 gallons per day, a sewer line, force main, or lift station exists in a public easement or right of-way that abuts the property of the establishment or is within 50 feet of the property line of the establishment as accessed via existing rights-of-way or easements.

U 4.2.2 The City will continue to pursue grants with its partner, the CCUA, under the Small Community Wastewater Facility Grant program administered by the Department of Environmental Protection in order to provide central service to existing residential units in the City .

U 4.2.3 Septic tanks will not be permitted in the 100 year floodplain, except to serve residences located within subdivisions platted prior to 1991 and which meet Health Department permitting requirements.

U 4.2.4 Septic Tanks, when permitted for residential dwellings, will be limited to areas of suitable soil types and residential lot sizes shall, at a minimum, comply with applicable state regulations.

U 4.2.5 The City shall report citizen complaints it receives related to septic tank malfunctions to the Health Department for investigation.

SOLID WASTE OBJECTIVE

U 4.3 Provide solid waste disposal services and secure adequate capacity for residents of the City by maintaining coordination through interlocal and contractual agreements with Clay County and a solid waste hauler.

Policies

U 4.3.1 Maintain coordination with Clay County such that the City's solid waste disposal demand is reflected in demand projections utilized by the County to project required disposal capacity for the five year period and through the 2025 planning horizon.

U 4.3.2 The City shall maintain an interlocal agreement with Clay County to ensure the provision of adequate solid waste disposal capacity and to annually review the capacity of the Clay County landfill and update demand projections associated with development within the City.

U 4.3.3 The City will participate in the County's recycling program to reduce the solid waste stream.

DRAINAGE OBJECTIVE

U 4.4 The City will require that development meet the adopted level of service standards for water quality and quantity (drainage) prior to approval of a final development order.

Policies

U 4.4.1 The City shall require development to meet the adopted drainage level of service standards, including on-site retention, water quality and positive outfall.

U 4.4.2 The City shall require all new development which is not exempt from the St Johns River Water Management District permitting requirements to comply with Surface Water Management System Environmental Resource Permit (Chapter 40C-4, F.A.C.) and Standard Environmental Resource Permit (Chapter 40C-40, FAC).

FLOODPLAIN OBJECTIVE

U 4.5 The City shall manage and regulate development within the 100 year floodplain through its floodplain management ordinance to insure that flood-carrying and flood storage capacity are maintained.

Policies

U 4.5.1 The City shall use the latest version of the Flood Insurance Rate Maps provided by FEMA to determine the location of areas of special flood hazard (100-year floodplain).

U 4.5.2 The City shall provide specifications for regulating development and land use activities within the 100 year floodplain:

Residential and non-residential development and land use activities shall be allowed in areas of special flood hazard unless otherwise prohibited and are subject to the following requirements:

1. Residential structures in all areas of special flood hazard must be elevated one (1) foot above the base flood elevation.
2. Non-residential structures in all areas of special flood hazard must either be elevated one (1) foot above the base flood elevation or flood-proofed as certified by a registered professional engineer or architect.
3. New construction, fill, and other improvements are prohibited in the floodway unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels of the base flood discharge.
4. No hazardous waste shall be generated, stored, or disposed of within the 100-year floodplain.

The following non-residential uses shall be prohibited in areas of special flood hazard:

1. Land uses requiring the storage, disposal, generation, or use of hazardous waste.
2. Underground storage of toxic materials
3. Auto salvage yards
4. Junkyards

POTABLE WATER OBJECTIVE

U 4.6 The City shall maintain an interlocal agreement with the Clay County Utility Authority to ensure that potable water supply and treatment available to the residents and businesses within the City and that there is continued coordination between the entities on the extension of facilities and increase of capacity.

Policies

U 4.6.1 Annually, representatives of the City and the Clay County Utility Authority (CCUA) shall meet to confirm the adequacy of the capacity of the water treatment facilities and authorized water withdrawals under the CCUA's Consumptive Use Permit to meet the projected demand within the CCUA service area and discuss the schedule of permits, construction projects, and ~~any~~ facility expansion plans required to provide adequate capacity or withdrawals for the five year period.

U 4.6.2 All development and redevelopment shall be required to connect to the centralized water system of the Clay County Utility Authority.

U 4.6.3 The City will require new construction and specified reconstruction to incorporate water saving devices in order to minimize water consumption within structures.

U 4.6.4 The City shall limit development and redevelopment within a 500 foot radius of existing wellfields for potable water supply wells. Within the wellhead protection zone, all uses and activities shall comply with the Wellhead Protection Rule 62-521, F.A.C:.

a. domestic wastewater treatment facilities shall be prohibited.
b. unlined reclaimed water storage systems are permitted, subject to permitting under Part III of Chapter 62-610, F.A.C.
c. domestic wastewater residuals land application sites shall be prohibited.
d. new discharges to groundwater of industrial wastewater shall be prohibited unless otherwise allowed under Chapters 62-660,62-670, 62-671, and 62-673, F.A.C.
e. new Class I and Class III underground injection control wells are prohibited.
f. new Class IV underground injection control wells are prohibited except as permitted under Chapter 62-521.400.
g. solid waste disposal facilities are prohibited.
h. new generators of hazardous waste (excluding household hazardous waste) are prohibited unless evidence of compliance with secondary containment requirements of 40 C.F.R. Part 264 Subpart I is provided.
i. hazardous waste treatment, storage, disposal and transfer facilities requiring permits under Chapter 62-730, F.A.C. are prohibited.
j. aboveground and underground tankage of hazardous waste regulated under Chapter 62-730, F.A.C. is prohibited.
k. new aboveground storage tanks regulated under Chapter 62-762, F.A.C. are prohibited. Replacement or upgrading of an existing aboveground storage tank or addition of new aboveground tanks which

are regulated under Chapter 62-762, F.A.C. at a facility with other such aboveground tanks are permitted. Provided that the replacement or new tanks meet the applicable provisions of Chapter 62-762, F.A.C.

l. Storage tanks which meet the auxiliary power provisions of subsection 62-555.320(6), F.A.C. for operation of potable water well and storage tanks for substances used for the treatment of potable water are permitted.

m. emergency equipment, including storage tanks, necessary to provide power to ensure a continuous supply on an emergency basis of public water supply, electrical power, sewer service, telephone service or other essential services that are of a public benefit are permitted.

U 4.6.5 The City shall maintain information on water conservation measures in the City Hall available to City customers.

NATURAL GROUNDWATER AQUIFER RECHARGE OBJECTIVE

U 4.7 The City shall protect the function of natural groundwater recharge areas to ensure the continued supply of good quality potable water.

Policies

U 4 7.1 Areas shown by the SJRWMD to potentially contribute 8 inches or more per year of recharge to the Floridan Aquifer are designated as high recharge areas as shown on the Floridan Aquifer Recharge Map.

U 4.7.2 Areas designated by the SJRWMD as high recharge to the Floridan aquifer (8 inches or more per year) shall be protected from incompatible land uses to ensure adequate recharge rates and water quality maintenance.. The following restrictions shall apply:

a. All development within the high recharge areas shall have maximum impervious surfaces of 20 percent of total lot area, provided that at least 25% of the site is dedicated to native and/or drought-resistant vegetation areas, and containment using concrete surfaces is provide for all areas where materials are stored and transferred.

b. Direct discharge of stormwater, via sinkholes, drainage wells, etc., shall be prohibited.

c. All development within the high recharge area shall be designed to have 100 percent retention of on-site runoff for a 25-year/24-hour storm.

d. Performance standards shall be established in the land development regulations regarding storage, use, and handling of hazardous substances and other uses that pose a risk of groundwater contamination. These shall include the requirement that storage of hazardous substances or hazardous waste shall be on or over an impervious surface sufficient to completely contain such substances in the event of a spill or leak.

e. Certain uses shall be prohibited in high recharge areas, including but not limited to: mines, solid waste disposal facilities, concentrated animal feeding operations, auto salvage and junkyards, underground storage of hazardous substances and hazardous waste, phosphogypsum stacks, hazardous waste treatment, storage, disposal, and transfer facilities, and certain types of land application disposal projects and injection wells which shall be more specifically defined in the land development regulations. Detailed prohibitions along with any necessary exemptions shall be incorporated into the LDRs specific to the High Recharge Area.

f. Direct discharge of stormwater to groundwater, via sinkholes, drainage wells, etc., shall be prohibited.

g. All new developments within the high recharge areas shall be designed to have 100 percent retention of on-site runoff for a 25-year/24-hour storm.

h. Existing uses that do not meet the requirements in Policy U 4.8.2 a -- j shall comply with the overall non-conforming use provisions of the land development regulation. Certain exemptions to this policy may be incorporated into the land development regulations specific to the High Recharge Area.

i. Any new Floridan aquifer wells in the designated high recharge area shall be cased to SJRWMD standards to ensure that they do not provide a means of contamination to the Floridan aquifer.

j. Inspections of existing septic tanks and drainfields within the high recharge area shall be required when such septic tank or drainfield or related dwelling unit is altered, enlarged or replaced, if the system has not been inspected within three years.

GOAL

Goal U 5 Needed public facilities shall be provided in a manner which protects investments in existing facilities and promotes orderly compact urban growth.

LEVEL OF SERVICE OBJECTIVE

U 5.1 The issuance of final development orders shall be conditioned upon the availability of public infrastructure at the adopted level of service standard.

Policies

U 5.1.1 The City shall establish and maintain a concurrency management system which contains procedures for monitoring the condition of level of service standards for sanitary sewer, potable water, solid waste, and drainage facilities.

U 5.1.2 Keystone Heights shall use the following level of service standards in reviewing the impacts of new development and redevelopment on public facility capacity:

Sanitary Sewer: 250 gpd/ERU

Solid Waste: 3.99 pounds per person per day

Drainage:

Drainage Facility	Design Frequency
Crossdrains for major watersheds	50 years 24 hours
Detention/Retention/Attenuation Basins	25-year, 24 hour critical event with protection to a 100 year rainfall
Bridges and Bridge Culverts	50 years
Crossdrains for minor watersheds	25 years
Crossdrains and ditches for internal drainage	25 years
Sidedrains for roadway ditches	10 years

Water Quality: Standards established in Chapter 62-25, Florida Administrative Code

Potable Water: 294gpd/ ERU

	Water Supply	Projected demand for first five year period met through permitted withdrawals or adopted alternative water supply plan

U 5.1.3 The City shall coordinate with potable water and sanitary sewer service providers to prepare annual summaries of water and sewer system demand and capacity information for each facility. This data will be used to make a determination of adequate capacity availability which will be required prior to issuance of building permits.

U 5.1.4 The Applicant seeking development approval shall coordinate with the service provider to trace existing and committed use of facilities to determine if adequate capacity is available to maintain the adopted level of service.

U 5.1.5 The City will require the evaluation of water demand to be included in the data and analysis provided in support of all proposed amendments to the Future Land Use Map. Amendments which project an increase in water demand will be required to show that water supply is available to meet the increased demand.

U 5.1.6 All facilities necessary to meet level of service standards shall be provided in a manner that meets all applicable federal, state, and local regulations.

CAPITAL IMPROVEMENTS OBJECTIVE

U 5.2 To correct deficiencies as well as coordinate the extension of facilities to meet future needs, the City shall maintain a five year schedule of capital improvements for public facilities within the City.

Policy

U 5.2.1 The City shall update its Five Year Schedule of Improvements annually to identify the funding for necessary infrastructure required to maintain the adopted level of service including infrastructure/facilities to be provided by service providers other than the City that are necessary to meet the adopted level of service standard.

U 5.2.2 The Five Year Schedule shall be updated annually in compliance with the review process in the Capital Improvements Element of this plan.

Proposed capital improvement projects will be evaluated and ranked according to the following priority guidelines:

Level One: whether the project is needed to protect public health and safety, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities and correct existing deficiencies;

Level Two: whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs, provides service to development areas lacking full service or promotes in-fill development; and

Level Three: whether the project represents a logical extension of facilities and services within a designated service area.

U 5.2.3 The City shall incorporate the five year capital plans of those service providers responsible for public infrastructure subject to concurrency management within its jurisdiction when capacity improvements necessary to maintain the adopted level of service standard are funded.

CAPITAL IMPROVEMENTS ELEMENT

Introduction

Chapter 163, Florida Statutes and Rule 9J-5, Florida Administrative Code require local governments to adopt a Capital Improvements Element as part of the local government comprehensive plan. The Capital Improvements Plan (CIP) includes a Five Year Schedule of Capital Improvements (5 Year Schedule) which identifies the funding source and schedule of capital improvements required to address the need for public facilities identified in the other elements of the comprehensive plan. The Five Year Schedule includes expenditures by service providers other than the City when those capital improvements are necessary to maintain an adopted level of service.

A full fiscal analysis is performed with analysis of the capital and operating expenditures necessitated by the improvements and standards specified in the comprehensive plan as well as other non-plan related expenditures that are funded from the same source. Only by including non-plan related expenditures funded from the source of capital improvements funding can the financial feasibility of the 2025 Comprehensive Plan be accurately assessed.

The Keystone Heights Comprehensive Plan defines capital improvements as non-recurring expenditures for which the construction, acquisition or installation of facilities or equipment is identified in the Traffic Circulation, Community Facilities, Recreation and Open Space , and Public School Facilities Elements. Public facilities required to be included in the 5 Year Schedule are those subject to concurrency management pursuant to Section 163.3180, Florida Statute:

Transportation Facilities (roads)
Potable Water Treatment
Potable Water Supply
Wastewater Treatment
Solid Waste Disposal
Drainage
Recreation Facilities and Parks
Open Space
Public Schools

For public facility planning purposes, the facilities necessary to meet the adopted level of service in the first five years of the planning period are included in the 5 Year Schedule of Capital Improvements and future needs are recognized and included in the 5 Year Schedule as the five year horizon advances each year. The 5 year Schedule of Capital Improvements is updated annually in coordination with the adoption of the City's budget.

Relationship with other Elements

The CIE is the financial implementation element of the City's 2025 Comprehensive Plan. Other elements provide the supporting data and analysis on which the need for public infrastructure is based and the CIE assesses the financial resources available to make capital investment in the necessary infrastructure.

The CIE has a strong relationship to the Future Land Use Element through the Concurrency Management System. The requirement for capital improvements to support the future development within the city is clear: facilities and services must be available at their adopted level of service standard concurrent with the impacts of development. Land Use decisions are coordinated and approval conditioned upon the availability of facilities and services under the Concurrency Management System.

Level of Service Standards

Level of service standards (LOS Standards) are the indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on the operational characteristics of each public facility. Once established, the LOS Standard is used to measure the impact of additional demand associated with planned development based on the standard and to determine the investment required to maintain the LOS standard if there is a projected impact that would reduce the level of service to a point below that adopted.

The City has adopted level of service standards for public infrastructure and based on the data and analysis of the 2025 Comprehensive Plan, determined whether there are existing deficiencies in level of service. The City has projected whether level of service deficiencies will occur in the future. The analysis of need for public infrastructure is based on the population projections for the City and the Future Land Use Plans adopted by the City and the immediately surrounding unincorporated Clay and Bradford counties where land use patterns affect the demand for potable water and wastewater treatment, solid waste disposal and transportation facilities.

Capital Improvements Planning

Planning for capital improvements in the City follows a traditional budgetary cycle with proposed projects considered for inclusion in the City's budget each summer and final budget documents and schedules adopted in September, prior to the beginning of the fiscal year in October. The City has some funding sources that are restricted to capital expenditures; these are the Infrastructure Surtax Revenue and any grant funds awarded specifically for capital improvements. All other funding sources available to the City may be spent on capital and non-capital projects.

The Clay County Utility Authority (CCUA) is the service provider for potable water treatment, potable water supply and wastewater treatment for the City. The CCUA updates its capital plan annually in September and to the extent capital improvements are required to

facilities operated and maintained by the CCUA to maintain the adopted level of service in the five years of the 5 Year Schedule, the CCUA's Five Year Capital Plan is adopted by the City as a component of its 5 Year Schedule.

The Clay County School District (CCSD) is the service provider for pubic schools that serve the City. The CCSD updates its capital plan annually in September and to the extent capital improvements are required to public school facilities to maintain the adopted level of service in the five years of the 5 Year Schedule, the CCSD's Five Year Capital Plan is adopted by the City as a component of its 5 Year Schedule.

The 5 Year Schedule is updated annually in September to reflect the need for public facilities and services reflected in the most current Annual Capacity Statement.

Impact of Public Facilities on Infrastructure

In addition to the impacts on concurrency governed public facilities generated by development within the City, new or improved public educational and public health care system components may generate impacts on the provision of infrastructure within Keystone Heights. An analysis of those impacts is undertaken by the City to assist in the planning and coordination of the provision of public infrastructure.

Public Health Facilities

There are no public health facilities within the City.

Education Facilities

Public education is provided by the Clay County School District. Within the City, the CCSD operates the following facilities:

Keystone Heights' Elementary School
Keystone Heights' Junior/ Senior High School

There is no projected expansion of public health or education facilities within the City during the planning period ending in 2025. No additional demand on these public facilities is projected.

Existing Revenue Sources and Funding Mechanisms

Local Sources

The following local sources are available funding mechanisms for the City.

Property Taxes (ad valorem)

During the 2009-10 fiscal year ad valorem taxes accounted for 14.5 percent of the City's annual revenue. For the 2010-11 budget, ad valorem tax revenues are projected to represent 15.6 percent of the City's budget. A mil is equal to $1.00 per $1000 of assessed property value (0.1 percent) and is applied to the total taxable value of all real property and other tangible personal property.

Property tax reform in Florida started in 2007-08; restrictions on a local governments discretion to raise property (ad valorem) taxes were adopted by the legislature and most local governments saw significant reduction in ad valorem revenue in subsequent years as a result. Millage caps were established in 2008-09 with a referendum required to exceed the cap; permanent reductions in taxable value base was implemented by increasing the homestead exemption value from $25,000 to $50,000, a cap was added on the increase on non-homestead properties, "Save our Homes' caps on increases in the valuation of homestead property was made portable and a $25,000 exemption for tangible personal property taxes was added.

Ad valorem revenue in the City has not comprised a large portion of its revenue. From a historic low of 10% of the revenue in 2006-07, property tax is just over 15 % of the total revenue in 2009-10 and is projected to remain at this percentage for the next five years. Property values in the City are declining, but because the housing stock is not new and sales are few, the City did not see the dramatic escalation and then loss of value experienced in other jurisdictions. With the declining market value of property that started in 2008 and continues into 2011, the City is projecting ad valorem taxes to remain the same (flat) for the first five years of the planning period (2011- 2016).

Local Government Infrastructure Surtax

Clay County reauthorized its infrastructure surtax in 1999 for a twenty year period (ending in 2019). The Infrastructure Surtax generates approximately $170,000 annually for capital projects within the City. The City has historically used these funds to retire debt service on its revenue bond for road paving and to fund capital improvements.

Tax Increment Finance Revenue

The City of Keystone Heights recognized the need for redevelopment in 2003 and was granted the powers enumerated in Section 163.358, Florida Statute, relating to community redevelopment, by Clay County, a Charter County, on February 24, 2004. Revenue is received as tax increment finance revenue (TIF) annually and may be utilized only for expenditures that are consistent with the adopted Community Redevelopment Plan and Capital Improvement Plan for the CRA. The TIF revenue associated with community redevelopment is used to fund eligible capital and non-capital expenditures within the CRA boundary. The City's tax increment revenue associated with properties within the CRA boundary are allocated to the CRA by the City and are not available as general revenue to the City.

The CRA adopts a capital budget annually; in 2009-10 the City contributed $6,089 and the County contributed $34,118 in increment revenue.

Public Utility Taxes and Fees

These charges are derived from the operation of publicly owned and operated utilities. The City does not own or operate public utilities but it does receive revenue from the CCUA for administration of the operation of water and wastewater facilities within the City and from electric, water and local communications taxes. Revenues are derived from this source and amount to 21 percent of the budgeted revenues for fiscal year 2010-11. These revenues are projected to remain constant (value) through the planning period.

Other taxes, fees and charges

This category includes special assessments, various administrative fees and other user charges for services and facilities owned by the City. The City assesses a user fee for solid waste pick-up within the City which includes revenue for the administration of the assessment in addition to the fee that is passed on to the solid waste hauler. Other examples are sales of public documents, intergovernmental revenues, review fees, fines and forfeitures, licenses, permits, and interest income from various City funds, rents and royalties. Keystone Heights expects to derive approximately 1 percent of its revenue from administrative fees and a total of 15.1% of its revenue from all of these sources in fiscal year 2010-11. These revenue sources are projected to continue to constitute approximately 14.5 percent of the annual revenue.

Special Assessment

Special assessments are a financing mechanism available to finance infrastructure improvements (street lighting, drainage) at the neighborhood level. In a special assessment district, properties that benefit from particular improvements (street lighting of a new local street) actually share the cost of providing it. This technique shifts capital facility costs away from public budgets. The City passed a special assessment in the form of an MSTU for fire and police service but has not yet relied upon special assessments to generate revenues to finance capital improvements. As revenue from other sources declines, the City may utilize assessments to meet infrastructure needs.

Bonds

Because most capital investments involve the outlay of substantial funds, local government can seldom pay for these facilities through appropriations in the annual budget. Bonds are a method employed by local governments to obtain additional revenue to finance capital outlays. To obtain revenues from bonds the local government borrows money from investors (both public and private) and pays principal and interest over a number of years. Local governments' use of this technique depends on financial factors as bond ratings and current outstanding debt. In 2010, the City carried $585,000 of revenue bond debt, with retirement of the debt paid from funds collected for capital infrastructure. The debt service on current bonded revenue will be retired in 2019.

General Obligation Bonds: General Obligation Bonds can be sold to finance permanent types of improvements such as schools, municipal buildings, parks and recreation facilities. Through this method, which is subject to voter

approval, the taxing power of the jurisdiction is pledged to pay interest and principal to retire the debt. The City has not issued any general obligation bonds to finance capital improvements.

Revenue Bonds: Revenue Bonds frequently are sold to finance projects that produce revenue such as water ands sewer systems. These bonds are not backed by the full faith and credit of the local jurisdiction but are financed through service charges or fees. They are not included in the state imposed debt limits, as are general obligation bonds. Voter approval is not required and interest rates are usually higher than those of General Obligation Bonds. Keystone Heights has ~~not~~ issued Revenue Bonds to finance capital improvements in the past and will retire that debt in 2019.

State and County Sources

Keystone Heights and other municipalities in the State rely on disbursements from the State to support their operating and capital budgets. These revenues are generated locally, collected by the state and returned for use by the local government.

Revenue Sharing
The State of Florida disbursed $47,622 to Keystone Heights during fiscal year 2009-10 with $52,371 anticipated in 2010-11.

Other Shared Revenue
This category includes several major financial resources that are shared between the City, County and State agencies. The following taxes generate a large portion of the total annual revenue.

Local Option Fuel Tax: The 2010-11 budget includes $91,491 from this revenue source. This represents approximately 12 percent of the total revenue in 2010-11.

Miscellaneous Taxes: This category includes the beverage License Tax and Mobile Home License tax. These two sources produced $ 11,790 in revenues to the City during fiscal year 2009-10 and is projected to produce $2,929 in revenue in 2010-11.

Federal and State Grants and Loans

The United States State and Local Fiscal Assistance Act of 1972, which formerly provided for a system of federal general revenue sharing, has been substantially modified. Federal funds are now either allocated to state agencies to administer as block grant programs, or reserved at the federal agency level for disbursement as block grants directly to state and local agencies or other eligible organizations and individuals. The purpose of the block grant program is to enable greater latitude in actual use of the funds by recipients. Recipients are still required to use the funds for specific categories of projects. Block Grants required competitive

applications. These monies are generally a non-recurring source of funds and cannot be accurately projected for budgeting purposes. Keystone Heights received funding from block grant programs in the mid-1990's to pave dirt roads.

The City has improved sidewalks within the City under the Safe Routes to School grant program administered by the Florida Department of Transportation.

As revenues continue to decline, the City will continue to rely on grant revenue to augment its resources and meet its capital infrastructure needs.

Policies and Practices for Providing Capital Improvements

The City implements policies and practices for the efficient extension and provision of Capital Improvements.

Level of Service Standards:

The City has adopted level of service standards for public facilities governed by concurrency management based on the data and analysis of the applicable element of its 2025 Comprehensive Plan.

Transportation Facilities (roads)

The Transportation Element of the 2025 Comprehensive Plan documents level of service standards for roads within the City using a volume to capacity ratio for the PM Peak Hour.

Segment	Adopted PM Peak LOS	Maximum Service Volume
SR 100 from SR 21 to NW City Limits	C	1,370 [1]
SR 100 from SR 21 to SE City Limits	C	1,370 [1]
SR 21 from N City Limits to SR 100	D	1,480 [1]
SR 21 from SR 100 to S City Limits	D	1,480 [1]
Orchid Avenue	D	670 [2]
Nightingale Street	D	670 [2]
Pecan Street	D	670 [2]
Commercial Circle	D	670 [2]

[1] FDOT Generalized Tables, Table 5

[2] Level of Service (LOS)/Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module with PM Peak Factor of 0.10.

Community Facilities

The Community Facilities Element establishes the level of service standard for potable water treatment, potable water supply, wastewater treatment, solid waste disposal, drainage and water quality.

Potable Water Treatment:	294gpd/ ERU
Potable Water Supply	projected demand for first five year period met through permitted withdrawals or adopted alternative water supply plan
Sanitary Sewer:	250 gpd/ERU
Solid Waste Disposal:	3.99 pounds per person per day

Drainage:

Drainage Facility	Design Frequency
Crossdrains for major watersheds	50 years 24 hours
Detention/Retention/Attenuation Basins	25-year, 24 hour critical event with protection to a 100 year rainfall
Bridges and Bridge Culverts	50 years
Crossdrains for minor watersheds	25 years
Crossdrains and ditches for internal drainage	25 years
Sidedrains for roadway ditches	10 years

Water Quality: Standards established in Chapter 62-25, Florida Administrative Code

Recreation

The Recreation and Open Space Element inventories recreational facilities available to City residents and establishes the level of service standard to be applied to park land, open space and recreation facilities.

Recreation (Parks): Neighborhood Parks: 3.5 acres/ 1,000 population

Open Space: 2.5 acres per 1,000 population

Recreation Facilities:

Facility	Level of Service
Freshwater Beach	0.5 acres per 1,000 population
Basketball Court	1 per 2,000 population
Equipped Play Area	1 per 1,000 population
Multi-purpose Field	1 per 2,000 population
Urban Jogging/ Hiking Trail	1 per 5,000 population
Tennis	1 per 2,000 population
Volleyball Courts	1 per 1,000 population
Dog Park	1 per 2,000 population
Covered Picnic (Pavilions)	1 per 1,000 population

Schools

The City has a Public School Facilities Element that is based on data and analysis performed by the Clay County School District (CCSD) as to the need for pubic school facilities. The CCSD updates its Education Facilities Plan (EFP) annually, prior to the adoption of its annual budget and capital plan. The City recognizes the most current EFP and CCSD Capital Plan in its annual updates to the 5 Year Schedule of Capital Improvements.

The 2010-11 to 2014-15 Education Facilities Plan indicates that a new high school facility will be open in 2010-11 bringing the total school campuses to 40. Additionally, a new elementary wing at Middleburg Elementary will be completed for the start of the 2010 school year.

The District does not utilize any leased or loaned facilities for classroom purposes. However, 43% of the District's student stations identified in Florida Inventory of School Houses (FISH) are housed in satisfactory relocatable buildings. There are currently no relocatable classrooms scheduled for replacement during the next five years.

Based on current FDOE COFTE forecast elements, there are no plans to construct any new schools in the next ten years. The School District has identified the possibility that a total of 15 schools could be needed by school year 2030-31. The proposed new schools for the 5, 10 and 20 year periods are shown on the Future Schools map of the Public School Facilities

Element.. General locations of future school sites are be based on the school site policies in the interlocal agreement and comprehensive plans of the local governments.

Capital Improvement Plan (CIP)

The City utilizes its Capital Improvements Plan (CIP) to direct its expenditures and manage the revenue sources it utilizes to provide public facilities and services under concurrency management. The CIP is a plan for capital expenditures to be incurred annually over a fixed period of years to meet anticipated capital needs. It sets forth each capital project or other expenditures contemplated by the City. The CIP must be consistent with the Capital Improvements Element and estimates the resources needed to finance the project. The CIP covers the current year and the next five years of the planning period; each year when updated the CIP moves ahead one year to maintain the five year horizon. The first year of the CIP is reflective of the current year's capital budget with subsequent five years representing the longer range expenditures. The CIP is updated on an annual basis.

Impact Fees

The City could utilize impact fees as a funding mechanism /strategy for addressing the need for infrastructure. Impact Fees are imposed on new development by local governments to offset the cost of new capital facilities necessitated by that development. Because the development potential in the City is very low, if implemented, impact fees that apply only to City infrastructure would not contribute significantly to the funding for infrastructure. Clay County has adopted impact fees for transportation; Keystone Heights has not chosen to adopt the County's impact fee because improvements funded from the fee are identified on a sector (geographic) basis and none of the planned improvements are proximate to the City.

The Clay County School District has implemented impact fees that are collected on new residential units permitted in the City.

Utility and Franchise Taxes

User charges are designed to recoup the costs of public facilities or services by charging those who benefit from them. They are employed in many areas of local government service. Tolls and transit fares are collected for the use of transportation facilities; water and wastewater tap (connection) fees are used to fund capacity in these treatment facilities and user fees at parks or recreation facilities can fund operations or capital expenses.

User fees may be utilized to guide the pace and pattern of development because they can be designed to vary according to the quantity and location of the service provided. Thus urban sprawl can be discouraged by the provision of high user fees for services at further distances from urban areas.

Mandatory Dedications or Fees in Lieu of

As a condition to plat approval, the City may require developers to dedicate land in their development to be used for public purposes such as roads. When parks and schools are required to be dedicated, the adopted level of service standard for the facility type is applied and lands dedicated in excess of the standard may be donated or, if available to the general public for use, may be purchased or granted impact fee credits by the City or the Clay County School District.

Moratoria

A moratorium may temporarily halt or freeze development for a specified period of time on an emergency basis. It may be imposed on building permits, development approvals, or governmental services such as potable water connection, sanitary sewer extension or hookups. Florida courts have found development moratoria to be a valid measure of last resort for the protection of local public health, safety and welfare when adopted in accordance with applicable procedures.

CAPITAL IMPROVEMENTS ANALYSIS

The City's financial position can be analyzed by estimating future receipts of revenues and balancing these receipts against anticipated expenditures to determining the feasibility of financing capital improvements.

CURRENT REVENUE

The City experienced a significant reduction in its revenues starting in 2006-07 when Clay County voted to eliminate funds previously allocated to the cities through long standing interlocal agreement. Keystone Heights was the most affected by the change because it does not operate a utility, so its sources of revenue are stable and do not provide opportunity for meaningful increase. The County funds comprised approximately 27 percent of the City's revenues in 2004-05 and 2005-06; the funds were phased out such that the reduction was not over a single year. In 2009-10 this funding source ended. The reduction in overall revenues places greater reliance on other sources.

Ad valorem Revenue (Property Taxes)

Ad valorem revenue grew from approximately 10 percent of the City's revenue sources to just over 15 percent in the last five years and is projected to continue to comprise approximately 15 percent of the total revenue available to the City. Despite the reduction in the value of individual properties during this period, multiple non-residential structures were constructed in the City, mitigating the loss of value generally experienced throughout Florida. These revenues may be allocated to operating and capital expenditures. Tables 1 and 2 illustrate historical millage rates in the City.

TABLE 1

HISTORIC MILLAGE RATES 1985-1991

FISCAL YEAR	TAX BASE	MILLAGE RATE
1985-86	16,675,078	3.50
1986-87	17,202,089	3.43
1987-88	20,598,225	4.97
1988-89	22,972,288	4.63
1989-90	23,407,565	2.50
1990-91	25,338,457	2.00

TABLE 2
HISTORIC MILLAGE RATES 2005-2011

FISCAL YEAR	TAX BASE	MILLAGE RATE
2005-06	55,000,000	2.0000
2006-07	58,000,000	2.0000
2007-08	66,915,310	1.9245
2008-09	60,996,077	2.0000
2009-10	58,300,000	2.3075
2010-11	55,200,000	2.3414

It is projected that the ad valorem revenue will remain constant over the five year planning horizon. The tax base is not anticipated to significantly increase in the five year period; almost all the vacant land in the City lies within the residential land use category and significant new construction is not anticipated in this or the non-residential sector in the five year period.

Public Utility Taxes and Fees

These revenue sources play a larger role in the City's budget because of the loss of County revenues in 2010-11. Utility taxes increased as a share of total revenue from 10 percent of the City's revenue when County Interlocal funds were received (prior to 2010-11) to 20 percent of the revenues in 2010-11 when Interlocal funds were phased out (and the total revenue was reduced).

State and County Sources

This category includes standard revenue sharing plus local option sales and gasoline taxes. State revenue sources comprised approximately 13 percent of the total revenue in 2009-10 and are projected to make up approximately 15 percent in 2010-11. This revenue is projected to remain approximately 15 percent of all revenue through the five year planning period.

The revenue from local option gas taxes represent 10% of the total revenue in 2009-10 and 11.5 percent in 2010-11, maintaining this level through the five year planning horizon.

The local One Cent Infrastructure Surtax represents revenue of approximately $170,000 to the City; this source is available through 2019. At 21 percent of the total revenue in 2010-11, this is the source of capital funding within the City.

Combined, these state and local sources comprise approximately 47 percent of the City's total revenue.

TABLE 3
CITY OF KEYSTONE HEIGHTS
REVENUE SOURCES

	2006-07	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Property Taxes	110,922	125,510	118,181	130,974	123,934
Utility	124,742	119,315	130,453	140,996	169,752
State/County [1]	416,564	402,835	380,485	375,085	385,518
County Interlocal	286,743	204,108	147,610	98,407	0
License/Permits	9,477	13,662	6,079	13,706	8,700
Other	173,844	119,729	114,327	143,711	104,408
TOTAL	1,122,292	985,159	897,135	902,879	792,312

[1] Not Including County Interlocal Funds

Future Projections

In projecting future revenues for the City of Keystone Heights it is important to note the dependence on state and county revenue transfers in the form of taxes and revenue sharing. In 2006-07 these sources accounted for 62 percent of the total revenue; in 2009-10 this dropped to 48 percent, representing a drop in revenue of $317,000. Utility taxes in the same period increased from 10 percent of the revenues in 2006-07 to 19 percent in 2010-11 and are projected to increase to 35 percent of all revenue by 2016 because of the additional fees related to central wastewater service within the City. Property taxes have represented approximately 15 percent of the revenue in recent years and are projected to continue to make

up this percentage of the City's revenue in the next five years. In projecting revenues over the next five years, it is important to note that:

a. The City has the majority of its revenues collected by another entity and returned to it either through revenue sharing, tax reimbursements or franchise fees.

b. The nature of the receipts are economy dependent in that fuel taxes, utility taxes and other fees will fluctuate with upturns and downturns in the economy; and

c. The loss of County Interlocal revenues has affected the City's revenue drastically in the past five years; the loss of approximately $300,000 out of a total revenue of just over $1 million (approximately 25% of total revenue) has caused the City to adjust its capital expenditures and goals for the future. The City has reduced staff, operational expenses and reorganized to meet the challenge of reduced revenues

Previous increases in the state/county payments ~~has~~ allowed the City to adjust its millage rate downward since 1987 during a time when the valuation of property in the City grew moderately (around seven percent). The most recent 5 year period has brought declining property values and restrictions on changes to millage rates with little opportunity for added taxable value through new construction through the five year planning horizon ending in 2016. Utility taxes and State and County revenue sources are projected to grow at a very slow rate through the five year planning period ending in 2016.

TABLE 4
CITY OF KEYSTONE HEIGHTS
REVENUE PROJECTIONS

	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Property Taxes	123,934	124,925	125,925	126,932	127,948	128,971
Utility	169,752	178,912	185,452	192,317	199,521	207,084
State/County [1]	385,518	386,047	386,580	387,117	387,659	388,205
County Interlocal	0	0	0	0	0	0
License/Permits	8,700	8,700	8,700	8,700	8,700	8,700
Other	104,408	104,278	104,706	105,067	105,358	105,663

TOTAL	792,312	802,862	811,363	820,133	829,186	838,623

[1] Not Including County Interlocal Funds

B. EXPENDITURES

To address significant revenue losses, the City has undertaken a multi-year effort to improve operating efficiency, dramatically reduce operating expenses and prudently manage capital improvement decisions. This directly affects revenue available for capital improvements because the City allocates revenue after operating expenditures in its general fund to capital improvements. Actual operating expenses between 2007 and 2010 were reduced by almost 23 percent.

These efforts have directly resulted in a strengthening of the reserves. The City manages its current reserve balance in a manner prudent and reasonable given the likelihood of the extended economic downturn and the future without Interlocal Agreement revenues.

The data and analysis of the elements of the comprehensive plan have identified no existing deficiencies in level of service for the following facilities subject to concurrency management:

Transportation Facilities (roads)
Potable Water Treatment
Potable Water Supply
Wastewater Treatment
Solid Waste Disposal
Drainage
Recreation Facilities and Parks
Open Space
Public Schools

The data and analysis of the elements of the comprehensive plan has projected deficiencies in potable water treatment within the first five years of the planning period and potential deficiencies in potable water supply and transportation (roads) in the period after the first five years and before 2025.

The projected deficiencies are based on the population projection for the City, its Future Land use Map and an analysis of demand with the service area outside the City for potable water treatment, potable water supply, wastewater treatment, transportation facilities (roads), solid waste disposal, and public schools.

Table 5
POPULATION ESTIMATES AND PROJECTIONS

Year	Per Annum Growth Rate	Population	Annual Increase (persons)
2000 Census		1,345	
2005 Estimate	0.61%	1,386	8.2
2010 Projection	0.38%	1,413	5.4
2020 Projection	0.26%	1,450	3.7
2025 Projection	0.16%	1,462	2.4

Source: Shimberg Center for Affordable Housing, 2010

While no projected level of serviced failures are shown in the five year planning horizon, the City projects that revenue will be available for capital projects not associated with growth management. Table 6 projects operating expenditures through fiscal year 2015-16, allowing the City to monitor the resources available should deficiencies be identified.

TABLE 6
CITY OF KEYSTONE HEIGHTS
PROJECTED OPERATING EXPENDITURES

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
General and Administrative	383,733	383,663	389,993	382,824	390,208	398,215
Police and Code Enforcement	14,592	14,709	14,826	14,945	15,065	15,185
Highway and Streets	249,660	256,484	263,859	271,841	280,496	289,897
Parks and Recreation	34,253	34,840	35,450	36,081	36,737	37,418
Other	10,500	10,564	10,628	10,693	10,759	10,825

Available for Capital Improvements	99,574	102,602	96,607	103,749	95,920	87,083
TOTAL	792,312	802,862	811,363	820,133	829,185	838,623

IMPLEMENTATION STRATEGY

The City annually updates its Capital Improvement Plan (5 Year Schedule of Capital Improvements) in October/November in efforts coordinated with the City's budget cycle and that of the CCUA and Clay County School District. The Five Year Work Program for the FDOT does not include any capital improvements within the City that are necessary to meet the adopted level of service; the City monitors the FDOT Five Year Work program and will include the relevant portions in its CIP if capacity improvements are funded.

The Available Revenue in Table 6 may be utilized by the City to meet level of service capital needs in the five year period.

Clay County Utility Authority

2010/2011 Capital Projects Expenditures Budget
And Five Year Capital Projects Plan
Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010

		Adjusted						
		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
		2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
REVENUES:								
Fund Balance October 1, 2009		$22,743,841						$22,743,841
	Funds Spent on Jobs Prior to FY 2009/2010	30,167,958						30,167,958
	Renewal & Replacement Transfer Including Construction	1,530,440	1,686,901	1,686,901	1,686,901	1,686,901	1,686,901	9,964,945
	Environmental Reuse Capital Fund Transfer	715,030	794,321	794,321	794,321	794,321	794,321	4,686,635
	Connection Fees Transfer	205,381						205,381
	Departmental Capital Transfer	1,364,716	1,563,211	1,563,211	1,563,211	1,563,211	1,563,211	9,180,771
	Surplus Transfer (Operating Contingency Utility & Construction)	1,003,436	1,127,088	1,127,088	1,127,088	1,127,088	1,127,088	6,638,876
	Tap-In Construction Funds	31,361						31,361
	Grant Money	8,341,447						8,341,447
	Restricted Interest Earnings	39,934	12,729	12,729	12,729	12,729	12,729	103,579
	Debt Service (paid from connection fees)	-						0
	Borrowing if needed	(3,171,123)	6,749,037	3,523,000	8,073,000	83,000	(1,172,000)	14,084,914
Fund Balances After Transfers		$62,972,421	$11,933,287	$8,707,250	$13,257,250	$5,267,250	$4,012,250	$106,149,708
CAPITAL EXPENDITURES:								
99	"Tap-In" Construction Assets	$44,646	$25,000	$25,000	$25,000	$25,000	$25,000	$169,646
100	Departmental Capital	1,118,179	524,037	1,000,000	1,000,000	1,000,000	1,000,000	5,642,216
INFILL PROJECTS BUDGET		997,899						997,899
	Unidentified System Renewal & Replacement	-	107,250	107,250	107,250	107,250	107,250	536,250
	General Capital Projects Contingency	28,093	80,000	80,000	80,000	80,000	80,000	428,093
WATER TREATMENT PLANTS:								
Orange Park Grid Water Treatment Plants:								
	Lucy Branch WTP - New fencing on two sides	25,000	5,000					30,000
	Lucy Branch WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Meadowbrook WTP - Add 16 x 12 Well #5	-					200,000	200,000
	Meadowbrook WTP - Refurbish Ground Storage Tanks & Wells	50,000			150,000			200,000
	Meadowbrook WTP - Refurbish Electric Weatherhead, and 3 Soft Starts	-	40,000					40,000
	Meadowbrook WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Meadowbrook WTP - Refurbish Well # 2	50,000						50,000
	Ridgecrest WTP - Refurbish ground storage tanks	250,000	$250,000					500,000
681	Ridgecrest WTP - Replace Well Pump #1	38,530						38,530
	Ridgecrest WTP - Replace Hydro Tank	65,000						65,000
	Orange Park South WTP - Miscellaneous Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Orange Park South WTP - Tank Painting	-	50,000					50,000
	Orange Park South WTP - New Garage Door on Generator Room	10,000						10,000
	Greenwood/Tanglewood - Refurbish Ground Storage Tanks	-	75,000	10,000	10,000	5,000	5,000	105,000
	Old Jennings Road WTP - Refurbish Hydro Tank	-				50,000		50,000
	Old Jennings Road WTP - Refurbish Hydro Tank	-				50,000		50,000
	Old Jennings Road WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Ridaught WTP - Miscellaneous Plant Upgrades	-	5,000	5,000	5,000	5,000	5,000	25,000
	Ridaught WTP - Ground Storage Tank Repairs	-					25,000	25,000
	Middleburg High School- Replace Hydro Tank	25,000						25,000
Fleming/Pace Grid Water Treatment Plants:								
	Fleming Oaks WTP - Refurbish Ground Storage Tanks	110,000						110,000
	Fleming Oaks WTP - Replace 10,000 Gallon Hydro Tank	50,000						50,000
	Fleming Oaks WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Pace Island WTP - Miscellaneous Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
	Pace Island WTP - New 10,000 Gal. Hydro Tank	-			50,000			50,000
Other Water Treatment Plants:								
	Peters Creek WTP -Plant Expansion & #3 Well	-		490,000	1,000,000			1,490,000
	Peters Creek WTP - Land Costs	75,000						75,000
	Peters Creek WTP - Refr\urbish Tank and Hydro Tank	-			65,000			65,000
	Meadow Lake WTP - Refurbish Exist Hydro Tank	-	50,000	50,000				100,000
	Meadow Lake WTP - #2 Ground storage tank & Electric Service upgrade	-			500,000			500,000
	Mid Clay WTP - Miscellaneous Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
	Oakleaf WTP - Refurbish Hydro Tank	-				40,000		40,000
	Oakleaf WTP - Misc. Plant Upgrades	-		10,000	10,000	10,000	10,000	40,000

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			Clay County Utility Authority							
			2010/2011 Capital Projects Expenditures Budget							
			And Five Year Capital Projects Plan	Adjusted						
			Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
				2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
			Spencers WTP - Miscellaneous Plant Upgrades	11,000	10,000	10,000	10,000	10,000	10,000	61,000
			Spencers WTP - Ground Storage & High Service Pump	-		400,000	140,000			540,000
			Spencers WTP - Replace 2- 2,500 gallon Chlorine Tanks	-	11,000					11,000
			Spencers WTP - Refurbish Hydro Tank	-			50,000			50,000
			Pier Station - Relocate Mid Clay Generator to Pier Station	10,000						10,000
			Pier Station - Refurbish Hydro Tank	15,000						15,000
			Pier Station - Miscellaneous Plant upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
			Ravines WTP - Ground Storage Tank	-		350,000				350,000
			Ravines WTP - Refurbish Tanks	80,000	50,000					130,000
			Ravines WTP - Miscellaneous Plant Upgrades	20,000	5,000	5,000	5,000	5,000	5,000	45,000
			Branscomb Road WTP - Paint Tank	-			25,000			25,000
			Branscomb Road WTP - Replace Hydro Tank and install VFD's	27,000						27,000
			Tanglewood WTP - Refurbish Hydro Tank	-			25,000			25,000
			Tanglewood WTP - Miscellaneous Plant Upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
		583	Keystone WTP (Postmasters Village) And Distribution Plant Expansion-2007	1,604,889						1,604,889
			Keystone WTP - Postmasters Village Refurbish Storage Tanks and Hydro	-			65,000			65,000
			Keystone Club - Replace 10,000 Gal. Hydro tank	50,000						50,000
			Keystone WTP - Refurbish Tanks	15,000	60,000	60,000				135,000
			Keystone WTP - Peach St. - Refurbish Hydro Tank	-	40,000					40,000
			Keystone - Geneva Lake Estates WTP - Miscellaneous Plant Upgrades	5,000	5,000	5,000	5,000	25,000	10,000	55,000
		561	Keystone Ground Water Modeling	100,000						100,000
			CR218 & 301 Industrial Park - Phase I Plant (Highlands DRI)	250,000		250,000	750,000			1,250,000
			WTP - Industrial Development and Prison south of GCS, net of CIAC	-	100,000	225,000	1,500,000			1,825,000
			Sundew Industrial Development and Frank Yong Development	-		100,000	750,000			850,000
		666	Painting - Rehab Various Tanks - Bid 08/09 - A6	538,500						538,500
	RECLAIMED WATER PLANTS:									
			Fleming Island Regional - Reclaimed Water Plant Misc Plant Upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
			Mid Clay Reclaimed Water Plant, Phase II	-		540,000				540,000
		544	Oakleaf Reclaimed Plant - .75 GST and High Service pumping	775,000						775,000
			Old Jennings Road Reclaimed Water Plant	-		400,000				400,000
			Green Cove Regional Reclaimed WTP	-			1,000,000			1,000,000
	WASTE WATER TREATMENT PLANTS:									
		Miller Street WWTP:								
			Miller St. WWTP - Replace Magna Rotors	50,000						50,000
			Miller St. WWTP - Complete Paving of Loop Road	-	30,000					30,000
		669	Miller St. WWTP - Replace Sludge Facility	2,767,016						2,767,016
			Miller St. WWTP - Miscellaneous Plant Upgrades	-	20,000	20,000	20,000	20,000	20,000	100,000
		634	Miller St. WWTP - Filters, Pump Out Station, Plant upgrades	6,001,282						6,001,282
			Miller St. WWTP - Install mixers in surge tank for odor control	-			100,000			100,000
		684	Miller St. WWTP - #2 Clarifier Rehab	75,000						75,000
			Miller St. WWTP - Paint #2 and #3 Clarifier	-		25,000			35,000	60,000
		702	Miller St. WWTP - Repair walls on sludge beds	8,540						8,540
			Miller St. WWTP - Enclosure for Roto Screens for Odor Control	-	10,000					10,000
			Miller St. WWTP - 2 Way Screw Conveyor for Centrifudge	-	10,000					10,000
			Miller St. WWTP - Remove Sludge Facility Roof	-	10,000					10,000
		Ridaught WWTP:								
		509	Ridaught WWTP - Phase III Expansion	8,442,589						8,442,589
			Ridaught WWTP - Miscellaneous Plant Upgrades And Improvements	-	20,000	20,000	20,000	20,000	20,000	100,000
		605	Ridaught WWTP - Replace Sludge Facility	1,586,878						1,586,878
			Ridaught WWTP - New Storage Tank and Shelter for SO2 Storage	-	6,000					6,000
		Fleming Island Regional WWTP:								
			Fleming Island Reg. WWTP - Install #4 Effluent Pump	66,000						66,000
			Fleming Island Reg. WWTP - Convert CL2 tanks to Storage Building	-			25,000			25,000
		589	Fleming Island Reg. WWTP - Install BioChem Class A Sludge Treatment Syste	2,413,838						2,413,838
		680	Fleming Island Reg. WWTP - Relocate Spencer's Generator to the effluent pum	358,200						358,200

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		Clay County Utility Authority							
		2010/2011 Capital Projects Expenditures Budget							
		And Five Year Capital Projects Plan	Adjusted						
		Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
			2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
		Fleming Island Reg. WWTP - Replace Odor Control system w/sponge	-			50,000			50,000
		Fleming Island Reg. WWTP - Convert digester to surge after BioChem installed	10,000						10,000
		Fleming Island Reg. WWTP - #4 Clarifier	-				700,000		700,000
		Fleming Island Reg. WWTP - Paint Clarifier #1	-					40,000	40,000
	682	Fleming Island Reg. WWTP - 8" FM BCR Filtrate pump station	7,243						7,243
		Fleming Island Reg. WWTP - 2 way Screw Conveyor for Centrifuge	-	10,000					10,000
		Fleming Island Reg. WWTP - Eimco DO Control in Aeration Tank	-	80,000					80,000
		Fleming Island Reg. WWTP - Miscellaneous Plant Upgrades	20,000	20,000	20,000	20,000	20,000	20,000	120,000
	Fleming Oaks WWTP:								
		Fleming Oaks WWTP - Outfall Dock Repair	-			100,000			100,000
	Mid Clay WWTP:								
	685	Mid Clay WWTP - Relocate Spencer's filter and Fleming Isl. Generator to Mid C	30,000	10,000					40,000
		Mid Clay WWTP - paint clarifier, aeration tank and digesters	-		50,000				50,000
		Mid Clay WWTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Ravines WWTP:								
		Ravines WWTP - Paint Aeration/Clarifier	-	15,000					15,000
		Ravines WWTP - Rehab and Paint Surge Tank	-	40,000					40,000
		Ravines WWTP - Misc. Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
	Spencers WWTP:								
		Spencers WWTP - Miscellaneous Plant Upgrades	-	35,000	35,000	35,000	35,000	35,000	175,000
	686	BCR Facility-Filtrate Lift Station Improvements	40,000						40,000
		Spencers WWTP - Install BioChem Class A Sludge System	975,000						975,000
	540	Spencers WWTP - Phase V Expansion	8,541,116						8,541,116
		Spencers WWTP - Paint Reject Tanks	-					100,000	100,000
		Spencers WWTP - 2 Way Screw Conveyor for Centrifuge	-	10,000					10,000
		Spencers WWTP - Paving	-	70,000					70,000
	Peters Creek WWTP:								
		Peters Creek WWTP - Land Acquisition	634,050						634,050
		Peters Creek WWTP - Phase II	-			500,000	750,000		1,250,000
		Peters Creek WWTP - BCR Sludge Treatment Plant	-				1,100,000	1,100,000	2,200,000
		Peters Creek WWTP - Phase III Expansion	-				50,000	50,000	100,000
		Peters Creek WWTP - Miscellaneous Plant Upgrades	-	5,000	5,000	5,000	5,000	5,000	25,000
	CR 218 & 301 - Industrial Park:								
		CR 218 & 301 - Industrial Park - Phase 1 Plant/ Highland DRI	-		550,000	750,000			1,300,000
	Keystone WWTP Plant And Collection System								
		Keystone WWTP and Collection System Misc Expansion	50,000						50,000
		Keystone Wastewater Treatment Plant - Phase II Construction	-	0	400,000	650,000			1,050,000
		Keystone Wastewater Treatment Plant - Refurbish Existing Aeration	-	75,000					75,000
		Keystone WWTP - Relocate Meadowbrook Generator to Keystone	-	10,000					10,000
	Other:								
	683	Lightning Protection @ Biochem Facilities	281,001						281,001
		WWTP - Industrial Development and Prison south of GCS, net of CIAC	-	100,000	150,000	1,800,000			2,050,000
		Sundew Industrial Development and Frank Yong Development	-		125,000	750,000			875,000
		BCR Tank Rehab at Various Plants	-	100,000			100,000		200,000
DISTRIBUTION & COLLECTION SYSTEM:									
	All Systems:								
		Water & Wastewater System Rehab - 2007-2008	2,614,589	1,500,000	500,000	500,000	500,000	500,000	6,114,589
	676	Libra Lane Meadowbrook U-10 Water Main & Service Rehab	26,577						26,577
	677	Lakeside Estates Unit 1-2-3 Woodland-Cedarcrest-Hollyridge WM & Service Re	29,222						29,222
		Miscellaneous Trunk Main Upgrades	114,563	50,000	50,000	50,000	50,000	50,000	364,563
		Various Relocations & ROW Acquisitions	166,398	50,000					216,398
	610	Inventory- WWtr System Rehab 2008	74,569						74,569
		Upgrade Various Lift Stations, including hydro tanks	333,860	50,000					383,860
	526	Lift Station Back up Generators Phase III & IV	1,081,932						1,081,932
	668	Lift Station Back up Generators Phase V	482,188						482,188

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Clay County Utility Authority

2010/2011 Capital Projects Expenditures Budget
And Five Year Capital Projects Plan
Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010

		Adjusted Fiscal Year 2009/2010	Fiscal Year 2010/2011	Fiscal Year 2011/2012	Fiscal Year 2012/2013	Fiscal Year 2013/2014	Fiscal Year 2014/2015	TOTALS
Kingsley System Distribution & Collection:								
	Hollycrest-Repair Manhole near Lift Station	15,000						15,000
571	Lakeside Estates Unit 7 Water Service Rehab	150,000						150,000
	Collection System Hydro tank upgrades	-	50,000	50,000	50,000	50,000	50,000	250,000
641	Lift Station 18 - Wells Ridge Rehab	42,000						42,000
659	Loch Rane Storm Pond - Relocation of Wtr and WWtr Utilities	259,079						259,079
	US 17 Loop Water Main on the East Side Raggedy Point to Allegro	-	150,000					150,000
691	Sewer Rehab #18 - Linden Lane	51,378						51,378
689	Sewer Rehab #17 - Meadowbrook Units 6-8	11,677						11,677
687	Sewer Rehab #16 - LS#2 to lakeside U9 dukes trailer park lakeside U7	225,217						225,217
706	Sewer Rehab #19 - Foxridge 1 -1A & 2	21,615						21,615
696	Parliment Court-Refurbish Gravity Sewer	80,000						80,000
652	Foxridge - Bottomridge Drainage Culver - access to existing sewer main for ma	107,469						107,469
707	Lester Murray Lane Manholes 1-5 Emergency Repairs	25,636						25,636
	Lakeshore & White Owl - Loop 8" Water Main	30,000						30,000
	Mocassin Slough Sanitary Sewer Main Phase II	-						-
528	Heritage Hills to Spencer WWTP - Trunk FM & LS Upgrade	7,311,778						7,311,778
698	Orion and Ursa Street Water Rehab	73,000						73,000
	Peoria Rd - Relocate and Protect Wtr & WWtr utilities due to County Rd paving	-						-
704	Rehab LS # 7 - Pine Island	10,000						10,000
	Doctors Lake Dr. - Utility adjustment due to bike path renovation	150,000						150,000
Spencers System Distribution & Collection								
	Spencers 12" Water Main To Backfeed Orange Park Country Club	-		190,000				190,000
	Miscellaneous Trunk Main Upgrades	295,116						295,116
	Eagle Landing #6 - Estimated Cost Share	125,000						125,000
694	Oakleaf Regional Park Ph1 Off-site Water Main Extension	50,000						50,000
Clay System Distribution & Collection:								
	Brannanfied CR220 Trunk Main inter connects	141,674						141,674
	Maverick Trails Apts.-Sewer Repair	25,000						25,000
	Maverick Trails Apts.-Refurbish Pump Station	40,000						40,000
678	CR209 - Relocate Mains Due to Road Construction	25,000						25,000
	Cost Share - Extension from Mayfield Annex to Blanding	37,800						37,800
	College Drive- W&S Extension to Intersection of Old Jennings Road	75,000						75,000
661	Coopergate LS 56 Rehab and Upgrade	66,338						66,338
	CR 220 & Baxley - Utility adjustments accommodate road work	5,000						5,000
	CR 220, 220A, SR21, Long Bay Water and FM Extensions	300,000						300,000
612	Updgrade Liftstation 37 - SouthLake	60,000						60,000
701	CR 220 Wtr & WWtr interconnection - Salvation Army to Pinecrest Manor	100,000						100,000
672	Ridaught WWTP - Treemendous BBQ Wtr & WWtr Extension	67,363						67,363
Mid Clay System Distribution & Collection:								
	Sandridge To Meadowlake 12" Water Loop	75,900						75,900
	Development South of Royal Point - Cost Share Force Main & Liftstation	220,000						220,000
	Lake Asbury Dr. to Cokesbury - Water main loop	162,500						162,500
	Mid Clay to Ridaught Trunk Reclaim	-	3,275,000					3,275,000
	Bradly Creek Crossing Cost Share	129,500						129,500
	Asbury Preserve and Plantation - Install Wtr & WWtr stubs to south and secure	21,000						21,000
Ravines System Distribution & Collection:								
	Ravines Off Site Mains - Middleburg W&S Extensions	1,878,337						1,878,337
Peters Creek System Distribution & Collection:								
	GCS Trunk Water Main To Proposed School Area and other interconnections	-	250,000					250,000
675	Upgrade 4" to 6" FM - EOC Bldg to POC to CCUA	10,437						10,437
	GCS Trunk Force Main & Water Mains From Development Area To Phase I WV	-	150,000					150,000
Keystone Distribution System:								
	Keystone - Water Distribution System Miscellaneous	125,805						125,805
606	Keystone - Water Distribution System - Postmaster to Keystone	375,000	450,000					825,000

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			Clay County Utility Authority						
			2010/2011 Capital Projects Expenditures Budget						
			And Five Year Capital Projects Plan	Adjusted					
			Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
				2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
			Keystone Water Distribution System - Keystone Club to Geneva Lake Estates	460,000						460,000
			Keystone WWtr Collection System Expansion	50,000						50,000
RECLAIMED WATER TRANSMISSION & DISTRIBUTION SYSTEMS:										
		Clay System Reuse Transmission & Distribution System:								
			Clay System- Old Jennings Rd Tynes Elementary to Allie Murray Rd - Reclaim	135,000						135,000
		Mid Clay System Reuse Transmission & Distribution System:								
			Development South of Royal Point - Cost Share Reclaimed Main	100,000						100,000
			Bradley Creek Crossing - Cost Share	79,000						79,000
			Install 20" Reclaimed Water Transmission Main From Ridaught to Mid Clay-Bla	-	3,275,000					3,275,000
		Kingsley System Reclaimed Water Transmission & Distribution System:								
	529		OP Reclaimed Water Main Transmission	1,820,000						1,820,000
			Orange Park Country Club Reclaimed Main extension	170,000						170,000
		All Systems:								
			Miscellaneous Reclaimed Mains	-	100,000	100,000	100,000	100,000	100,000	500,000
			Miscellaneous Reclaimed Mains Upgrades	1,016,823	50,000	50,000	50,000	50,000	50,000	1,266,823
GENERAL & ADMINISTRATIVE										
			Maintenance Facility Phase II & Paving	-		870,000				870,000
			Equipment Storage Facility, Pond & Fencing	-		1,020,000				1,020,000
	625		Office Reclaimed Irrigation System	3,721						3,721
	599		GIS Mapping & System Integration	534,008						534,008
			Meters - Growth Potable and Reuse	350,000	250,000	250,000	250,000	250,000	250,000	1,600,000
	234		Meters - Retrofit for Radio Read	1,482,863						1,482,863
			TOTAL CAPITAL EXPENDITURES	$ 62,972,421	$ 11,933,287	$ 8,707,250	$ 13,257,250	$ 5,267,250	$ 4,012,250	$ 106,149,708
Fund Balance September 30, 2008-2009-2010-2011-2012-2013-2014				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($0)**

ote: Capital Projects for FY 2009/2010 not finished have been added to this year's budget along with their funding sources.

CAPITAL IMPROVEMENTS

GOALS, OBJECTIVES AND POLICIES

Goal CI 9 The City of Keystone Heights shall undertake actions necessary to employ sound fiscal policies to adequately provide needed public facilities to all residents within its jurisdiction in a manner which protects investments in existing facilities, maximizes the use of existing facilities, and promotes orderly growth.

OBJECTIVE

CI 9.1 Annually, through intergovernmental coordination and the budgetary process, capital improvements will be provided to correct existing deficiencies, to accommodate desired future growth, and to replace worn-out or obsolete facilities, as indicated in the elements of the comprehensive plan.

Policies

CI 9.1.1 Keystone Heights shall include capital projects identified in the elements of this plan that are required to maintain the adopted level of service or to replace worn out or obsolete facilities as capital improvement projects within the adopted 5-year Schedule of Capital Improvements.

CI 9.1.2 The City shall maintain an inventory of all deficient, obsolete or worn-out capital facilities and an inventory of projected capital improvements needed to satisfy deficiencies, meet projected demands, and to replace or repair obsolete or worn-out capital facilities. The inventory shall be updated on an annual basis, at a minimum. Inventories related to public school facilities will be the responsibility of the School District; inventories related to potable water and wastewater treatment will be coordinated with the Clay County Utility Authority.

CI 9.1.3 To the extent they include capital improvements projects that address existing or projected deficiencies within the City, the City shall annually adopt into its Capital Improvement Element that portion of the School Board's Educational Facilities Plan (EFP) providing a five-year schedule, the Five Year Schedule of Capital Improvements adopted by the Clay County Utility Authority and the Five Year Work Program of the Florida Department of Transportation District 2.

CI 9.1.4 Proposed capital improvements projects shall be evaluated and ranked in order of priority according to the following guidelines. Ranking of public school facilities will be the responsibility of the School District.

a. whether the project is needed to protect public health and safety including the elimination of a public hazard, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities;
b. whether the project eliminates an existing deficiency;
c. whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement cost, provides services to developed areas lacking full service, or promote in-fill development; and
d. whether the project represents a logical extension of facilities and services.
e. whether the project is financially feasible.
f. whether the project promotes the plans of any state, regional, or local agency or service provider responsible for funding public facilities within the City.

CI 9.1.5 The Five Year Schedule of Capital Improvements may be amended by the City by ordinance and not deemed to be an amendment to the comprehensive plan provided the changes are corrections, updates, and modifications concerning costs; revenue sources; acceptance of facilities pursuant to dedications which are consistent with the plan; or the date of construction of any facility enumerated within.

Expenditures of the City funded by the same revenue source as capital improvements included in the Five-Year Schedule of Capital Improvements may be revised provided the financial feasibility of the Five-Year Schedule of Capital Improvements is maintained.

A plan amendment is required to eliminate, defer or delay construction of any public facility which is needed to maintain the adopted level of service and which is included in the 5-Year Schedule of Capital Improvements.

CI 9.1.6 The City shall replace worn out capital facilities under their jurisdiction, when it is cost effective to replace the facilities and economically feasible for the City.

OBJECTIVE

CI 9.2: Future development will bear a pro rata share of the costs necessary to finance improvements necessitated by such development in order to adequately maintain adopted LOS standards.

Policies

CI 9.2.1 New development and redevelopment will be required to contribute a proportionate or fair share of the costs necessary to provide additional public facility capacity necessary to serve such developments and maintain the LOS standards stipulated in this plan. Funds may not be utilized to address backlogged facilities.

CI 9.2.2 The City may allow a landowner to proceed with development of a specific parcel of land notwithstanding a failure of the development to satisfy transportation concurrency, when all of the following factors are shown to exist:

a. The City has adopted a comprehensive plan that is in compliance;

b. The proposed development would be consistent with the future land use designation for the specific property and with applicable sections of the City's adopted comprehensive plan;

c. The transportation facilities necessary to serve the proposed development are included in a financially feasible capital improvement schedule and the City has not implemented the necessary traffic circulation improvements as required by the schedule;

d. The City has adopted policies within this element to assess a fair share of the cost of providing the transportation facilities necessary to serve the proposed development;

e. The fair share assessment shall have a reasonable relationship to the transportation impact that is generated by the proposed development; and

f. The landowner has made a binding commitment to the City to pay the fair share of the cost of providing the transportation facilities necessary to serve the proposed development.

CI 9.2.3 The City will adopt a Fair Share Ordinance in 2011 that will allow development on a particular parcel despite the fact the development could not satisfy transportation concurrency where such approval is consistent with Section 163.3180 (11) and (16), Florida Statutes.

CI 9.2.4 Keystone Heights shall require dedications for the provision of recreation and open space as a condition of plan approval for residential development.

OBJECTIVE

CI 9.3 Annually through the budgetary process, Keystone Heights shall manage its fiscal resources to ensure the provision of needed capital improvements such that

public facility needs created by unexpired development orders do not exceed the ability of the City to provide needed capital improvements.

Policies

CI 9.3.1 Prior to the issuance of a development order or permit, Keystone Heights will ensure that public facilities and services necessary to support proposed development and to maintain the adopted level of service standards will be in place at the time a development order or permit is issued or will be in place concurrent with the impacts of development or that development orders and permits are specifically conditioned on the availability of facilities and services necessary to serve the proposed development.

CI 9.3.2 Keystone Heights shall include a five-year capital improvement program and annual capital budget as part of its budgeting process. The City shall annually update its 5-Year Schedule of Capital Improvements by amendment to the comprehensive plan.

CI 9.3.3 Efforts shall be made to secure grants or private funds whenever available to finance the provision of capital improvements

CI 9.3.4 The City shall limit total indebtedness to no more than 20 percent of its governmental fund revenues.

CI 9.3.5 The City shall maintain a monitoring system that shall at least annually (a) update the available capacity for roads, sanitary sewer, potable water, solid waste, drainage, parks and recreation, public schools and mass transit (if applicable) facilities; and (b) prepare a Five Year Schedule of Capital Improvements or update the schedule within the adopted Five-Year Schedule of Capital Improvements recognizing the School District of Clay County's annually adopted financially feasible Five-Year Educational Facilities Plan, the Five Year Capital Plan for the Clay County Utility Authority and the Five Year Work Program of the FDOT District 2.

OBJECTIVE

CI 9.4 Based upon levels of service standards included in this plan, the issuance of final development orders shall be conditioned upon the availability of public infrastructure at the adopted level of service standards.

Policies

CI 9.4.1 Keystone Heights shall use the following LOS standards in reviewing the impacts of new development and redevelopment on public facility capacity:

Sanitary Sewer: 250 gpd/ERU

Solid Waste: 3.99 pounds per person per day

Drainage:

Drainage Facility	Design Frequency
Crossdrains for major watersheds	50 years 24 hours
Detention/Retention/Attenuation Basins	25-year, 24 hour critical event with protection to a 100 year rainfall
Bridges and Bridge Culverts	50 years
Crossdrains for minor watersheds	25 years
Crossdrains and ditches for internal drainage	25 years
Sidedrains for roadway ditches	10 years

Potable Water: 294gpd/ ERU

Transportation:

Segment	Adopted PM Peak LOS	Maximum Service Volume
SR 100 from SR 21 to NW City Limits	C	1,370 [1]
SR 100 from SR 21 to SE City Limits	C	1,370 [1]
SR 21 from N City Limits to SR 100	D	1,480 [1]
SR 21 from SR 100 to S City Limits	D	1,480 [1]
Orchid Avenue	D	670 [2]
Nightingale Street	D	670 [2]
Pecan Street	D	670 [2]
Commercial Circle	D	670 [2]

[1] FDOT Generalized Tables, Table 5

[2] Level of Service (LOS)/Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module with PM Peak Factor of 0.10.

Recreation (Parks): Neighborhood Parks: 3.5 acres/ 1,000 population

Recreation Facilities:

Facility	Level of Service
Freshwater Beach	0.5 acres per 1,000 population
Basketball Court	1 per 2,000 population
Equipped Play Area	1 per 1,000 population
Urban Jogging/ Hiking Trail	1 per 5,000 population
Tennis	1 per 2,000 population
Volleyball Courts	1 per 1,000 population
Dog Park	1 per 2,000 population
Covered Picnic (Pavilions)	1 per 1,000 population

Public School Facilities: (based on lesser of FISH Capacity or Core Capacity):

Elementary Schools	110 percent of capacity
Middle Schools	110 percent of capacity
High Schools	110 percent of capacity

CI 9.4.2 The City shall coordinate land use decisions with available or projected fiscal resources with a 5 Year Schedule of Capital Improvements to maintain the adopted level of service for existing and projected facility needs.

CI 9.4.3 Future Land Use Amendments, including those changing the Future Land Use Map shall include an analysis of the public infrastructure required to support any proposed increase in impacts associated with development permitted under the proposed amendment and shall identify strategies or mitigation that may be required to maintain the adopted level of service.

CI 9.4.4 Upon adoption of the Plan, no development order will be issued unless the developer demonstrates that the public facilities are available and meet the level of service standards as defined in policies CI 9.4.1 and CI 9.5.2.

OBJECTIVE

CI 9.5 The City shall maintain a Concurrency Management System (CMS) which shall ensure that the impacts resulting from the issuance of final development permits shall meet the adopted level of service standards for the affected public facilities ~~as~~ established in this Element.

Policies

CI 9.5.1 The Concurrency Management System shall incorporate provisions which shall require that the level of service standards for the following public facilities are met prior to the issuance of a final development order : roads, sanitary sewer, potable water, solid waste, drainage, mass transit, parks and recreation and public school facilities.

CI 9.5.2 To ensure that public facilities and services to support development are available concurrent with the impacts of development, the CMS shall require that the following minimum standards are satisfied:

a. At the time a Concurrency Reservation Certificate (CRC) is issued, the necessary solid waste, drainage, sanitary sewer, potable water and public school facilities must be:

1. in place and available to serve the new development; or

2. guaranteed in an enforceable development agreement, pursuant to Section 163.3220, F.S., or development order issued pursuant to Chapter 380, F.S., to be in place and available to serve the new development at the time a certificate of occupancy is issued.

b. For parks and recreation facilities, one of the following must be met:

At the time the CRC is issued, the necessary facilities and services are:

1. in place or under actual construction; or

2. in place and available to serve the new development; or

3. guaranteed in an enforceable development agreement, pursuant to Section 163.3220, F.S., or development order issued pursuant to Chapter 380, F.S., to

be in place and available to serve the new development at the time a certificate of occupancy is issued; or

4. a CRC is issued subject to the condition that at the time a certificate of occupancy is issued:

i. acreage for the necessary facilities and services is dedicated or acquired by the County or funds in the amount of the developer's fair share are committed; and

ii. the necessary facilities and services are scheduled to be in place or under actual construction not more than one year after a certificate of occupancy is issued as provided in the City's 5-Year Schedule of Capital Improvements, a binding executed agreement, or an enforceable development agreement, pursuant to Section 163.3220, F.S., or development order issued pursuant to Chapter 380, F.S.

c. For transportation facilities (roads and mass transit), one of the following must be met:

1. At the time the CRC is issued, the necessary facilities and services are in place or under actual construction; or

2. A CRC is issued subject to the condition that the necessary facilities are scheduled to be in place or under actual construction at the time a certificate of occupancy is issued as provided in the third ~~first~~ year of the adopted Florida Department of Transportation's Five-Year Work Program or the City's 5-Year Schedule of Capital Improvements, a binding executed agreement, or an enforceable development agreement, pursuant to Section 163.3220, F.S. or development order issued pursuant to Chapter 380, F.S.

CAPITAL IMPROVEMENTS SCHEDULES

Five-Year Schedule of Capital Improvements

The City's 5-Year Capital Improvements Plan consists of up to four components as required to reflect capital improvements necessary to meet the existing or projected demand for public facility infrastructure:

- The schedule of capital improvements funded by the City or by enforceable development agreement or interlocal agreement for the five year period

- The School District of Clay County's annually adopted financially feasible Five-Year Educational Facilities Plan (EFP), consisting of the following attachments:

  Projected New Revenue (EFP Table 3.1)
  District Capital Outlay Expenditures (EFP Table 3.2)
  Capital Projects Plan Worksheet (EFP Table 3.3)

- The Five Year Capital Plan of the Clay County Utility Authority

- The adopted Five Year Work Program of the Florida Department of Transportation, District 2

For the period 201-11 through 2014-15, the City of Keystone Heights, Clay County School District and the Florida Department of Transportation identify no capacity improvements necessary to maintain the adopted level of service for development within the City of Keystone Heights.

City Of Keystone Heights
Five Year Schedule of Capital Improvements
FY 2010/11 to FY 2015/16

Expenditures

IMPROVEMENT	DESCRIPTION	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	5 YEAR TOTAL
No Capacity Improvements Required to Maintain Adopted LOS		$0	$0	$0	$0	$0	$0	$0
TOTAL EXPENDITURES		$0	$0	$0	$0	$0	$0	$0

Revenues

SOURCE	DESCRIPTION	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	5 YEAR TOTAL
No Revenue required to Maintain Adopted LOS		$0	$0	$0	$0	$0	$0	$0
TOTAL REVENUE		$0	$0	$0	$0	$0	$0	$0
Project Expenditures		$0	$0	$0	$0	$0	$0	$0
Carry Forward		$0	$0	$0	$0	$0	$0	$0

October 2010

Clay County Utility Authority

2010/2011 Capital Projects Expenditures Budget
And Five Year Capital Projects Plan
Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010

		Adjusted						
		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
		2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
REVENUES:								
Fund Balance October 1, 2009		$22,743,841						$22,743,841
	Funds Spent on Jobs Prior to FY 2009/2010	30,167,958						30,167,958
	Renewal & Replacement Transfer Including Construction	1,530,440	1,686,901	1,686,901	1,686,901	1,686,901	1,686,901	9,964,945
	Environmental Reuse Capital Fund Transfer	715,030	794,321	794,321	794,321	794,321	794,321	4,686,635
	Connection Fees Transfer	205,381						205,381
	Departmental Capital Transfer	1,364,716	1,563,211	1,563,211	1,563,211	1,563,211	1,563,211	9,180,771
	Surplus Transfer (Operating Contingency Utility & Construction)	1,003,436	1,127,088	1,127,088	1,127,088	1,127,088	1,127,088	6,638,876
	Tap-In Construction Funds	31,361						31,361
	Grant Money	8,341,447						8,341,447
	Restricted Interest Earnings	39,934	12,729	12,729	12,729	12,729	12,729	103,579
	Debt Service (paid from connection fees)	-						0
	Borrowing if needed	(3,171,123)	6,749,037	3,523,000	8,073,000	83,000	(1,172,000)	14,084,914
Fund Balances After Transfers		$62,972,421	$11,933,287	$8,707,250	$13,257,250	$5,267,250	$4,012,250	$106,149,708
CAPITAL EXPENDITURES:								
99	"Tap-In" Construction Assets	$44,646	$25,000	$25,000	$25,000	$25,000	$25,000	$169,646
100	Departmental Capital	1,118,179	524,037	1,000,000	1,000,000	1,000,000	1,000,000	5,642,216
INFILL PROJECTS BUDGET		997,899						997,899
	Unidentified System Renewal & Replacement	-	107,250	107,250	107,250	107,250	107,250	536,250
	General Capital Projects Contingency	28,093	80,000	80,000	80,000	80,000	80,000	428,093
WATER TREATMENT PLANTS:								
Orange Park Grid Water Treatment Plants:								
	Lucy Branch WTP - New fencing on two sides	25,000	5,000					30,000
	Lucy Branch WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Meadowbrook WTP - Add 16 x 12 Well #5	-					200,000	200,000
	Meadowbrook WTP - Refurbish Ground Storage Tanks & Wells	50,000			150,000			200,000
	Meadowbrook WTP - Refurbish Electric Weatherhead, and 3 Soft Starts	-	40,000					40,000
	Meadowbrook WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Meadowbrook WTP - Refurbish Well # 2	50,000						50,000
	Ridgecrest WTP - Refurbish ground storage tanks	250,000	$250,000					500,000
681	Ridgecrest WTP - Replace Well Pump #1	38,530						38,530
	Ridgecrest WTP - Replace Hydro Tank	65,000						65,000
	Orange Park South WTP - Miscellaneous Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Orange Park South WTP - Tank Painting	-	50,000					50,000
	Orange Park South WTP - New Garage Door on Generator Room	10,000						10,000
	Greenwood/Tanglewood - Refurbish Ground Storage Tanks	-	75,000	10,000	10,000	5,000	5,000	105,000
	Old Jennings Road WTP - Refurbish Hydro Tank	-				50,000		50,000
	Old Jennings Road WTP - Refurbish Hydro Tank	-				50,000		50,000
	Old Jennings Road WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Ridaught WTP - Miscellaneous Plant Upgrades	-	5,000	5,000	5,000	5,000	5,000	25,000
	Ridaught WTP - Ground Storage Tank Repairs	-					25,000	25,000
	Middleburg High School- Replace Hydro Tank	25,000						25,000
Fleming/Pace Grid Water Treatment Plants:								
	Fleming Oaks WTP - Refurbish Ground Storage Tanks	110,000						110,000
	Fleming Oaks WTP - Replace 10,000 Gallon Hydro Tank	50,000						50,000
	Fleming Oaks WTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
	Pace Island WTP - Miscellaneous Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
	Pace Island WTP - New 10,000 Gal. Hydro Tank	-			50,000			50,000
Other Water Treatment Plants:								
	Peters Creek WTP -Plant Expansion & #3 Well	-		490,000	1,000,000			1,490,000
	Peters Creek WTP - Land Costs	75,000						75,000
	Peters Creek WTP - Refr\urbish Tank and Hydro Tank	-			65,000			65,000
	Meadow Lake WTP - Refurbish Exist Hydro Tank	-	50,000	50,000				100,000
	Meadow Lake WTP - #2 Ground storage tank & Electric Service upgrade	-			500,000			500,000
	Mid Clay WTP - Miscellaneous Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
	Oakleaf WTP - Refurbish Hydro Tank	-				40,000		40,000
	Oakleaf WTP - Misc. Plant Upgrades	-		10,000	10,000	10,000	10,000	40,000

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		Clay County Utility Authority							
		2010/2011 Capital Projects Expenditures Budget							
		And Five Year Capital Projects Plan	Adjusted						
		Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
			2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
		Spencers WTP - Miscellaneous Plant Upgrades	11,000	10,000	10,000	10,000	10,000	10,000	61,000
		Spencers WTP - Ground Storage & High Service Pump	-		400,000	140,000			540,000
		Spencers WTP - Replace 2- 2,500 gallon Chlorine Tanks	-	11,000					11,000
		Spencers WTP - Refurbish Hydro Tank	-			50,000			50,000
		Pier Station - Relocate Mid Clay Generator to Pier Station	10,000						10,000
		Pier Station - Refurbish Hydro Tank	15,000						15,000
		Pier Station - Miscellaneous Plant upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
		Ravines WTP - Ground Storage Tank	-		350,000				350,000
		Ravines WTP - Refurbish Tanks	80,000	50,000					130,000
		Ravines WTP - Miscellaneous Plant Upgrades	20,000	5,000	5,000	5,000	5,000	5,000	45,000
		Branscomb Road WTP - Paint Tank	-			25,000			25,000
		Branscomb Road WTP - Replace Hydro Tank and install VFD's	27,000						27,000
		Tanglewood WTP - Refurbish Hydro Tank	-			25,000			25,000
		Tanglewood WTP - Miscellaneous Plant Upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
	583	Keystone WTP (Postmasters Village) And Distribution Plant Expansion-2007	1,604,889						1,604,889
		Keystone WTP - Postmasters Village Refurbish Storage Tanks and Hydro	-			65,000			65,000
		Keystone Club - Replace 10,000 Gal. Hydro tank	50,000						50,000
		Keystone WTP - Refurbish Tanks	15,000	60,000	60,000				135,000
		Keystone WTP - Peach St. - Refurbish Hydro Tank	-	40,000					40,000
		Keystone - Geneva Lake Estates WTP - Miscellaneous Plant Upgrades	5,000	5,000	5,000	5,000	25,000	10,000	55,000
	561	Keystone Ground Water Modeling	100,000						100,000
		CR218 & 301 Industrial Park - Phase I Plant (Highlands DRI)	250,000		250,000	750,000			1,250,000
		WTP - Industrial Development and Prison south of GCS, net of CIAC	-	100,000	225,000	1,500,000			1,825,000
		Sundew Industrial Development and Frank Yong Development	-		100,000	750,000			850,000
	666	Painting - Rehab Various Tanks - Bid 08/09 - A6	538,500						538,500
RECLAIMED WATER PLANTS:									
		Fleming Island Regional - Reclaimed Water Plant Misc Plant Upgrades	5,000	5,000	5,000	5,000	5,000	5,000	30,000
		Mid Clay Reclaimed Water Plant, Phase II	-		540,000				540,000
	544	Oakleaf Reclaimed Plant - .75 GST and High Service pumping	775,000						775,000
		Old Jennings Road Reclaimed Water Plant	-		400,000				400,000
		Green Cove Regional Reclaimed WTP	-			1,000,000			1,000,000
WASTE WATER TREATMENT PLANTS:									
	Miller Street WWTP:								
		Miller St. WWTP - Replace Magna Rotors	50,000						50,000
		Miller St. WWTP - Complete Paving of Loop Road	-	30,000					30,000
	669	Miller St. WWTP - Replace Sludge Facility	2,767,016						2,767,016
		Miller St. WWTP - Miscellaneous Plant Upgrades	-	20,000	20,000	20,000	20,000	20,000	100,000
	634	Miller St. WWTP - Filters, Pump Out Station, Plant upgrades	6,001,282						6,001,282
		Miller St. WWTP - Install mixers in surge tank for odor control	-			100,000			100,000
	684	Miller St. WWTP - #2 Clarifier Rehab	75,000						75,000
		Miller St. WWTP - Paint #2 and #3 Clarifier	-		25,000			35,000	60,000
	702	Miller St. WWTP - Repair walls on sludge beds	8,540						8,540
		Miller St. WWTP - Enclosure for Roto Screens for Odor Control	-	10,000					10,000
		Miller St. WWTP - 2 Way Screw Conveyor for Centrifudge	-	10,000					10,000
		Miller St. WWTP - Remove Sludge Facility Roof	-	10,000					10,000
	Ridaught WWTP:								
	509	Ridaught WWTP - Phase III Expansion	8,442,589						8,442,589
		Ridaught WWTP - Miscellaneous Plant Upgrades And Improvements	-	20,000	20,000	20,000	20,000	20,000	100,000
	605	Ridaught WWTP - Replace Sludge Facility	1,586,878						1,586,878
		Ridaught WWTP - New Storage Tank and Shelter for SO2 Storage	-	6,000					6,000
	Fleming Island Regional WWTP:								
		Fleming Island Reg. WWTP - Install #4 Effluent Pump	66,000						66,000
		Fleming Island Reg. WWTP - Convert CL2 tanks to Storage Building	-			25,000			25,000
	589	Fleming Island Reg. WWTP - Install BioChem Class A Sludge Treatment Syste	2,413,838						2,413,838
	680	Fleming Island Reg. WWTP - Relocate Spencer's Generator to the effluent pum	358,200						358,200

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		Clay County Utility Authority							
		2010/2011 Capital Projects Expenditures Budget							
		And Five Year Capital Projects Plan	Adjusted						
		Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
			2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
		Fleming Island Reg. WWTP - Replace Odor Control system w/sponge	-			50,000			50,000
		Fleming Island Reg. WWTP - Convert digester to surge after BioChem installed	10,000						10,000
		Fleming Island Reg. WWTP - #4 Clarifier	-				700,000		700,000
		Fleming Island Reg. WWTP - Paint Clarifier #1	-					40,000	40,000
	682	Fleming Island Reg. WWTP - 8" FM BCR Filtrate pump station	7,243						7,243
		Fleming Island Reg. WWTP - 2 way Screw Conveyor for Centrifuge	-	10,000					10,000
		Fleming Island Reg. WWTP - Eimco DO Control in Aeration Tank	-	80,000					80,000
		Fleming Island Reg. WWTP - Miscellaneous Plant Upgrades	20,000	20,000	20,000	20,000	20,000	20,000	120,000
		Fleming Oaks WWTP:							
		Fleming Oaks WWTP - Outfall Dock Repair	-			100,000			100,000
		Mid Clay WWTP:							
	685	Mid Clay WWTP - Relocate Spencer's filter and Fleming Isl. Generator to Mid C	30,000	10,000					40,000
		Mid Clay WWTP - paint clarifier, aeration tank and digesters	-		50,000				50,000
		Mid Clay WWTP - Miscellaneous Plant Upgrades	10,000	10,000	10,000	10,000	10,000	10,000	60,000
		Ravines WWTP:							
		Ravines WWTP - Paint Aeration/Clarifier	-	15,000					15,000
		Ravines WWTP - Rehab and Paint Surge Tank	-	40,000					40,000
		Ravines WWTP - Misc. Plant Upgrades	-	10,000	10,000	10,000	10,000	10,000	50,000
		Spencers WWTP:							
		Spencers WWTP - Miscellaneous Plant Upgrades	-	35,000	35,000	35,000	35,000	35,000	175,000
	686	BCR Facility-Filtrate Lift Station Improvements	40,000						40,000
		Spencers WWTP - Install BioChem Class A Sludge System	975,000						975,000
	540	Spencers WWTP - Phase V Expansion	8,541,116						8,541,116
		Spencers WWTP - Paint Reject Tanks	-					100,000	100,000
		Spencers WWTP - 2 Way Screw Conveyor for Centrifuge	-	10,000					10,000
		Spencers WWTP - Paving	-	70,000					70,000
		Peters Creek WWTP:							
		Peters Creek WWTP - Land Acquisition	634,050						634,050
		Peters Creek WWTP - Phase II	-			500,000	750,000		1,250,000
		Peters Creek WWTP - BCR Sludge Treatment Plant	-				1,100,000	1,100,000	2,200,000
		Peters Creek WWTP - Phase III Expansion	-				50,000	50,000	100,000
		Peters Creek WWTP - Miscellaneous Plant Upgrades	-	5,000	5,000	5,000	5,000	5,000	25,000
		CR 218 & 301 - Industrial Park:							
		CR 218 & 301 - Industrial Park - Phase 1 Plant/ Highland DRI	-		550,000	750,000			1,300,000
		Keystone WWTP Plant And Collection System							
		Keystone WWTP and Collection System Misc Expansion	50,000						50,000
		Keystone Wastewater Treatment Plant - Phase II Construction	-	0	400,000	650,000			1,050,000
		Keystone Wastewater Treatment Plant - Refurbish Existing Aeration	-	75,000					75,000
		Keystone WWTP - Relocate Meadowbrook Generator to Keystone	-	10,000					10,000
		Other:							
	683	Lightning Protection @ Biochem Facilities	281,001						281,001
		WWTP - Industrial Development and Prison south of GCS, net of CIAC	-	100,000	150,000	1,800,000			2,050,000
		Sundew Industrial Development and Frank Yong Development	-		125,000	750,000			875,000
		BCR Tank Rehab at Various Plants	-	100,000			100,000		200,000
		DISTRIBUTION & COLLECTION SYSTEM:							
		All Systems:							
		Water & Wastewater System Rehab - 2007-2008	2,614,589	1,500,000	500,000	500,000	500,000	500,000	6,114,589
	676	Libra Lane Meadowbrook U-10 Water Main & Service Rehab	26,577						26,577
	677	Lakeside Estates Unit 1-2-3 Woodland-Cedarcrest-Hollyridge WM & Service Re	29,222						29,222
		Miscellaneous Trunk Main Upgrades	114,563	50,000	50,000	50,000	50,000	50,000	364,563
		Various Relocations & ROW Acquisitions	166,398	50,000					216,398
	610	Inventory- WWtr System Rehab 2008	74,569						74,569
		Upgrade Various Lift Stations, including hydro tanks	333,860	50,000					383,860
	526	Lift Station Back up Generators Phase III & IV	1,081,932						1,081,932
	668	Lift Station Back up Generators Phase V	482,188						482,188

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Clay County Utility Authority

2010/2011 Capital Projects Expenditures Budget
And Five Year Capital Projects Plan
Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010

		Adjusted Fiscal Year 2009/2010	Fiscal Year 2010/2011	Fiscal Year 2011/2012	Fiscal Year 2012/2013	Fiscal Year 2013/2014	Fiscal Year 2014/2015	TOTALS
Kingsley System Distribution & Collection:								
	Hollycrest-Repair Manhole near Lift Station	15,000						15,000
571	Lakeside Estates Unit 7 Water Service Rehab	150,000						150,000
	Collection System Hydro tank upgrades	-	50,000	50,000	50,000	50,000	50,000	250,000
641	Lift Station 18 - Wells Ridge Rehab	42,000						42,000
659	Loch Rane Storm Pond - Relocation of Wtr and WWtr Utilities	259,079						259,079
	US 17 Loop Water Main on the East Side Raggedy Point to Allegro	-	150,000					150,000
691	Sewer Rehab #18 - Linden Lane	51,378						51,378
689	Sewer Rehab #17 - Meadowbrook Units 6-8	11,677						11,677
687	Sewer Rehab #16 - LS#2 to lakeside U9 dukes trailer park lakeside U7	225,217						225,217
706	Sewer Rehab #19 - Foxridge 1 -1A & 2	21,615						21,615
696	Parliment Court-Refurbish Gravity Sewer	80,000						80,000
652	Foxridge - Bottomridge Drainage Culver - access to existing sewer main for ma	107,469						107,469
707	Lester Murray Lane Manholes 1-5 Emergency Repairs	25,636						25,636
	Lakeshore & White Owl - Loop 8" Water Main	30,000						30,000
	Mocassin Slough Sanitary Sewer Main Phase II	-						-
528	Heritage Hills to Spencer WWTP - Trunk FM & LS Upgrade	7,311,778						7,311,778
698	Orion and Ursa Street Water Rehab	73,000						73,000
	Peoria Rd - Relocate and Protect Wtr & WWtr utilities due to County Rd paving	-						-
704	Rehab LS # 7 - Pine Island	10,000						10,000
	Doctors Lake Dr. - Utility adjustment due to bike path renovation	150,000						150,000
Spencers System Distribution & Collection								
	Spencers 12" Water Main To Backfeed Orange Park Country Club	-		190,000				190,000
	Miscellaneous Trunk Main Upgrades	295,116						295,116
	Eagle Landing #6 - Estimated Cost Share	125,000						125,000
694	Oakleaf Regional Park Ph1 Off-site Water Main Extension	50,000						50,000
Clay System Distribution & Collection:								
	Brannanfied CR220 Trunk Main inter connects	141,674						141,674
	Maverick Trails Apts.-Sewer Repair	25,000						25,000
	Maverick Trails Apts.-Refurbish Pump Station	40,000						40,000
678	CR209 - Relocate Mains Due to Road Construction	25,000						25,000
	Cost Share - Extension from Mayfield Annex to Blanding	37,800						37,800
	College Drive- W&S Extension to Intersection of Old Jennings Road	75,000						75,000
661	Coopergate LS 56 Rehab and Upgrade	66,338						66,338
	CR 220 & Baxley - Utility adjustments accommodate road work	5,000						5,000
	CR 220, 220A, SR21, Long Bay Water and FM Extensions	300,000						300,000
612	Updgrade Liftstation 37 - SouthLake	60,000						60,000
701	CR 220 Wtr & WWtr interconnection - Salvation Army to Pinecrest Manor	100,000						100,000
672	Ridaught WWTP - Treemendous BBQ Wtr & WWtr Extension	67,363						67,363
Mid Clay System Distribution & Collection:								
	Sandridge To Meadowlake 12" Water Loop	75,900						75,900
	Development South of Royal Point - Cost Share Force Main & Liftstation	220,000						220,000
	Lake Asbury Dr. to Cokesbury - Water main loop	162,500						162,500
	Mid Clay to Ridaught Trunk Reclaim	-	3,275,000					3,275,000
	Bradly Creek Crossing Cost Share	129,500						129,500
	Asbury Preserve and Plantation - Install Wtr & WWtr stubs to south and secure	21,000						21,000
Ravines System Distribution & Collection:								
	Ravines Off Site Mains - Middleburg W&S Extensions	1,878,337						1,878,337
Peters Creek System Distribution & Collection:								
	GCS Trunk Water Main To Proposed School Area and other interconnections	-	250,000					250,000
675	Upgrade 4" to 6" FM - EOC Bldg to POC to CCUA	10,437						10,437
	GCS Trunk Force Main & Water Mains From Development Area To Phase I WV	-	150,000					150,000
Keystone Distribution System:								
	Keystone - Water Distribution System Miscellaneous	125,805						125,805
606	Keystone - Water Distribution System - Postmaster to Keystone	375,000	450,000					825,000

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			Clay County Utility Authority						
			2010/2011 Capital Projects Expenditures Budget						
			And Five Year Capital Projects Plan	Adjusted					
			Adjusted for Prior Year Jobs Not Completed as Of 9/30/2010	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
				2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	TOTALS
			Keystone Water Distribution System - Keystone Club to Geneva Lake Estates	460,000						460,000
			Keystone WWtr Collection System Expansion	50,000						50,000
RECLAIMED WATER TRANSMISSION & DISTRIBUTION SYSTEMS:										
		Clay System Reuse Transmission & Distribution System:								
			Clay System- Old Jennings Rd Tynes Elementary to Allie Murray Rd - Reclaim	135,000						135,000
		Mid Clay System Reuse Transmission & Distribution System:								
			Development South of Royal Point - Cost Share Reclaimed Main	100,000						100,000
			Bradley Creek Crossing - Cost Share	79,000						79,000
			Install 20" Reclaimed Water Transmission Main From Ridaught to Mid Clay-Bla	-	3,275,000					3,275,000
		Kingsley System Reclaimed Water Transmission & Distribution System:								
	529		OP Reclaimed Water Main Transmission	1,820,000						1,820,000
			Orange Park Country Club Reclaimed Main extension	170,000						170,000
		All Systems:								
			Miscellaneous Reclaimed Mains	-	100,000	100,000	100,000	100,000	100,000	500,000
			Miscellaneous Reclaimed Mains Upgrades	1,016,823	50,000	50,000	50,000	50,000	50,000	1,266,823
GENERAL & ADMINISTRATIVE										
			Maintenance Facility Phase II & Paving	-		870,000				870,000
			Equipment Storage Facility, Pond & Fencing	-		1,020,000				1,020,000
	625		Office Reclaimed Irrigation System	3,721						3,721
	599		GIS Mapping & System Integration	534,008						534,008
			Meters - Growth Potable and Reuse	350,000	250,000	250,000	250,000	250,000	250,000	1,600,000
	234		Meters - Retrofit for Radio Read	1,482,863						1,482,863
			TOTAL CAPITAL EXPENDITURES	$ 62,972,421	$ 11,933,287	$ 8,707,250	$ 13,257,250	$ 5,267,250	$ 4,012,250	$ 106,149,708
Fund Balance September 30, 2008-2009-2010-2011-2012-2013-2014				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($0)**

ote: Capital Projects for FY 2009/2010 not finished have been added to this year's budget along with their funding sources.

CONSERVATION ELEMENT

INTRODUCTION

The Conservation Element inventories the natural resources of Keystone Heights in light of the increasing requirements placed on these support systems to meet the demands created by an increasing population. Since the initial adoption of the comprehensive plan by the City in 1991, statutory requirements for the Conservation Element have been added, notably in the area of water supply planning

INVENTORY AND ANALYSIS

Air Quality

The Florida Department of Environmental Protection (FDEP) manages Florida's Air Quality System providing the public and units of local, state, and federal government with measurements of pollutant concentration levels in the ambient air – ambient air being generally defined as that portion of the atmosphere near ground level and external to buildings or other structures.

Ambient air quality standards, defined as levels below health standards, have been established by the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (DEP) for six pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter, and sulfur dioxide (SO_2).

Since health-based criteria have been used to establish the standards, these six pollutants are referred to as "criteria air pollutants."

The FDEP identifies that an essential component of air quality management in the state is the identification of (1) areas where the ambient air quality standards are being violated and plans are needed to reduce pollutant concentration levels to be in attainment with the standards and (2) areas where the ambient standards are being met but plans are needed to ensure maintenance of acceptable levels of air quality in the face of anticipated population or industrial growth.

Keystone Heights has a very limited amount of air pollution originating in or being transported into its air shed. Under the FDEP's Spatial Air Quality System, air quality is monitored for the state. Air quality for Keystone Heights is measured at stations in Duval County because the EPA's designations of nonattainment areas are typically based on county groupings of contributing jurisdictions. There are no air quality monitoring stations in Clay County.

Currently there are no violations of the air quality standards for Clay County and its municipalities.

Overview of Topography and Hydrology

Keystone Heights has a variety of natural resources because of its varied terrain. The topography ranges downward from a high elevation of 175 feet in the northwestern corner of the City to 110 feet along the shoreline of Lake Geneva.

The St Johns River Water Management District (the "District") has published a monthly report of the hydrological conditions of the Keystone Heights Area in coordination with the Keystone Heights Lake Advisory Council and the citizens of the City. The report documents monthly and annual rainfall and compares current rates to historical rates since June 1999; documents water levels in five area lakes, including Lake Magnolia and Lake Brooklyn, since 1950; monitors the change in potentiometric surface of the Floridan Aquifer and compares the water levels in Lake Brooklyn with that in the Floridan Aquifer. Inflows to Lowry and Brooklyn Lakes are documented as are outflows from Lowry and Magnolia Lakes.

Historically, rainfall averaged 50 inches annually. Over half of this rainfall occurs between June and September and less than 20 percent occurs from November through February. Rainfall is a contributor to the groundwater and influences the lake levels in Lakes Brooklyn, Keystone and Geneva.

The rainfall drains into streams and lakes or is absorbed by the soil. Eventually, the water moves downward through the soil to the zone of saturation referred to as the groundwater table. Groundwater continues to move laterally within the limestone recharge area to areas of lower elevation. Some is discharged by evapotranspiration, seepages, springs or wells. Groundwater in Keystone Heights occurs in the surficial aquifer and in the Floridan aquifer which is directly connected to the water table.

In the areas surrounding Keystone Heights, the uppermost aquifer also includes limestone beds of the Choctawhatchee Formation. Along Trail Ridge north of Kingsley Lake, the aquifer consists primarily of sand deposits which are directly connected to the Floridan Aquifer.

The depth of the water table ranges from more than 20 feet below land surface in the ridge area in the northern city limits to the lake level of Keystone, Geneva and Brooklyn. The aquifer is recharged by rainfall and fluctuates in response to variations in rainfall and groundwater withdrawals and the storage capacities in the City's lakes and streams.

Water Resources

Stream flow is that part of surface water that appears in natural channels. In general, it is closely related to precipitation, groundwater and other occurrences of surface water, such as lakes and canals. A portion of the rainfall leaves the area annually as stream flow. The reminder leaves as evaporation, transpiration by plants or groundwater outflow.

The Consumptive Use Technical Staff Report issued by the St Johns River Water Management District in January 2007 to the CCUA identifies that the most detailed and

comprehensive investigation of the water resources of Clay County was made in a 4 county investigation by Clark and others of the Florida Geological Survey in 1964. A regional report by Snell and Anderson (1970), and Bentley (1977) describes the water resources of the area and provides a useful compilation of data specific to Clay County based on the 1964 study. The following descriptions are mainly from the reports by Snell and Anderson, and Bentley:

Surface water in Clay County is largely undeveloped except for recreational use. The principal surface water feature in the county is the tide-affected St. Johns River, but the water is often too saline and high in dissolved solids (TDS) for most uses. Black Creek, with an average flow of 515 cfs, is the largest freshwater stream in the county; however, excessive color, TDS, hardness and pH make the water unsuitable for many uses. Water from the lakes and streams of the Etonia Creek basin in southwestern Clay County generally is of good chemical quality. Groundwater occurs in the county in a water table or surficial aquifer, secondary artesian aquifers (Hawthorn Group), and the Floridan aquifer. The surficial aquifer and secondary artesian aquifers supply small to moderate quantities of water to domestic and livestock wells in the county.

The principal source of water in the county is the Floridan aquifer, often available in amounts exceeding 2,500 gallons per minute. The Floridan aquifer is located immediately beneath clays of the Hawthorn Formation and is comprised of over 1,000 feet of permeable limestone. The Floridan aquifer is recharged partly by rainfall and the lakes in southwestern Clay County and adjoining counties, and more significantly, by seepage from the water table aquifer through the confining beds in extensive areas where the potentiometric surface of the Floridan aquifer is lower than that of the water table. Water quality within the Floridan aquifer of Clay County is generally of potable quality and suitable for most uses. The quality has not changed in a statistically significant manner since records of water quality data have been kept. Saline water underlies the freshwater zone in the Floridan aquifer at depths ranging from 500 feet below land surface in the southeastern corner of the county to more than 2,000 feet below land surface in the northeastern section.

In the City, the aquifer yields sufficient quantities of water for domestic and stock purposes. The principal source of potable water in Keystone Heights and in northern Florida are wells drilled into the sequence of permeable limestone formations known as the Floridan Aquifer. The top of the aquifer is exposed at the surface in Keystone Heights. Recharge to the aquifer also occurs in most of western Clay County, where the potentiometric surface is below the water table, and water moves downward from the water table through the semi-permeable confining beds and into the Floridan Aquifer.

From the recharge area, water in the aquifer moves down-gradient in a northeasterly direction toward the principal area of discharge along the margin of the Continental Shelf in the Atlantic Ocean. The poteniometric surface of the aquifer slopes in the same general direction as does the top of the aquifer, but not as steep. The potentiometric surface is more than 80 feet above sea level in Keystone Heights. The lower levels in the City's lakes are largely the result of large withdrawals from the aquifer in the Jacksonville-Orange Park, Green Cove Springs and southern St Johns County farming areas as well as prolonged drought.

The Florida Aquifer is recognized as one of the most productive aquifers in the world. It has been estimated that, under the region, the Floridan Aquifer stores far more fresh water than is stored in all of the Great Lakes combined. However, there are restraints on the amount of fresh water that may be withdrawn from this aquifer. Withdrawals from the Florida Aquifer induce recharge from the surficial aquifer, thereby lowering the water table and lake levels.

A general decline in water levels began in the late 1940's with the trend continuing until about 1956; when water levels remained nearly constant except for seasonal fluctuation. In the mid- 1960's, water levels began declining again. The potentiometric surface in the area will continue to decline as pumping increases.

When the City's comprehensive plan was adopted in 1991, the completion of Phase II of the *Upper Etonia Creek Hydrological Study* was anticipated; this Study was finalized by the St Johns River Water Management District and made available to the City and the public in March 1992.

Subsequent to the completion of the Phase II study of the Upper Etonia Creek in 1991, the SJRWMD completed the *Keystone Heights Hydrologic Conditions Report* for the Keystone Heights Lake Advisory Committee and the Citizens of Keystone Heights in September 2000 and the U.S. Geological Survey produced Water-Resources Investigations Report 00-4204 *Simulation of the Interaction of Karstic Lakes Magnolia and Brooklyn within the Upper Florida Aquifer, Southwestern Clay County, Florida* in 2001. In February 2002, the *Investigation of Conceptual Design of Options for the Lake Brooklyn Watershed, Clay County, Florida* was prepared by Schreuder, Inc. (the "Schreuder Report") for the SJRWMD, Lake Region Council Association, the Keystone Lake Advisory Committee (now Save Our Lakes), Clay County, Camp Blanding, E.I. DuPont and State Representative Joe Pickens.

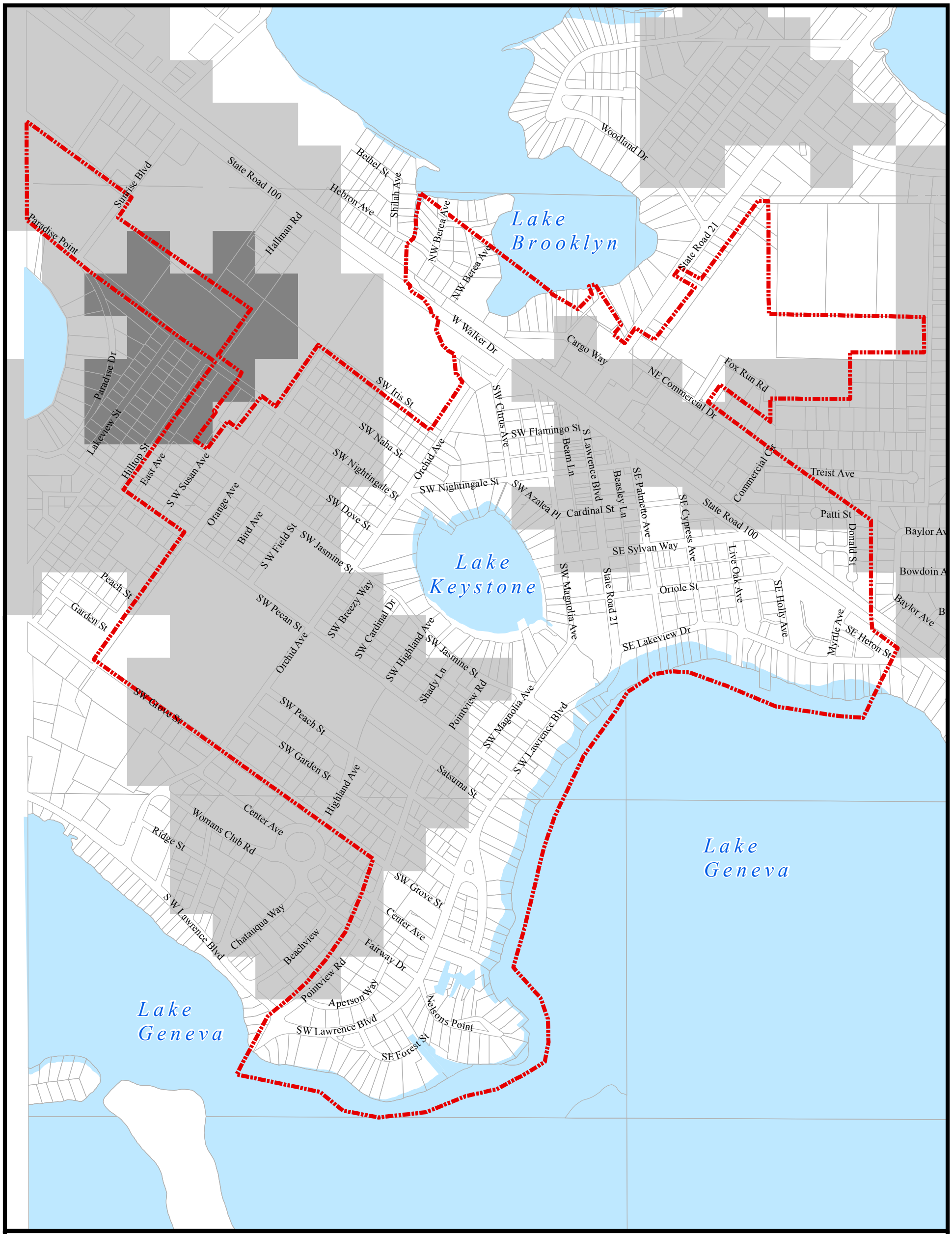
All of the studies were initiated because of significantly declining lake levels in the lakes of the Upper Etonia Creek Basin, the area of Putnam, Clay, Bradford and Alachua Counties that includes the City of Keystone Heights. Concerned citizens were joined by the local governments in asking the SJRWMD to lead investigations into the hydrology of the area with an eye to identifying the underlying causes of the declining lake levels. The City formed a Lake Advisory Committee to focus community efforts; this committee remains active.

In Phase I of the Upper Etonia Creek Hydrological Study, below average rainfall over several years was identified as the primary cause of the lake-level declines. A second phase of the study was recommended to investigate some of the hydrological factors in more detail.

Rainfall deficiencies remain the identified cause of the dramatically lower lake levels for the lakes in and immediately adjacent to the City (the lake level in Lake Brooklyn has fluctuated more than 27 feet since measurements began by the USGS in 1957). The studies suggest that flow occurs from Lake Brooklyn and the intermediate aquifer downward into the upper Floridan Aquifer. There has been a regional decline of water levels in the upper Floridan Aquifer and this has had an impact on the stage of Lake Brooklyn because it has been determined that there is significantly higher vertical leakage between Lake Brooklyn and the Floridan Aquifer and other lakes in the area. These studies, including the USGS Report in

Aquifer Recharge

City of Keystone Heights



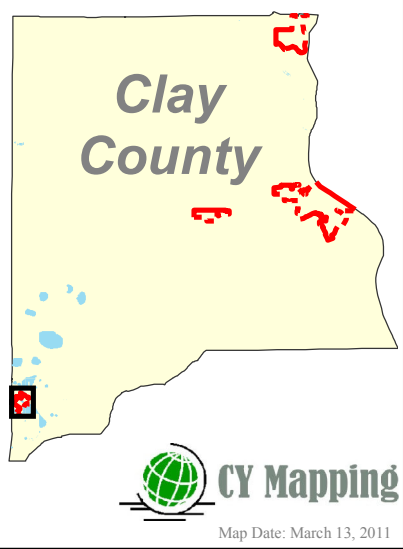
Recharge Range

- 4.001 - 8 In/Yr
- 8.001 - 12 In/Yr

N

500 0 500 1,000 Feet

Source:
Aquifer Recharge - SJRWMD, 2005



CY Mapping

Map Date: March 13, 2011

2001, concludes that lakes that are not hydraulically isolated from the Upper Floridan aquifer may exhibit large stage fluctuations as water drains to the aquifer during dry periods and is replenished in excess of the drainage rate during wet periods.

It is this knowledge that has produced the latest efforts for restoring the lake levels in the lakes in and near the City. The Schreuder Report in 2002 looks at augmentation options for several of the lakes that consist of controlled outlets and pipelines. Most recent discussions include the use of reuse water to supply water in excess of the drainage rate.

The City is fully engaged and an active participant in the ongoing discussions related to lake level augmentation. A local non-profit, Save Our Lakes, meets monthly to discuss technical options and funding sources. One important role for the City on the issue of lake levels continues to be its leadership in facilitating community input and communication with the St. Johns River Water Management District as it considers maximum flows and levels for lakes within and abutting the City. Save Our lakes provides a forum for the dissemination of information to interested citizens; the City actively participates in its meetings to foster communication and coordination. The City and area stakeholders are also active in the review of proposed revisions to minimum flows and levels for lakes within and abutting the City.

The St Johns River Water Management District has established minimum flows and levels (MFLs) for Lake Brooklyn and Lake Geneva pursuant to Sections 373.042 and 373.0421, Florida Statutes. Consideration is given in the establishment of MFLs to seasonal fluctuations in water flows or levels, non-consumptive uses, and environmental values associated with the aquatic and wetlands ecology of the area including recreation in and off the water; fish and wildlife habitats and the passage of fish; maintenance of fresh water storage and supply; aesthetic and scenic attributes; filtration and absorption of nutrients and other pollutants; sediment loads; water quality; and navigation.

The current surface water levels of Lake Brooklyn and Lake Geneva are below the adopted minimums established in Rule 40C-8.031, Florida Administrative Code. The City seeks directly, and indirectly through education and its community participation efforts to coordinate with the SJRWMD in the development of its required recovery strategies and shall consider the phasing or time table which will allow for the provision of sufficient water supplies fro all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures. The District, in its update to the Water Supply Plan, may consider the need for water resource or water supply development, additional regulatory measures, water shortage orders and implementation of additional water conservation measures.

The City and Save Our Lakes work closely with agency representatives to ensure that the concerns raised by the residents of the City are considered in the development and implementation of programs to address the lake levels.

Water Quality

Keystone Heights is located in an area of southwest Clay County and northwest Putnam County which contains approximately 100 lakes, many of which have no surface outlets. Runoff from this area is extremely low primarily because of seepage into groundwater and evapotranspiration from the lakes and creeks.

There are 66 natural lakes in excess of one acre which lie wholly or predominantly within Clay County. Ranging up to about 1,750 acres in size, these lakes now encompass an aggregate area of about 12,000 acres and provide a shoreline of some 55 miles. Many of these lakes, in particular Lake Geneva and Lake Brooklyn, are among the most attractive in Florida.

The US Geological Survey in cooperation with the State of Florida has collected and chemically analyzed water samples from wells that tap the Floridan aquifer in Keystone Heights. In general, water from the Floridan aquifer is of good chemical quality and meets the standards recommended by the Florida Department of Environmental Protection (FDEP) and the U.S. Environmental Protection Agency. The chemical quality of water from the aquifer has not changed noticeably.

In 2005 the St Johns River Water Management District updated its Floridan aquifer recharge mapping originally published in 1993 in *Mapping Recharge to the Floridan aquifer Using a Geographic Information System*. The original report offers insight into how recharge to the aquifer occurs in Florida: "Recharge to the Floridan aquifer occurs in areas where the elevation of the water table of the surficial aquifer is higher than the elevation of the potentiometric surface of the Floridan aquifer. In these areas, water moves from the surficial aquifer in a downward direction through the upper confining unit to the Floridan aquifer. Recharge also occurs directly from infiltrating rainfall where limestones of the Floridan aquifer are at or near land surface. In addition, significant local recharge may occur where sinkholes have breached the upper confining unit.

Recharge rates are highest in areas where the hydraulic pressure difference and leakage are greatest. Recharge rates are directly proportional to the hydraulic pressure difference and upper confining unit hydraulic conductivity and inversely proportional to upper confining unit thickness."

The lakes in Keystone Heights represent a connection to the Floridan Aquifer. A small area of the City lies within the high recharge area of the Floridan aquifer (8-12 inches per year). Water quality and the potential for contamination of the aquifer from existing or future uses within the City is a concern that the City addresses by regulating permitted uses. Aquifer recharge rates (water quantity) are protected by applying maximum impervious cover percentages to new development and any expansion of existing development within the high recharge area.

Leaking underground storage tank systems present a hazard to the water quality in the Floridan aquifer; new underground storage tank systems must be constructed of non-corrosive materials, such as fiberglass, or protected from corrosion. Both underground and aboveground tank systems must also be constructed with these features to protect against leakage:

- doublewall construction or secondary containment to prevent releases.
- overfill and spill containment protection to prevent discharges when the tank is filled.
- leak detection system for both tanks and piping which is monitored at least every thirty days.

Existing facilities must meet a replacement schedule that ends in 2009 with all underground storage tank systems required to be constructed as doublewall tanks. Further, all facilities with petroleum storage tanks are required to have pollution liability insurance. The amount of coverage depends on whether the tanks are aboveground or underground and facility size.

Underground tanks greater than 110 gallons and aboveground tanks greater than 550 gallons, which contain regulated substances, are subject to the FDEP storage tank rules. These substances include gasoline, diesel fuel, kerosene, new and used oil, pesticides to be applied off-site and many industrial solvents. Unregulated tanks include those at private residences which are not used commercially, septic tanks, heating oil tanks and temporary use aboveground tanks. Facilities which have regulated storage tanks must register them with the Florida Department of Environmental Protection. The FDEP identifies 13 regulated underground storage tanks registered with FDEP as of March 1, 2011 within the City. These are gasoline tanks in four locations and one emergency fuel tank for Bellsouth.

Within the City there is one facility with registered discharge of petroleum in 2008 that has not been closed.

Historically water quality issues not related to contamination have been addressed with improvements to infrastructure: according to a January 1987 Stormwater Study by Kelley Engineering, water quality problems in area lakes (Keystone and Geneva) identified by FDEP and Kelley Engineering were ~~are~~ related to soil erosion and introduction of sediment to the lakes or are due to contaminants other than soils which are washed off rooftops, roads and yards. Turbidity was determined to be the source of the water quality problems and the study recommended that the City:

- pave the dirt roads in the city with curb and gutter or grassed lined ditches,
- locate retention areas or ponds at the outfalls,
- retain drainage upstream and stage the runoff so as to minimize erosion and resultant sedimentation.

Since 1991, the City undertook a paving program using CDBG funds. All streets within the City with the exception of a portion of Forest Street and Fox Run are now paved. The pattern of streets within the City includes alleys that bisect each block of the old City; there is approximately 1 mile of alleys within the City. The alleys provide access to each parcel from the rear; most businesses have rear access and most residential units have garages that are accessed from the alleys. Alleys within the City remain unpaved.

In 2004 the FDEP prepared the Water Quality Assessment Report for the Lower St. Johns, pursuant to its watershed management approach for restoring and protecting water resource

problems and to address Total Maximum Daily Load (TDML) Program requirements under the federal Clean Water Act and the 1999 Florida Watershed Restoration Act. In the Water Quality Assessment Report, water bodies identified as potentially impaired in the FDEP's previously developed Status report were subject to additional data collection and analysis, resulting in a Verified List of Impaired Waters. With few exceptions, Total Maximum Daily Loads must be established for water bodies on the Verified List. The establishment of TMDLs for a water body means that monitoring will occur to document changes in water quality and that programs will be implemented that directly limit or eliminate the amount of pollutants entering the water body.

Water bodies in and near the City lie within the Etonia Creek Planning Unit. The City limits abut Lake Geneva to the southwest and its public beach provides access to this lake. The Water Quality Assessment Report identifies that of the 90 waterbody segments in this Planning Unit, 33 segments have sufficient data for assessment. Of these, 2 have been verified as impaired for at least one parameter, 5 remain on the Planning List and 26 meet standards. Lake Geneva remains on the Planning List with regard to Lead and Selenium. Lake Geneva is not on the Verified List.

For other parameters such as nutrients, turbidity and specific metals, Lake Geneva has been determined not to be impaired.

All other lakes adjacent to the City have been determined not to be impaired for any parameter and are not included on the FDEP Planning List.

The Clay County Utility Authority's potable water wells that serve Keystone Heights are constructed into the upper and lower Floridan aquifers. The CCUA routinely collects raw water samples from a selected well at each of their withdrawal/treatment sites for chemical analysis. All water samples that have been analyzed reflect no indication of saline water intrusion is occurring. A review of past water quality results at each existing facility shows no water quality degradation in the source aquifer. However, water quality sampling and analysis from a selected well at each of the wellfields will continue to be provided to the St Johns River Water Management District semi-annually through the planning period. Trend analysis of the data is required with the submittal of each compliance report to ensure saline water intrusion is not occurring.

Water Supply

The Florida Aquifer is recognized as one of the most productive aquifers in the world. It has been estimated that, under the region, the Floridan Aquifer stores far more fresh water than is stored in all of the Great Lakes combined. However, there are restraints on the amount of fresh water that may be withdrawn from this aquifer.

One way the SJRWMD manages water supply is through its Consumptive Use Permitting (CUP) process. For the City, the Clay County Utility Authority holds the CUP for the public water supply. In recent CUP permitting efforts, the CCUA evaluated the water supply in its service area, including the Keystone Heights area. The CCUA identifies that the Floridan

aquifer in this area of the State has a high degree of primary and secondary porosity, yielding abundant amounts of water. It is typically over 1,000- feet in thickness throughout Clay County. Water quality has historically been very good as confirmed by water quality sample analyses from a selection of the Clay County Utility Authorities' production wells. Water quality within the upper and upper portion of the lower Floridan aquifer is well within potable water drinking water standards without treatment and there are no indications of quality degradation as a result of the groundwater withdrawals in this area. Because of the large thickness, excellent water quality, and the fact that this aquifer has historically been able to supply all use put upon it without statistically significant impacts, the Floridan aquifer appears to be fully capable of supplying the requested amounts of water as long as withdrawals are monitored and actively managed.

The St Johns River Water Management District adopted its Water Supply Plan 2005 (WSP) in February 2006. The City is required to address issues raised in the WSP and to include long-range water supply facilities projects identified in the WSP.

The City of Keystone Heights does not lie within a priority water resource caution area; existing and reasonably anticipated sources of water and water conservation efforts are considered to be adequate to supply water for all legal uses and anticipated future uses and to sustain the water resources and related natural systems. The WSP identifies water supply development projects that must be included in a local government's comprehensive plan. No projects are identified as required for the City of Keystone Heights or its utility provider, the Clay County Utility Authority.

The SJRWMD has indicated that it will initiate a regional study in mid- 2009 with the Suwannee Water Management District to review the status of the area with regard to designation as a Priority Water Use Caution Area.

The City is served by central water service. Previously operated by a private company, Southern States Utilities, in 2005 the CCUA took over operation of the two water treatment plants that serve the City. The CCUA serves the City from two wells within the City limits. The WTP that serves the City (Keystone Heights) is looped with the Keystone Heights Club WTP, creating a combined service area that extends beyond the City limits. While the combined capacity for these two plants is 1.376 mgd, the Consumptive Use Permit (CUP) for this system authorizes withdrawals of 0.6499 mgd (236.747 MGY):

The average daily flow in the Keystone Grid is 0.5284 mgd and the annual withdrawal for 2008 is projected to exceed that permitted. The CCUA applied for a modification of its CUP in December 2006; the modification will consolidate the permits for the Keystone Grid, Postmasters Village (located in unincorporated Clay County) and Geneva Lakes Estates (located in unincorporated Bradford County) and increase the permitted withdrawals to 2 mgd. The consolidated CUP under review by the SJRWMD, increasing the permitted withdrawals to 2.0 mgd, includes in the service area portions of Clay County that are not within its Centralized Service Areas and as such, the requested withdrawal amounts are in excess of the projected demand associated with vacant land that can be served with central water.

Based on average demand per equivalent residential unit of 294 gallons per day, the City's daily consumption of potable water in 2008 is approximately 0.1402 mgd.

The average daily flow in the Keystone Grid in 2008 was 0.5284 mgd. The potential increase in demand of 0.073 in 2015 represents a total demand in 2015 of 0.6014 mgd, less than the available capacity of 0.6499 permitted under the current CUP. The projected demand for 2025 is 0.6744 mgd, which just exceeds the 0.6499 mgd permitted withdrawals in the current CUP. The consolidated CUP under review by the SJRWMD, increasing the permitted withdrawals to 2.0 mgd, which is in excess of the projected increase in demand associated with vacant land that can be served by central services within the service area through 2025.

Aquifer Recharge

The City implemented land development regulations in 1992 that, consistent with its adopted goals, objectives and policies, address protection of the high recharge areas of the Floridan aquifer that are located within the City limits. Because the City is essentially built-out, there is little opportunity for new development that would impact the Floridan aquifer from a water quality or recharge perspective. Redevelopment activities and the intensification of uses on existing properties within the City do however represent a threat to the Floridan aquifer if not properly regulated. Policies have been added that will restrict uses within high recharge areas.

Water Conservation

The City has been served by central water since before adoption of the original comprehensive plan in 1991. All development within the City must connect to central water service. Southern States Utilities owned and operated the system prior to its acquisition by the Clay County Utility Authority in 2005.

The CCUA system serves primary residential customers. The residential customers are almost exclusively single family homes; the non-residential customers are primarily small service businesses. Except for the Clay Electric Cooperative's offices within the service area, the non-residential customers are service and retail establishments that serve the needs of the community.

Water conservation is accomplished in two ways: by the practices of the utility itself, where leaks and other sources of unaccounted use are limited through maintenance and monitoring systems and by a reduction in demand by the end user. The Clay County Utility Authority has reduced the percentage of unaccounted use, as a percent of the total use, since its acquisition of the potable water system and the Keystone Heights Grid operates above the standards established by the FDEP.

The CCUA has an adopted Water Conservation Plan that identifies its efforts in leak detection, public information programs and accurate accounting (meter replacement and Automatic Meter Reading). The average demand in the Keystone Heights system, exclusive

of the demand generated in the Keystone Club area, located in Bradford County is 280.8 gpd. With a household size of 2.62, this demand represents 107 gallons per day per person. The low demand rate can be attributed to the small lot sizes within the City, the lack of irrigation systems (attributed to the age of development and to the soil types, which make irrigation systems inefficient because of very high infiltration rates). These characteristics are not projected to change, even with new development.

Within the City limits, there are 74 vacant residential, platted single family lots, 9.21 acres of vacant land in the Commercial Land Use category and 52.25 acres of vacant land in the Residential Land Use category. At a maximum development potential of 6 units per acre, the vacant residential land has a maximum development potential of 313 residential units. The vacant commercial lands are located outside the City Core and are subject to a maximum FAR of 0.4. The vacant acres could be developed at a maximum of 160,475 square feet of non-residential use.

The City has issued an average of less than 1 residential building permit a year since 1991. Lot sizes in the City are small, averaging less than 6,000 square feet, so irrigation water demand is not significant. Because new development will represent a small percentage of the total water demand through 2025 and will be subject to building construction standards that require low flow fixtures to reduce water demand, the City will focus its water conservation efforts on reducing the water demand associated with existing development.

The majority of the existing residential structures within the City are older; 53 percent of the single family units in the City as of 2000 were more than 30 years old and 83 percent were more than 20 years old. As of 2008, the 207 structures that were greater than 30 years old are approaching 40 years old. The majority of the existing residential units in the City were constructed prior to the enactment of building codes that required water saving fixtures.

The replacement of aging fixtures within a structure with low-flow fixtures occurs over time; low-flow fixtures are the only fixtures currently available in the marketplace. As bathroom and kitchen fixtures are replaced, the water savings is provided in the replacement fixture. The City will undertake additional water conservation measures:

- the city will adopt an irrigation ordinance that establishes which two days irrigation is permitted.
- Support a public information program that educates citizens about water conservation inside and outside the home and business. The SJRWMD has materials available and the City could serve to distribute, publish and otherwise distribute the information.
- Strengthen the landscape ordinance with regard to xeriscape requirements for new development

The average water demand rates within the City are low in comparison to demand rates in unincorporated Clay County. The total demand on the water supply by City residents and businesses is a very small percentage of the overall demand in the County. These attributes of

the CCUA system within the City are projected to continue. The City will focus on efforts to educate its residents and businesses on water conservation opportunities and to work with the CCUA to implement any initiatives it undertakes.

Mineral Resources

Keystone Heights is located on Trail Ridge, an area which has been actively mined for sand and heavy minerals.

Vulcan is currently mining sand in the Keystone Heights area with other deposits located within 5 miles both north and south of the City of Keystone Heights. Heavy minerals mining by DuPont occurs within the boundary of Camp Blanding in the northwestern area of the facility and in northwest Clay County.

Wetlands, Floodplains and Soils

Within Keystone Heights the two major associations of wetlands are bottom land hardwood and freshwater marshes. The only wetlands in the City are freshwater marsh associations often referred to as marsh wetlands. The freshwater marshes surround the periphery of the lakes in Keystone Heights.

The freshwater marshes along the tributary creeks and surrounding the Keystone lakes were flooded seasonally. Changes in lake levels have affected freshwater marshes adjacent to the shoreline of the lakes' this resource is being denied adequate water to sustain their characteristics. When adequate water is present, they are classified as palustrine with emergent vegetation of broad leaf trees and shrubs. These wetlands would typically be flooded during the summer and fall wet seasons.

The floodplain areas in Keystone Heights comprise less than five percent of the land area of the City. The Natural Resources Map depicts the generalize flood plain locations within the City. Portions of the areas shown on the Natural Resources Map will flood periodically during severe thunderstorms ad extended periods of rain associated with frontal activity and hurricanes.

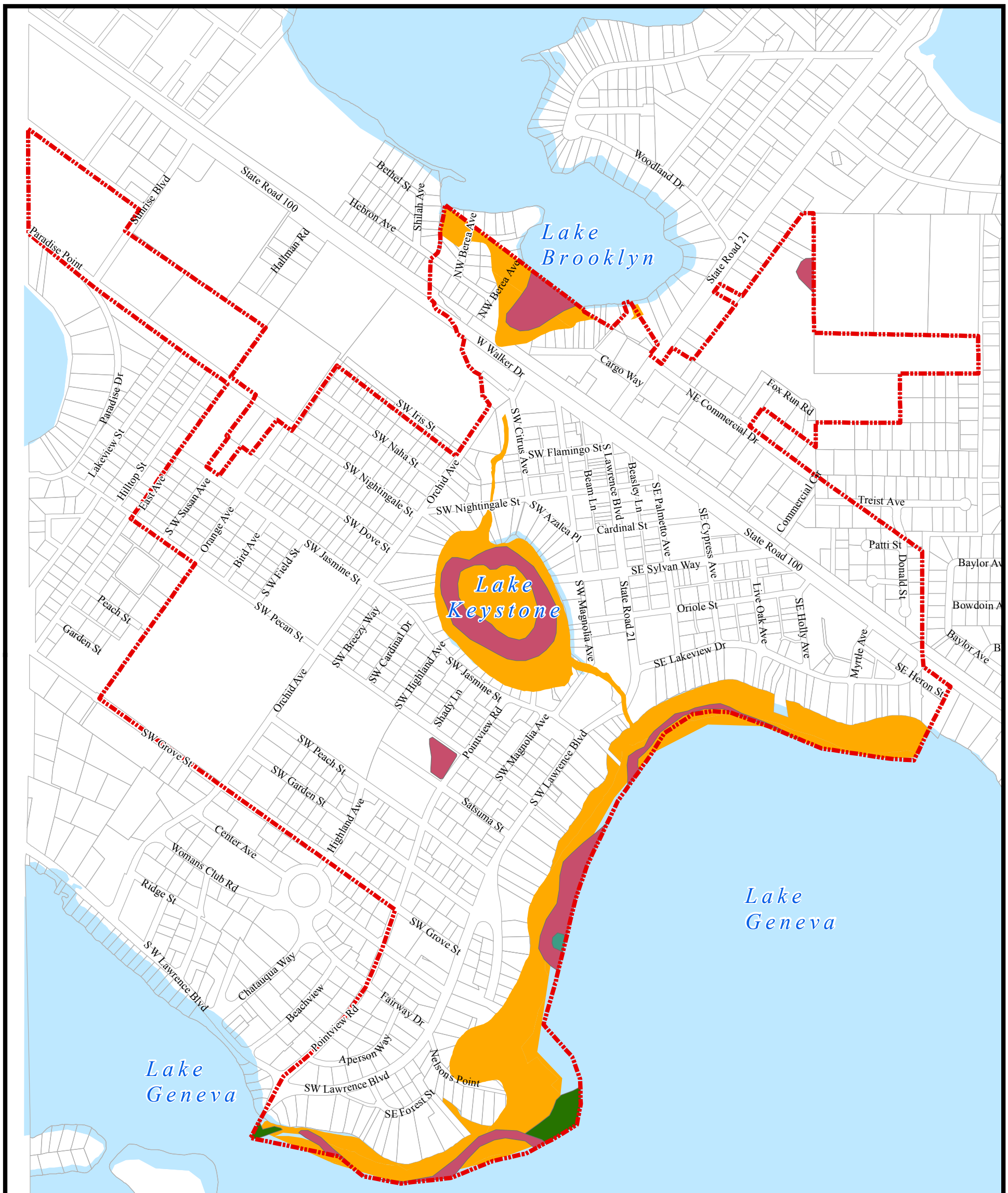
Much of the flood prone areas encompass wetlands with poor soils. While soil erosion is not a concern within the City, soils in wetlands will oxidize and shrink when drained. Special considerations and demucking should be accomplished when constructing roads or building pads. Additional discussion of soils in the City is included in the Future Land Use Element.

Native Vegetation and Forestry Resources

Dominant native vegetative species consist of oak and hickory at the higher elevations in Keystone Heights and cypress, maples, tupelo, hickory, oak and other hydrous hammock hardwoods at lower elevations bordering lakes and streams. Intervening lands are dominated by sand, long leaf and slash pine. These resources as well as majestic live oaks and other hardwoods, which dominate some of the City's residential areas, are of immeasurable value

Floodplain and Wetlands

City of Keystone Heights



100 Year Floodzone

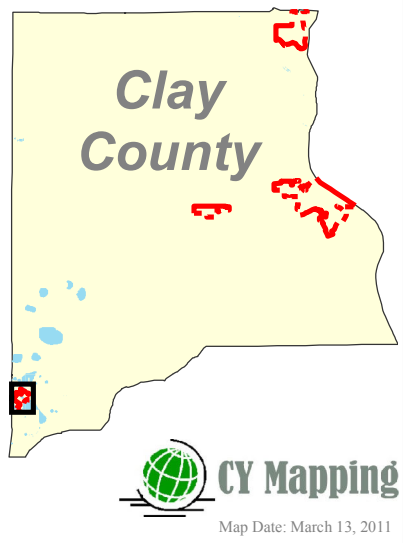
Wetlands

- Freshwater Marsh
- Wet Prairies
- Mixed Scrub-Shrub Wetland

N

500 0 500 1,000 Feet

Source:
FEMA Flood Zones - FEMA
Wetland - SJRWMD, 2004

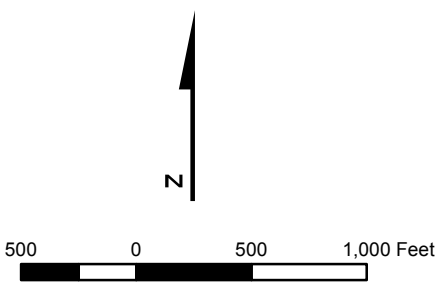


CY Mapping

Map Date: March 13, 2011

Soils

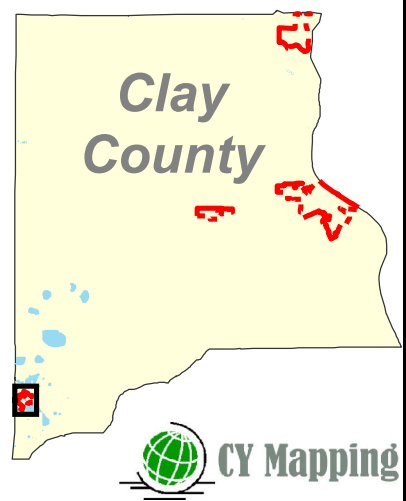
City of Keystone Heights



Soils

- ALLANTON
- MANDARIN
- ORTEGA
- PENNEY
- RIDGEWOOD
- SCRANTON
- TROUP
- URBAN LAND

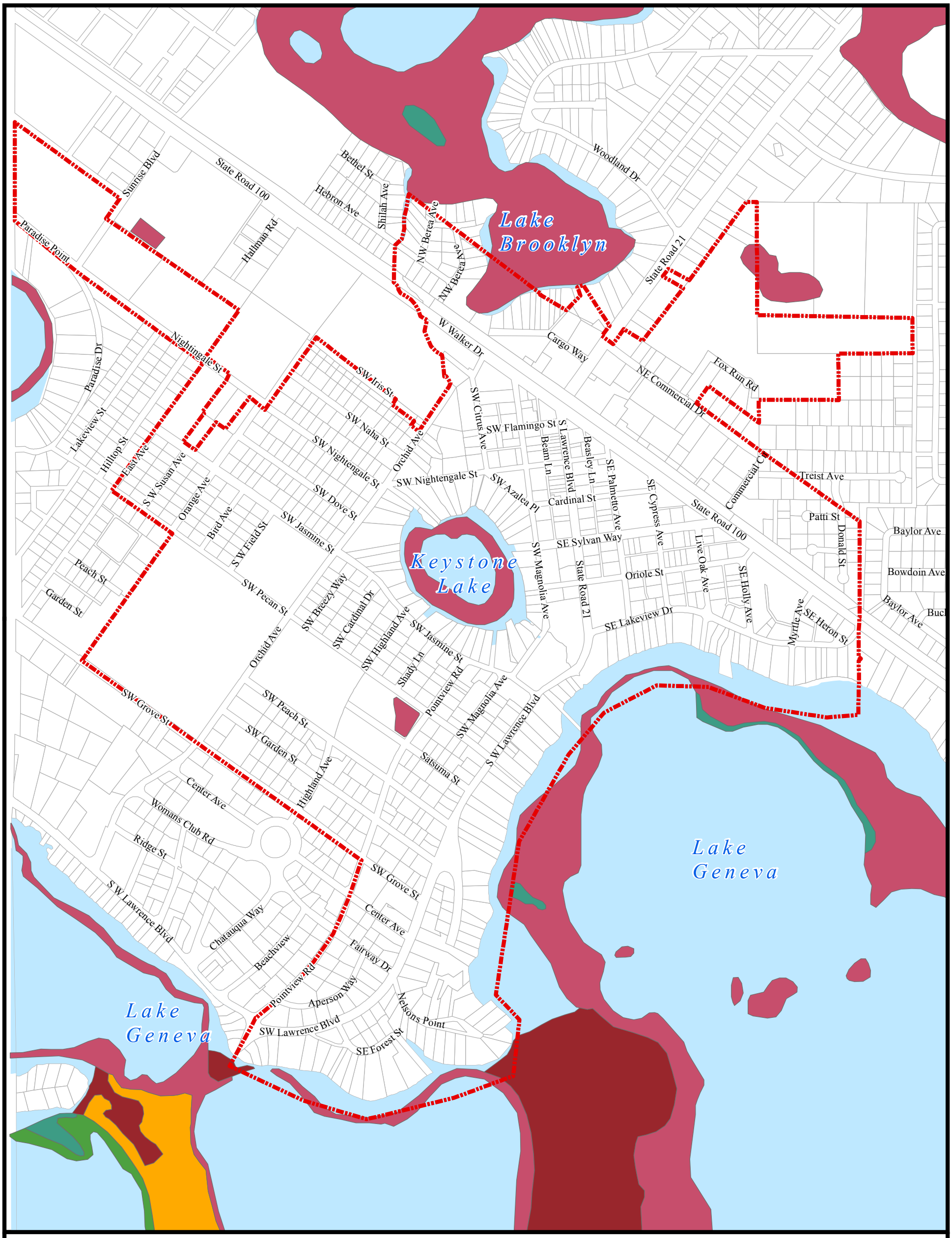
Source:
Soils - SSURGO



CY Mapping

Map Date: March 13, 2011

City of Keystone Heights
Clay County, FL
Wetland Land Cover Map



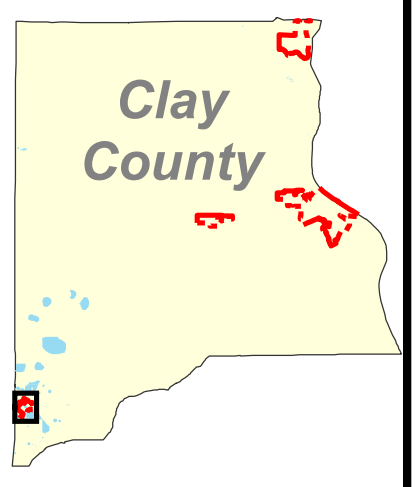
City Limits

Land Cover

- Wetland Forested Mix
- Freshwater Marsh
- Wet Prairies
- Emergent Aquatic Vegetation
- Mixed Scrub-Shrub Wetland
- Non-Vegetated Wetland

N W E S

500 0 500 1,000 Feet



Data Source:
Land Cover - SJRWMD, 2004
Parcels - Clay County Property Appraiser, 2010
City Limits - City of Keystone Heights

Map Date: January 2011

for aesthetic purposes, buffer zones, noise abatement, and habitat for birds, squirrels and other wildlife.

Adjacent to the City is the upland hardwoods community which is an open forest community influenced by fire, heat and drought. Fires can occur frequently in drought conditions and the natural vegetation has adapted to withstand their effects. Fires prevent hardwoods from regenerating, allowing the longleaf pine, which cannot tolerate hardwood competition, to remain dominant. Grasses cover large areas of this community and provide fuel for the fires. Water moves rapidly through the soil to the aquifer with little runoff and minimal evaporation.

There are some oak/pine hammock communities which occur at various locations scattered throughout the City and can be readily identified by some dense canopies of predominantly laurel and live oak trees. There is very little understory. This community can be found on level to rolling topography. Many areas have been cleared or altered extensively for urban uses.

Open Space, Scenic Areas and Unique Environmental Features

Keystone Heights is located close to Goldhead State Park which provides unique scenic vistas associated with the Florida Trail. The Florida Trail traverses Goldhead State Park and Camp Blanding Wildlife Management Areas.

The most unique environmental feature within the City is the freshwater lakes, with access to Lake Geneva provided from the City's public beach. This resource provides recreation opportunities to residents of the city and surrounding unincorporated counties as well as sustaining wetlands, freshwater marshes and fisheries. The County boat ramp located on Lake Brooklyn has been closed for approximately 5 years because of declining lake levels. The County has elected not to invest in improvements and maintenance until such time as the lake levels increase sufficiently to allow access from the ramp. There is no longer public boating access to Lake Brooklyn.

The City has placed the lakes within its jurisdiction in the Conservation Land Use category and established standards for their protection that include coordination with the SJRWMD and community stakeholders.

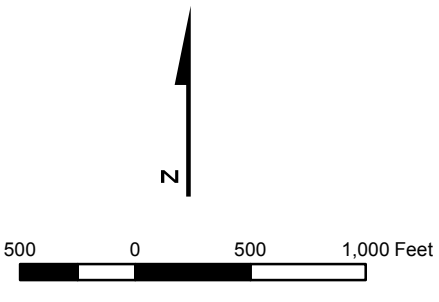
Wildlife and Fisheries

Keystone Heights has a variety of wildlife and fishes. There are at least 100 plant types, 40 species of fish, 30 species of reptiles, 65 species of birds, 15 species of mammals, and 5 species of amphibians that exist within the City's boundaries. None of these are listed as rare, threatened or endangered species of special concern. The three basic classifications of endangerment used by federal and state wildlife and fish management agencies are defined below:

Endangered – The highest level of protection because of the potential for extinction.

Lakes and Freshwater Beaches

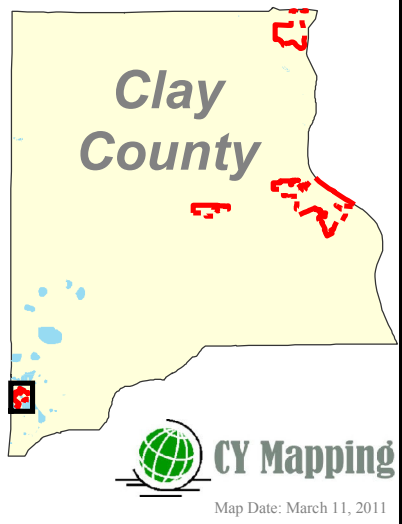
City of Keystone Heights



Freshwater Beach

Lakes

Source:
Freshwater Beach - City of Keystone Heights, 2011.



CY Mapping

Map Date: March 11, 2011

Threatened – The population of these species have dramatically declined and these species have the potential of being endangered.

Species of Special Concern – The populations are declining.

Because the City has been subdivided and the land made for urban use, there are no significant habitat areas for any animal or plants listed as endangered or threatened. The animals (mammals, birds, amphibians and reptiles) and plants which are listed on the Florida Fish and Wildlife Conservation Commission (FWC) list of Rare and Endangered Species which may be found in an isolated location includes:

Plants:	Curtiss' Milkweed (Endangered) Chapman's Rhododendron (Endangered)
Birds	Red Cockaded Woodpecker (Species of Special Concern)
Reptiles and Amphibians:	Gopher Tortoise (Species of Special Concern)

Source: Florida National Areas Inventory, FNAI, July 1989.

Of the listed endangered species, the various State and Federal agencies as well as private volunteer organizations are only able to monitor the location of the red cockaded woodpecker and the closest sighting are 5 miles north in Camp Blanding.

Fishery resources of Keystone Heights are associated with the major lakes. The numerous lakes once supported good large-mouth bass, crappie, shellcracker and bluegill populations. The lack of rainfall has drastically affected the water level in the area lakes and fishery resources have all been adversely affected. The recovery of these resources will depend on the future lake levels. Regulatory decisions by the St Johns River Water Management District with regard to minimum flows and levels for lakes within and adjacent to the City are critical to the restoration of fishery resources historically associated with these lakes.

Hazardous Waste

Keystone Heights does not have any large scale hazardous waste generators within its corporate limits.

The only significant generator in Keystone Heights is the Clay Electric Cooperative Headquarters. The Cooperative cleans their electric transformers at their offices. The wash water is treated onsite in accordance with FDEP requirements. Other generators are small business generators.

The FDEP offers assistance under its Small Business Environmental Assistance Programs to small quantity generators and local governments in understanding how to handle small

quantities of hazardous waste. Materials are provided on the FDEP website for the following businesses that may locate within the City:

Asbestos (removal)
Dry Cleaner
Demolition Contractor/ Services
Furniture refinishers
Laboratories
Paint and Body Shop
Pharmacies
Photo Shop
Printer

CONSERVATION ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal C.6 Protect, conserve and manage the natural, cultural and historic resources of the City of Keystone Heights thereby enhancing the quality of life in the community.

AIR QUALITY OBJECTIVE

C 6.1 To maintain the minimum air quality standards established by the U.S. Environmental Protection Agency.

Policies

C.6.1.1 The City shall maintain its current high standard of ambient air quality by coordinating with the Florida Department of Environmental Protection to monitor air quality as changing conditions indicate the need for additional data to determine if additional measures are appropriate to address air quality.

C 6.1.2 The City shall require landscaping and vegetative buffers between residential and non-residential development and adjacent to all arterial and collector roadways.

C 6.1.3 Any commercial or industrial establishments demonstrating a potential to degrade air quality in the City shall be referred to the Florida Department of Environmental Protection (FDEP) by the City for evaluation and determination of the City's role in implementing any required mitigation or measures.

C 6.1.4 Changes to major collectors and arterials within the City shall be reviewed by the City in cooperation with Clay County and the Florida Department of Transportation to determine the impact on air quality.

C 6.1.5 The City shall require the construction of sidewalks on all arterials and collectors when development is proposed adjacent to same.

GROUNDWATER OBJECTIVE

C 6.2 The City shall regulate new development to ensure that its water supply is sufficient in quality and quantity to meet present and future needs by limiting uses adjacent to water

bodies, reviewing stormwater management plans, coordinating with the SJRWMD minimum flows and levels and alternative water supply plans and protecting wellfields.

Policies

C 6.2.1 The City will continue to review construction practices and stormwater management plans during the site plan review process to prevent soil erosion and off-site siltation of surface water bodies.

C 6.2.2 The City will continue to allow on-site sewage treatment systems (septic tanks and drainfields) for single family and residential infill development, subject to Health Department regulations. Multi-family development that is not infill and non-residential development/ redevelopment shall be served by central water and wastewater systems. Residential infill development shall be defined as development within a subdivision platted prior to January 1, 2010.

C 6.2.3 Waterfront development /redevelopment shall be regulated to provide setbacks to natural waterbodies:

a. All structures shall be set back a minimum of 50 feet landward of the property line or Ordinary High Water Line, whichever is more restrictive. Setbacks for waterfront structures on Lake Geneva, Keystone Lake and Lake Brooklyn shall be governed by the historical Ordinary High Water Line established by the Florida Department of Environmental Protection / U.S. Corps of Engineers. These setbacks shall not apply to water dependent uses including bulkheads, boardwalks, docks, and boathouses when constructed pursuant to permits issued by the applicable regulatory agency.

b. All septic tanks and drain fields associated with on-site sewage disposal systems shall be set back a minimum of 100 feet landward of the waterfront property line or Ordinary High Water Line, whichever is more restrictive.

All new on-site sewage disposal systems or replacements installed for existing systems shall be located on the landward side of the primary structure on the property unless the application of this requirement precludes the replacement or installation.

C 6.2.4 The City shall limit development and redevelopment within a 500 foot radius of existing wellfields for potable water supply wells. Within the wellhead protection zone, all uses and activities shall comply with the Wellhead Protection Rule 62-521, F.A.C:.

a. domestic wastewater treatment facilities shall be prohibited.
b. unlined reclaimed water storage systems are permitted, subject to permitting under Part III of Chapter 62-610, F.A.C.
c. domestic wastewater residuals land application sites shall be prohibited.

d. new discharges to groundwater of industrial wastewater shall be prohibited unless otherwise allowed under Chapters 62-660,62-670, 62-671, and 62-673, F.A.C.

e. new Class I and Class III underground injection control wells are prohibited.

f. new Class IV underground injection control wells are prohibited except as permitted under Chapter 62-521.400.

g. solid waste disposal facilities are prohibited.

h. new generators of hazardous waste (excluding household hazardous waste) are prohibited unless evidence of compliance with secondary containment requirements of 40 C.F.R. Part 264 Subpart I is provided.

i. hazardous waste treatment, storage, disposal and transfer facilities requiring permits under Chapter 62-730, F.A.C. are prohibited.

j. aboveground and underground tankage of hazardous waste regulated under Chapter 62-730, F.A.C. is prohibited.

k. new aboveground storage tanks regulated under Chapter 62-762, F.A.C. are prohibited. Replacement or upgrading of an existing aboveground storage tank or addition of new aboveground tanks which are regulated under Chapter 62-762, F.A.C. at a facility with other such aboveground tanks are permitted. Provided that the replacement or new tanks meet the applicable provisions of Chapter 62-762, F.A.C.

l. Storage tanks which meet the auxiliary power provisions of subsection 62-555.320(6), F.A.C. for operation of potable water well and storage tanks for substances used for the treatment of potable water are permitted.

m. emergency equipment, including storage tanks, necessary to provide power to ensure a continuous supply on an emergency basis of public water supply, electrical power, sewer service, telephone service or other essential services that are of a public benefit are permitted.

C 6.2.5 Areas designated by the SJRWMD as high recharge to the Floridan aquifer (8 inches or more per year) shall be protected from incompatible land uses to ensure adequate recharge rates and water quality maintenance. The following restrictions shall apply:

a. All development within the high recharge areas shall have maximum impervious surfaces of 30 percent of total lot area, provided that at least 25% of the site is dedicated to native and/or drought-resistant vegetation areas, and containment using concrete surfaces is provided for all areas where material are stored and transferred.

b. Direct discharge of stormwater, via sinkholes, drainage wells, etc., shall be prohibited.

c. All development within the high recharge area shall be designed to have 100 percent retention of on-site runoff for a 25-year/24-hour storm.

f. Any new Floridan aquifer wells in the designated high recharge area shall be cased to SJRWMD standards to ensure that they do not provide a means of contamination to the Floridan aquifer.

g. Inspections of existing septic tanks and drainfields within the high recharge area shall be required when such septic tank or drainfield or related dwelling unit is altered, enlarged or replaced, if the system has not been inspected within three years.

C 6.2.6 New public supply wells shall meet the requirements stated in Policy 6.2.3 and in addition, shall be located no closer than 100 feet from other sanitary hazards that pose a potentially high risk to ground water quality and public health and shall be located no closer than 50 feet from other sanitary hazards that pose a moderate risk to ground water quality and public health, consistent with Rule 62-555.312(3) F.A.C.

C 6.2.7 To recharge the aquifer and conserve water resources, the City shall require that development/ redevelopment permitted by the City that is served by water-to-air heat pumps have return wells and that water from heat pumps is retained on site.

C 6.2.8 The City will require the evaluation of water demand to be included in the data and analysis provided in support of all proposed amendments to the Future Land Use Map. Amendments which project an increase in water demand will be required to show that water supply is available to meet the increased demand.

WATER CONSERVATION OBJECTIVE

C 6.3 The City will maintain or reduce the per capita consumption of potable water to 2008 levels.

Policies

C 6.3.1 The City, in cooperation with the SJRWMD, shall make available materials developed by the SJRWMD related to water conservation programs including information on the use of water saving devices and drought resistant native vegetation in the landscape, the limitation on landscape watering to certain hours and which promote public education and awareness of the benefits of water conservation.

C 6.3.2 The City shall coordinate annual monitoring of per capita water usage with the Clay County Utility Authority and will implement strategies to reduce water consumption on a per capita basis if the 2008 per capita demand is shown to increase for two consecutive years by 5 percent (cumulative) or if there is a single year increase of greater than 20 percent.

C 6.3.3 Development and redevelopment shall be required to utilize water saving devices in new construction and remodeled structures and shall be subject the City's xeriscape landscape requirements.

AQUIFER RECHARGE OBJECTIVE

C 6.4 The City will apply development criteria to protect the high aquifer recharge area of the Floridan Aquifer from the effects of additional development or redevelopment .

Policies

C 6.4.1 The City shall implement a public information program which annually informs residential and non-residential development within the high recharge area of the Floridan Aquifer served by septic tanks that inspections are encouraged. The information distributed shall identify the potential for contamination of the aquifer and adjacent surface waters from a poorly maintained or failing septic tank.

C 6.4.2 All new subdivisions, multi-family residential, commercial, industrial and institutional development will be required to have paved roads and drainage systems which treat all runoff prior to discharge into the City's water bodies.

C 6.4.3 The City will coordinate with the Clay County Utility Authority to identify areas of existing residential development located within the high aquifer recharge area of the Floridan aquifer where the extension of central wastewater is most financially feasible and will use the results of this analysis to identify funding sources and incentives for the extension of said services.

NATURAL SYSTEMS AND HABITATS OBJECTIVE

C 6.5. The City of Keystone Heights shall require the protection of native vegetative communities and the natural function of soils, fisheries, lakes, floodplains, wildlife habitats, wetlands, freshwater beaches and marine habitats; as well as unique habitats and ecological systems from destruction by development activities by limiting or prohibiting development activities.

Policies

C 6.5.1 The City shall develop and maintain an inventory of environmentally sensitive areas which shall include 100-year floodplains; wetlands as identified by existing sources such as USFWS and SJRWMD; listed wildlife species, habitats supporting wildlife species officially listed by the Florida Fish and Wildlife Conservation Commission (including species of special concern); existing public and private conservation areas and areas identified by the SJRWMD as having "high recharge" to the Floridan Aquifer.

C 6.5.2 The Land Development Regulations shall contain performance standards as to density, intensity, allowable uses and retention of native vegetation that protect and conserve the natural functions of environmentally sensitive areas, as defined in Policy 6.5.1.

a. Proper siting of development structures and infrastructure, including clustering of dwelling units away from sensitive areas.

b. Restrictions on the uses allowed in critical habitats to those found to be compatible with the requirements of wildlife species which are threatened, endangered, or of special concern as identified by the Florida Fish and Wildlife Conservation Commission.

c. Buffer zones of native vegetation adjacent to surface water bodies to prevent erosion, retard runoff, and provide habitat.

d. Setback requirements for buildings, other structures and septic tanks.

e. Providing incentives, where applicable, to encourage minimizing the environment impacts of development.

The City, in cooperation with the SJRWMD, will review development proposals for wetland impacts.

C 6.5.3 The City will coordinate with the St Johns River Water Management District to maintain or recover adopted minimum flows and levels for lakes within and adjacent to the City and prevent violation thereof such that environmental values associated with the aquatic and wetlands ecology of the area including: recreation in and off the water; fish and wildlife habitats and the passage of fish; maintenance of fresh water storage and supply; aesthetic and scenic attributes; filtration and absorption of nutrients and other pollutants; sediment loads; water quality; and navigation are protected.

C 6.5.4 The current surface water levels of Lake Brooklyn and Lake Geneva are below the adopted minimums established in Rule 40C-8.031, Florida Administrative Code. The City will work directly, and indirectly through education and its

community participation efforts to coordinate with the SJRWMD in the development of its required recovery and prevention strategies that may provide phasing or a time table which will allow for the continued provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures. During the SJRWMD's update to the Water Supply Plan, the City shall advocate for the SJRWMD to consider the need for water resource or water supply development, additional regulatory measures including water shortage orders and implementation of additional water conservation measures.

C 6.5.5 The City will provide drop off locations for household hazardous waste in coordination with Clay County.

C 6.5.6 First floor elevations of all new development in the 100 year floodplains will be required to be one foot above the flood elevation established by FEMA.

C 6. 5.7 All new development located adjacent to wetlands as identified on the Natural Resources Map shall include a 25 foot buffer upland from the wetlands. This requirement shall be in addition to regulations restricting allowable uses, density and intensity of new development adjacent to or within the wetlands (i.e. prohibition of septic tanks and requirements to maintain the natural hydro period).

C 6.5.8 The City hereby designates all lakes within the City to be environmentally sensitive/stressed and designates each lake or portion thereof within the City limits as Conservation Land Use.

CULTURAL AND HISTORIC RESOURCES OBJECTIVE

C 6.6 Keystone Heights will actively promote the preservation of access to cultural and historic resources by requiring that applications for development of vacant land investigate the potential of such resources on site.

Policies

C 6.6.1 Keystone Heights will coordinate with the State Division of Archives to identify and protect historically significant sites as a part of its review of development proposals.

C 6.6.2 The City will support requests for variances associated with the restoration or preservation of historic structures when such variances do not impact the health, safety or welfare of the citizens of the City.

C 6.6.3 The City will provide technical assistance to owners desiring to apply for inclusion of their significant properties on the National Register of Historic Sites and Places.

City Of Keystone Heights
Five Year Schedule of Capital Improvements
FY 2011/12 to FY 2016/17

Expenditures

IMPROVEMENT	DESCRIPTION	2011-12	2012-13	2013-14	2014-15	2015-16	2016/17	5 YEAR TOTAL
No Capacity Improvements Required to Maintain Adopted LOS		$0	$0	$0	$0	$0	$0	$0
	TOTAL EXPENDITURES	$0	$0	$0	$0	$0	$0	$0

Revenues

SOURCE	DESCRIPTION	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	5 YEAR TOTAL
No Revenue required to Maintain Adopted LOS		$0	$0	$0	$0	$0	$0	$0
	TOTAL REVENUE	$0	$0	$0	$0	$0	$0	$0
Project Expenditures		$0	$0	$0	$0	$0	$0	$0
Carry Forward		$0	$0	$0	$0	$0	$0	$0

FUTURE LAND USE

Introduction

The City of Keystone Heights is one of four municipalities in Clay County. It is the third largest municipality in population size. The City was founded in 1923 and in 1963 the City was reincorporated by special act of the legislature.

The geographic location of the City has been a major factor contributing to its population growth and development. Located in extreme southwest Clay County, the Karst Lake region was one of the major enticements to the founders of the City. The City was originally platted into residential lots in 1923 by the Lawrence Developing Company of Keystone Heights. Advertised as 'the ideal place to live, to play, and to invest', platted lots were purchased by individuals from many other states. While some moved to Keystone Heights soon after their purchase many held the lots for investment. The City saw steady development on the Lawrence Subdivision lots such that in 2010, only 54 of the original lots were undeveloped; these undeveloped lots are scattered throughout the City. Redevelopment opportunities do exist and are supported by the City in its Downtown Core and adjacent commercial and mixed uses areas; the City created a Community Development Area Agency and designated a redevelopment area in 2006.

The following discussion provides an overview of the existing conditions in the City and proposed future land uses.

Existing Land Use

The existing land use analysis performed in 1988 was updated in 2010 using the 2009 Property Appraiser's database to reflect the existing use of land within the City. Since 1988, the City has annexed four parcels of land, increasing its area by 52.17 acres: 9.99 acres of the annexed land is developed as a wastewater treatment plant; 5.74 as a City park and public works facility with the remaining 36.44 acres being vacant.

Existing uses in 2010 were residential single family, mobile home and multi-family cottages; commercial retail and service; industrial warehouse and utilities (Clay Electric Cooperative);~~,~~ recreational, institutional (including public schools, religious, non-profits and public facilities, grounds and buildings); utilities; and vacant land. The City lacks agricultural land uses within its boundaries. The Existing Land Use Map depicts the existing use of land within the City. The acreage in each use is identified in Table 1.

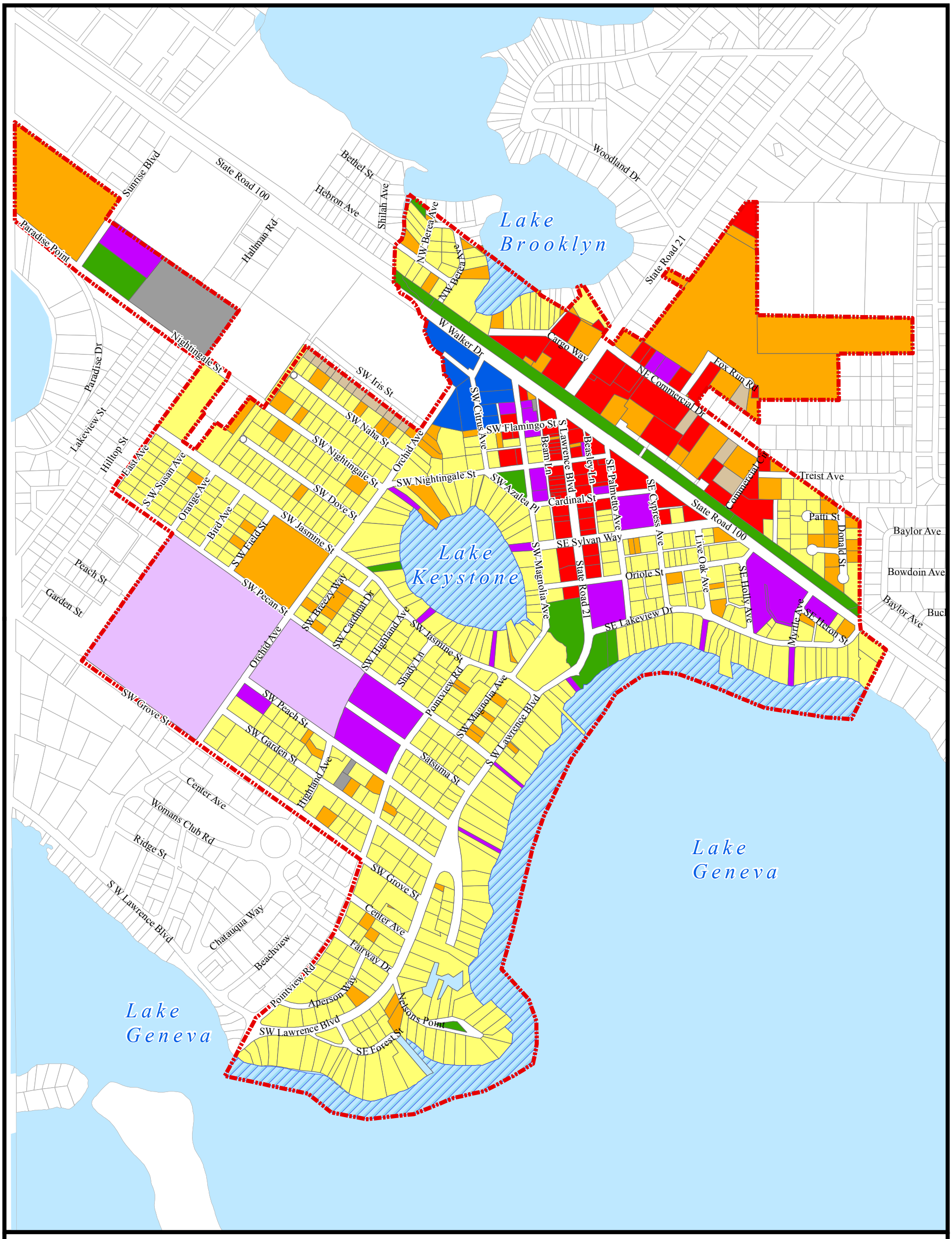
TABLE 1
2010 EXISTING USE

Use		Acreage		Percent of Developable
Residential			**248.62**	**50.6 %**
	Single Family	239.36		
	Mobile Home	6.08		
	Multi-Family	3.18		
Commercial			**34.00**	**6.9 %**
	Retail	21.95		
	Service	12.05		
Industrial			**12.66**	**2.6 %**
	Warehouse	2.42		
	Utility	10.24		
Recreation			**20.96**	**4.3 %**
	City	10.33		
	SR 100 Trail	10.63		
Institutional			**78.88**	**16.1 %**
	City and County	9.90		
	Non-Profit/Religious	18.43		
	School	50.55		
Conservation			**72.7**	**NA**
Vacant			**95.79**	**19.5 %**
	Residential	75.49		
	School	8.38		
	Commercial	10.35		
	Light Industrial	1.57		
	TOTAL Developable		**490.91**	**100**
	TOTAL(less roads)		**563.61**	

Existing residential single family use occupies 50 percent of the developable land within the City. The general range of density of the existing residential uses is 1.5 to 5 dwelling units per acre. A small area of medium density does exist at an average density of 10 dwelling units per acre. The 2010 average density of residential use within the City is 2.38 per acre.

2010 Existing Land Use

City of Keystone Heights



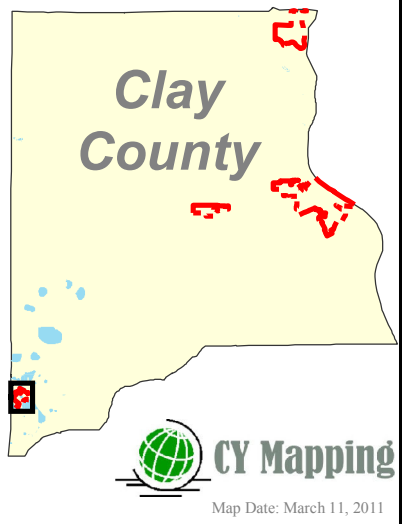
Existing Land Use

- Commercial
- Conservation
- Industrial
- Institutional
- Light Industrial
- Public School
- Recreation/Open Space
- Residential
- Utilities
- Vacant

N

500 0 500 1,000 Feet

Source:
City of Keystone Heights, 2010



CY Mapping

Map Date: March 11, 2011

There were 552 housing units in the City in 2000; 523 were single family, 7 were multi-family and 22 were mobile homes. Of the multi-family units (2 or more units in a single building), all 7 are duplexes. There were no multi-family structures with greater than 2 units per building in the City in 2009; this is a function of the lack of availability of central wastewater treatment within the City limits prior to 2008. An additional 39 residential single family units were constructed between 2000 and 2010 bringing the total number of units in the City to 591 in 2010.

Commercial use occupies 34 acres within the City, representing only 6.9 percent of the developable land. The intensity of commercial use ranges from 5,000 to 15,000 sq. ft of gross leasable floor area per acre.

Existing industrial use is limited; Clay Electric Cooperative's corporate offices occupies 10.24 acres of industrial land within the City. Four small parcels comprise the remaining 2.42 acres of developed light industrial use in the City. The offices, maintenance and vehicle yards extend into the unincorporated County. The Clay Electric Cooperative properties in the City are classified as industrial use based on the potential for outdoor uses that are more intense than a commercial designation would allow.

Light industrial warehouse use is located within the City on two parcels located on Fox Run off Commercial Circle; these warehouse uses are on parcels less than one half acre in size and are not incompatible with the surrounding commercial use.

Recreational use within the City includes the public City Beach and other parks, and the Palatka- Lake Butler State Trail. The recreational facilities within the City are located on 20.96 acres. The lakes within the City represent prime recreational areas; there is over two and a half miles of lake waterfront within the City limits with approximately 500 feet of public access. The lakes occupy 72.7 acres of area within the City.

Institutional land uses are the public buildings, religious, non-profit (clubs and lodges) and educational uses within the City. This designation includes two public schools, City Hall and several churches. Institutional uses comprise 16.1 percent of the developable land within the City. The average land use intensity ranges from 3,000 to 15,000 square feet per net acre.

Conservation uses within the City are Lake Keystone and the portions of Lake Brooklyn and Geneva that lie within the City limits. Uses within the Conservation land use category are limited to those appropriate for the lakes and shores given their natural resource value.

Vacant Land Analysis

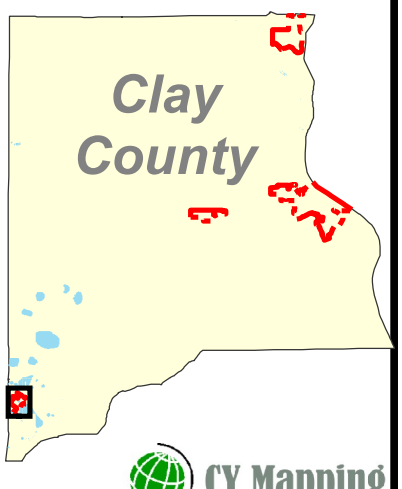
A total of 95.79 acres within the City are vacant. 75.49 acres of the vacant land lies in the Residential land use category; recent annexations comprise 51.7 acres of the vacant residential land in the City. Only two residential vacant parcels other than those recently annexed exceed 1 acre in area; the remainder are individual lots (59) scattered throughout the City. There are

City of Keystone Heights
Clay County, FL
Vacant Lands Map

500 0 500 1,000 Feet

City Limits

Vacant Parcel



Data Source:
Parcels - Clay County Property Appraiser, 2010
City Limits - City of Keystone Heights

CY Mapping

Map Date: July 2008
Revised: August 2010

10.35 acres of vacant commercially designated land in the city and 1.57 acres of vacant land designated light industrial.

The Residential vacant acres represent the future development potential within the City. The two recent annexations have produced two parcels, one 13.88 acres in area and the other almost 38 acres in area, of vacant residential land that will support traditional subdivision development and add diversity to the housing stock (age and type) available to the residents of the City.

Population Projections

The City of Keystone Heights' population exhibited slow but steady growth between 1960 and 1990, with an average annual rate of increase of 2-3 percent. Since 1960 the City's population has more than doubled. In 1990, the Census population was 1,315; in 2000 this had increased to 1,345 persons. Table 2 identifies ~~two~~ ~~lists~~ the historic population increase beginning in 1960 and the annum growth rate. The 1991 comprehensive plan predicted declining population growth rate in the period between 1980 and1990 and listed reasons for the conclusion as the:

- Decline in the amount of developable sized blocks of vacant land within the city limits
- Relatively older age of residents
- Lack of central sewer system
- Non-conforming platted lots within Old Lawrence Subdivision
- Relatively higher taxes than surrounding county
- Unsuccessful annexation votes in the past
- Present zoning regulations and rezoning policies of the City Commission

While the 1991 comprehensive plan noted that these factors were not anticipated to change in the coming decade (1990 – 2000), in fact they did, but only recently (2007-2010). As a result, the growth rate ~~is~~ between 1990 and 2000 was less than one quarter of one percent and is estimated to be less than 1 percent for the period between 2000 and 2010.

Table 2
HISTORIC POPULATION

Year	Per Annum Growth Rate	Number of Residents
1960		655
1970	2.0%	800
1980	2.8%	1,056
1990	2.4 %	1,315
2000	0.23 %	1,345

Source: US Census

Future population growth in the City is projected to remain well under one percent a year through 2025. The population projections utilized for planning in the City through 2025 are those developed by the Shimberg Center for Affordable Housing and do not consider the recent residential land annexations and construction of the wastewater treatment system; the City will monitor population growth through its building permit records to determine if the rate of growth should be adjusted during development of its next Evaluation and Appraisal Report. The changes in the availability of vacant land (annexations) and the construction of a central wastewater system to serve the City in the period between 2006 and 2010 is anticipated to increase the rate of population growth in the City. Without these changes, it would have been reasonable to project that the population of the City would decline in the future.

Table 3
POPULATION PROJECTIONS BY YEAR

Year	Per Annum Growth Rate	Population	Annual Increase
2000 Census		1,345	
2005 Estimate	0.61%	1,386	8.2
2010 Projection	0.38%	1,413	5.4
2020 Projection	0.26%	1,450	3.7
2025 Projection	0.16%	1,462	2.4

Source: Shimberg Center for Affordable Housing, 2010

Population Characteristics

The City is a rural commercial center for portions of three adjacent counties. Seasonal population associated with the recreational use of the lakes was very significant until the early 1990's. With the lowering of lake levels in the City in the mid- 1990's, tourism within the City and the area has been all but eliminated.

The population of Keystone Heights is older than surrounding Clay County, but exhibits characteristics similar to the state of Florida as a whole. The median age in Keystone Heights is lower than the state as a whole but higher than in the unincorporated County. Household size in the City and unincorporated Clay are almost the same, indicating that the population of the City has changed from one with a large number of retirees to one that includes families. Average household size in 2000 was 2.62 (Clay was 2.77) and average family size was 3.09, compared to 3.11 in Clay.

Residents of:	Percent Over 65	Median Age
Florida	17.6	38.7
Clay County	9.8	35.9
Keystone Heights	17.6	37.8

Source: 2000 Census

Analysis of the Availability of Facilities

The citizens of the City are provided public services by the City, Clay County, the Florida Department of Transportation and the Clay County Utility Authority. All facilities subject to concurrency management review are provided at or above the adopted level of service standard and are projected to be provided at or above the standard through 2015 (five year horizon).

Traffic Circulation

There are no existing deficiencies relative to transportation levels of service in the City of Keystone Heights. The realignment of the SR 100 / SR 21 intersection to a 90 degree angle would however be an improvement that could be made in the existing transportation network to would improve traffic circulation and safety: The current configuration creates congestion on SR 21 on the south side of the intersection creating queuing issues in the central core of the City. If improvements to State Road 100 are made to address capacity deficiencies or if accident records indicate a safety issue, the City will coordinate with the FDOT to prioritize the realignment of this intersection.

State Road 100 is projected to operate below the adopted level of service standard applicable to the Strategic Intermodal System between 2015 and 2025. Discussions with FDOT, the maintenance entity for SR 100, brought concurrence that the projected exceedance of the adopted level of service standard is very small. The City will monitor traffic counts and update its projections of the long term counts (consistent with the FDOT projections) to determine if the trend in declining traffic counts continues and reduces the long range projection sufficiently to meet the adopted level of service standard. In addition, the City will evaluate the adoption of a Transportation Concurrency Exception Area to address the needs of the City.

Recreation and Open Space

The City has adopted a level of service for recreation facilities based on the standards recommended in *Outdoor Recreation in Florida 2000 (2000 SCORP)* and the availability of land and resources for additional facilities. The needs of the projected future population are met with the existing inventory of recreation facilities. Additionally, new residential

development is required to provide recreation facilities to maintain the adopted level of service and to serve the residents of the development.

Priorities for recreation and open space within the City are to first maintain the existing facilities in good condition such that they are safe and available to the public for use; second , for the continued improvement of Recreation Park consistent with the Master Plan for this park; and third, to pursue unforeseen opportunities to expand the inventory of recreation facilities if new funds/ funding sources become available.

Potable Water Treatment

The City has been served by central water since before adoption of the original comprehensive plan in 1991. Southern States Utilities owned and operated the system prior to its acquisition by the Clay County Utility Authority in 2005. All development within the City must connect to central water service.

The CCUA serves the City from two wells within the City limits and two wells outside the City limits. The WTP that serves the City (Keystone Heights) is looped with the Keystone Club Estates WTP, creating a combined service area that extends beyond the City limits. The combined capacity for these two plants is 1.376 mgd. The peak daily flow in the Keystone Grid in 2009 was 0.5284 mgd. The potential increase in demand through 2015 generates a total demand in 2015 of 0.597 mgd, less than the available capacity of the treatment capacity of the Keystone Grid and less than the 0.6499 mgd withdrawal permitted under the current CUP.

The projected demand for potable water in 2025 is 0.666 mgd which is less than the available capacity of the treatment capacity of the Keystone Grid and just exceeds the 0.6499 mgd permitted withdrawals in the current CUP. The consolidated CUP under review by the SJRWMD, increasing the permitted withdrawals to 2.0 mgd, is adequate to meet the projected increase in demand within the service area through 2025.

Water Supply

The Clay County Utility Authority holds the Consumptive Use Permit (CUP) for the public water supply that serves the City. In recent CUP permitting efforts, the CCUA evaluated the water supply in its service area, including the Keystone Heights area.

The average daily flow in the Keystone Grid in 2008 was 0.5284 mgd. The CCUA applied for a modification of its CUP in December 2006; the modification will consolidate the permits for the Keystone Grid, Postmasters Village (located in unincorporated Clay County) and Geneva Lakes Estates (located in unincorporated Bradford County) and increase the permitted withdrawals to 2.00 mgd. The consolidated CUP under review by the SJRWMD, increasing the permitted withdrawals to 2.0 mgd, includes in the service area portions of Clay County that are not within its Centralized Service Areas and as such, the requested withdrawal amounts are in excess of the projected demand associated with vacant land that can be served with central water.

Because the SJRWMD is updating its regional groundwater model it has requested the CCUA wait until the new model is available to utilize for the final permitting of the consolidation of the CCUA wells that serve the City and an increase in withdrawals. The CCUA is currently operating under its current permits with an interim approval for additional withdrawal, pending issuance of a new permit.

Sanitary Sewer

In 1991, there was no central wastewater treatment within the City limits. The City and the Clay County Utility Authority secured a grant to construct a wastewater treatment plant within the City to serve the businesses in 2003; the plant became operational in 2005. Central service has been extended to the non-residential development within the City and there is adequate capacity to extend service to some residential properties upon request without facility expansion. In May 2009, the CCUA was permitted to expand the Keystone Heights WWTP to a capacity that meets the projected needs through 2025. The CCUA has funded the construction in its CIP with plans to commence construction of the expanded facilities in December 2010 and complete them in December 2012.

Because the residential properties in the City are each served by on-site septic systems, wholesale extension of central wastewater service to any significant percentage of the existing development in the City is unlikely. Continued use of on-site systems is anticipated for the majority of the residential properties in the City unless there are financial incentives made available to residents to connect to central services. New residential development within two planned subdivisions will be served by central wastewater treatment facilities. All new non-residential development must be served by central wastewater.

The City and CCUA was awarded a grant under the Small Community Wastewater Facility Grant program administered by the Department of Environmental Protection in order to provide central wastewater service to existing residential units in the City . The design portion of the project is funded; application for construction funding will be made in late 2011. The schedule in the grant application identifies completion of construction if the grant is awarded to occur in mid-2013.

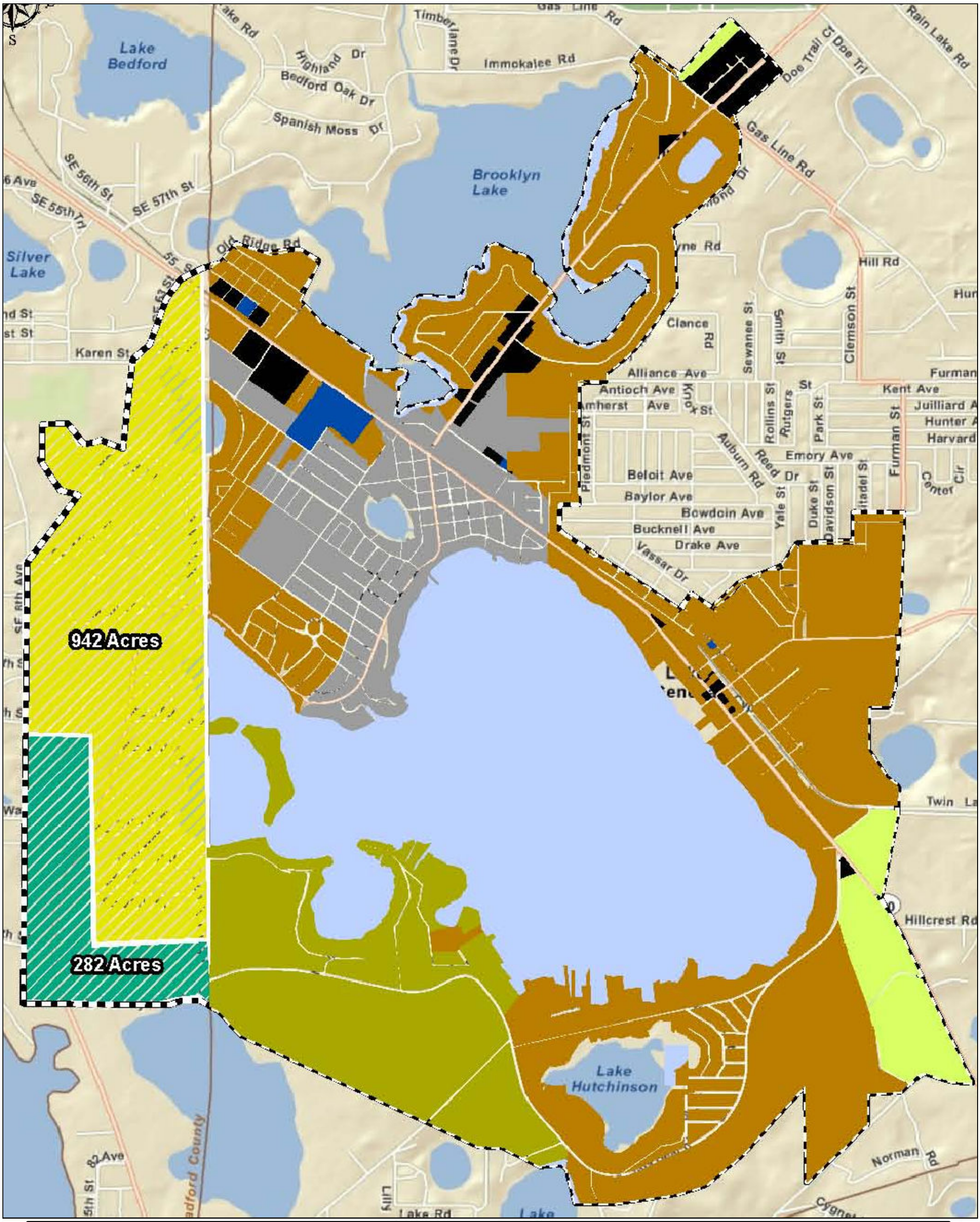
The majority of the soils within the City are suitable for septic tank drain fields. Only Mandarin fine sand is rated severe for septic tanks due to the high water table. Mandarin fine sand occupies the slopes immediately adjacent to Lake Geneva.

Solid Waste

The solid waste facilities that handle the disposal of solid waste generated within the City are managed by Clay County. In 1993 the County converted from a fee based system of financing solid waste facilities to a system based on a solid waste assessment for all residents of the unincorporated county; the City assesses its residents the same fee, collects the funds and makes payment to the County directly. The City, through its solid waste hauler, collects a

Central Service Area

City of Keystone Heights

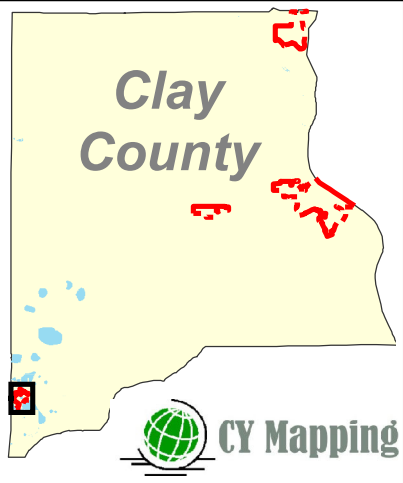


N

(Not to Scale)

- Central Water Service Area
- Central Wastewater Service Area

Source: Clay County Utility Authority, 2010



CY Mapping

Map Date: March 11, 2011

solid waste disposal fee from the businesses in the City and pays the applicable tipping fees to the County.

Clay County includes the population of the municipalities when projecting the solid waste generated annually. Throughout the planning period, the City represents less than one percent of the total Class I waste stream projected for Clay County and its municipalities, falling to just over one half of one percent of the total waste stream in 2025.

The City is obligated to secure adequate capacity to meet the projected need for solid waste disposal facilities for its population through the planning period. The City will continue to rely on a third party to manage and operate the disposal facilities necessary to meet its projected need. The analysis performed by Clay County identifies that the County will begin a study in 2009 to review its current contracts and approach of shipping solid waste out of the County for disposal. The City will coordinate with the County to ensure that the City's solid waste demand is recognized in any study undertaken by the County related to solid waste disposal options.

The City plans to continue to contract with the County's waste disposal provider.

Drainage

The City has adopted a drainage level of service standard applicable to all development and redevelopment within the City that is consistent with the stormwater criteria of the St Johns River Water Management District. Permits to develop or redevelop land within the City will be required to meet the adopted level of service standard.

The historical drainage problem in the City was created by surface drainage associated with the many unpaved streets. Prior to 1991, there were six miles of unpaved streets; since 1991, the City completed a paving program using CDBG funds. All streets within the City with the exception of a portion of Forest Street and Fox Run are now paved.

The City will address erosion issues at Keystone Beach in coordination with the Florida Department of Transportation and the Department of Environmental Protection.

Ground Water Recharge

The City implemented land development regulations in 1992 consistent with its adopted goals, objectives and policies that address protection of the high recharge areas of the Floridan aquifer that are located within the City limits. Because the City is essentially built-out, there is little opportunity for new development that would impact the Floridan aquifer from a recharge perspective. Changes in use as well as redevelopment activities and the intensification of uses on existing properties within the City do however represent a threat to the Floridan aquifer if not properly regulated.

The lakes in Keystone Heights represent a connection to the Floridan aquifer. A small area of the City lies within the high recharge area of the Floridan aquifer (8-12 inches per year). Water quality and the potential for contamination of the aquifer from existing or future uses within the City is a concern that the City addresses by regulating permitted uses. Aquifer recharge rates (water quantity) are protected by applying maximum impervious cover percentages to new development and any expansion of existing development within the high recharge area. The City is active in coordination and review of the establishment of minimum flows and levels for Lakes Geneva and Brooklyn; changes to the lake levels affect the economy of the area and the City specifically, and affect natural resources such as fisheries and beaches.

Development Suitability

Topography and Soils
Within the City, elevations vary from 100 feet above mean sea level to 160 feet, trending from northwest to southeast. Lake Geneva is located at the lowest elevation within the City.

Soils within the City are predominantly sand with high percolation rates. These soils are classified in one of the following series and characteristics in the Soil Survey of Clay County, Florida.

Table 4
Soil Suitability and Flooding

Soil Name	Water Table Depth	Septic Tanks	Flooding
Penney fine sand	> 6 feet	Favorable	none
Mandarin fine sand	1.5 to 3.5 feet	Unfavorable	none
Ortega fine sand	3.5 to 5 feet	Moderately favorable	none
Ortega Urban Land	3.5 to 5 feet	Moderately favorable	none
Ridgewood fine sand	2 to 3.5 feet	Unfavorable	none

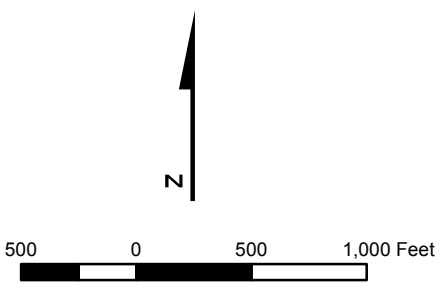
The high elevations and the sandy soils combine to reduce the threat of flooding. Only very small areas of the City and a few isolated streams within the City are prone to flood during the most severe storm event.

Potable Water Wellfields

The CCUA operates a potable water wellfield within the City limits. Uses adjacent to the wellfield are subject to restrictions to protect the potable water quality. The City's potable

Soils

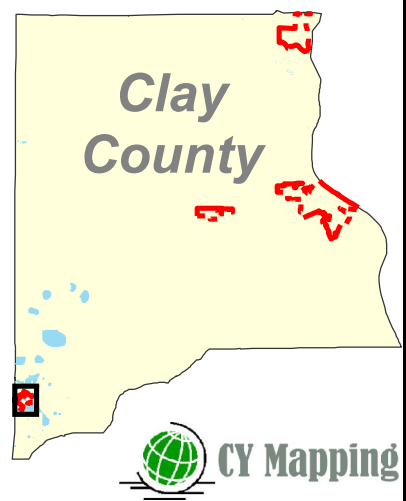
City of Keystone Heights



Soils

- ALLANTON
- MANDARIN
- ORTEGA
- PENNEY
- RIDGEWOOD
- SCRANTON
- TROUP
- URBAN LAND

Source:
Soils - SSURGO



CY Mapping

Map Date: March 13, 2011

water wellfield protection zone is 500 feet. Within the wellhead protection zone, all new facilities and activities shall comply with the Wellhead Protection Rule (62-521, F.A.C.)

The potable water wellfield protection zone includes properties within the Mixed Use, Institutional and Industrial land use categories. Located immediately adjacent to SR 100, existing use of properties within the 500 foot protection zone are auto sales and repair, County Fire Station, a Southern Bell switching station, convenience and gas station (with pumps), City Public Works Yard/barn, retail commercial, office, and single family residential. These existing uses may continue.

Plans for development or redevelopment and changes in use will be reviewed for compliance with use restrictions in Rule 62-521, Florida Administrative Code and setbacks identified in the policies of this Plan.

Natural Resources

Natural resources within the City include habitat for wildlife and fishes. There are wetlands within the City associated with the lakes and drainageways. There are at least 100 plant types, 40 species of fish, 30 species of reptiles, 65 species of birds, 15 species of mammals, and 5 species of amphibians that exist within the City's boundaries. None of these are listed as rare, threatened or endangered species of special concern.

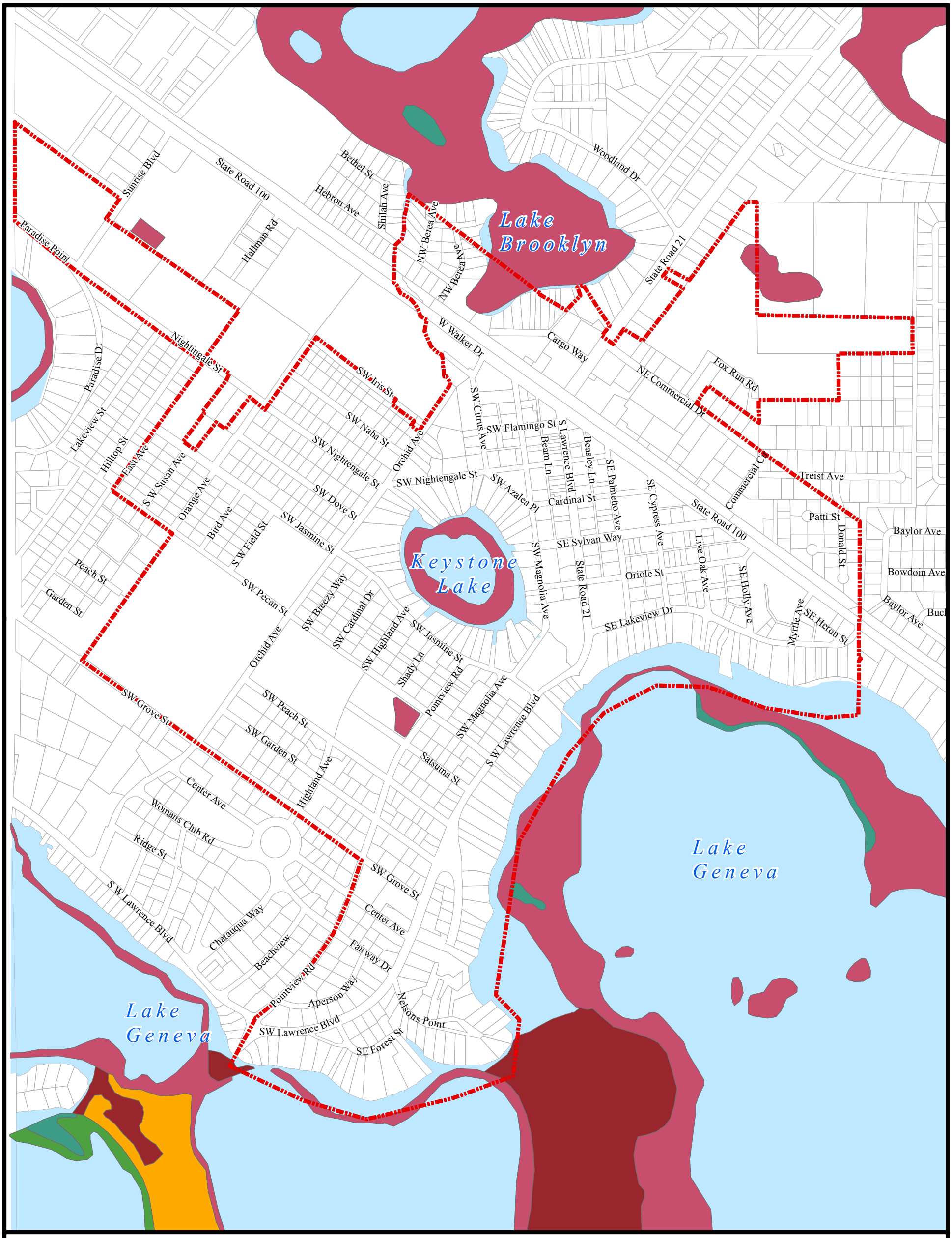
Because the City has been subdivided and the land is developed for urban use, there are no significant habitat areas for any animal or plants listed as endangered or threatened. The lands recently annexed into the City do not contain significant habitat areas for plants or animals listed as endangered or threatened. The animals (mammals, birds, amphibians and reptiles) and plants which are listed on the Florida Fish and Wildlife Conservation Commission (FWC) list of Rare and Endangered Species which may be found in an isolated locations includes:

Plants:	Curtiss' Milkweed (Endangered) Chapman's Rhododendron (Endangered)
Birds:	Red Cockaded Woodpecker (Species of Special Concern)
Reptiles and Amphibians:	Gopher Tortoise (Species of Special Concern)

Source: Florida National Areas Inventory, FNAI, July 1989.

Fishery resources of Keystone Heights are associated with the major lakes. The numerous lakes once supported robust large-mouth bass, crappie, shellcracker and bluegill populations. The lack of rainfall and groundwater withdrawals have drastically affected the water level in the area lakes and fishery habitats have all been adversely affected. The recovery of these resources will depend on the future lake levels. Regulatory decisions by the St Johns River

City of Keystone Heights
Clay County, FL
Wetland Land Cover Map



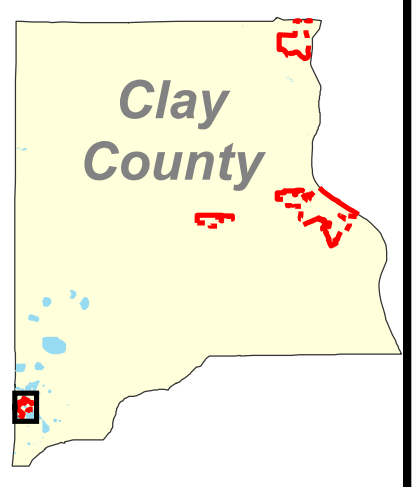
City Limits

Land Cover

- Wetland Forested Mix
- Freshwater Marsh
- Wet Prairies
- Emergent Aquatic Vegetation
- Mixed Scrub-Shrub Wetland
- Non-Vegetated Wetland

N W E S

500 0 500 1,000 Feet



Data Source:
Land Cover - SJRWMD, 2004
Parcels - Clay County Property Appraiser, 2010
City Limits - City of Keystone Heights

Map Date: January 2011

Lake Brooklyn

NW Berea Ave

W Walker Dr

Cargo Way

State Road 21

NE Commercial Dr

SW Citrus Ave

SW Flamingo St

S Lawrence Blvd

Beam Ln

Beasley Ln

State Road 100

Orchid Ave

SE Palmetto Ave

SW Nightingale St

SW Azalea Pl

SE Cypress Ave

Cardinal St

SW Magnolia Ave

State Road 21

SE Sylvan Way

Oriole St

Lake Keystone

Potable Water Wellfield

City of Keystone Heights

N

200 0 200 400 Feet

Potable Water Wellfield

Wellhead Protection Zone (500 ft.)

Clay County

CY Mapping

Map Date: March 11, 2011

Water Management District with regard to minimum flows and levels for lakes within and adjacent to the City are critical to the restoration of fishery resources historically associated with these lakes.

Historic Resources

The City established its Heritage Commission in 2009 and charged the Commission with assessment of the resources within the City. The Commission is a recommending body to the Council.

On the recommendation of the Commission, the City has funded a historical and archaeological resource survey to be completed in 2011. In addition to documenting the resources of the City, the survey report will include a history of Keystone Heights and the County, copies of old plat maps, deeds and pictures / records for buildings.

The survey will document its findings using the Florida Master Site File Field Survey forms and submit the records to the Council which will make them available to the Bureau of Historic Preservation. The survey will include recommendations to the Council on issues such as the need for a Historic District, design standards and incentives the City could offer to encourage the preservation of the historic resources of the City.

Future Land Use

Background

The Future Land Use Map for the City follows traditional neighborhood development patterns south of State Road 100. The main street in the City is SR 21 (Lawrence Boulevard). Developed with small scale commercial and service uses with on street parking, mixed use areas surround the main street on a grid street network and single family residential use on small lots are located in the third tier.

North of State Road 100, the Palatka –Baldwin Trail is located along the northern right of way line of SR 100 so access to properties that front on SR 100 is provided from two service roads, Green Way and Cargo Way. Commercial Circle intersects with SR 21, running east and south looping back to SR 100. The main commercial road within the City, Commercial Circle serves relatively larger commercial parcels (the largest being approximately 2.5 acres in size). Cargo Way serves properties on the west side of SR 21 with residential and commercial development on its northern side, and commercial highway development on the south. Limited residential use accesses Cargo Way at its most westerly limits; residential uses also access Commercial Circle at its easterly limit.

Two annexations since 2000 have dramatically changed the inventory of land available for development within the City. The annexation of land in 2007 was combined with lands within the City to create a 37.82 ace parcel of developable land north of SR 100 and east of SR 21. The land use was changed to the residential category in 2008 and plans for development with

single family and attached single family units have been approved. In 2009, a parcel 13.88 acres in area was annexed into the city. Located off Sunrise Boulevard at the northwestern limits of the City, the land use designation was changed to residential in 2010. Individually, these parcels are the largest vacant residential properties in the City and they provide opportunities for a more diverse housing stock and new construction to serve the residents of the City.

Analysis of the Need for Redevelopment

The City of Keystone Heights recognized the need for redevelopment in 2003 and was granted the powers enumerated in Section 163. 358, Florida Statute, relating to community redevelopment, by Clay County, a Charter County, on February 24, 2004. The City is authorized to exercise all the powers identified in Section 163.358 except the power of eminent domain for redevelopment and the power to bond redevelopment revenues. The boundary of the Community Redevelopment Area of the City is comprised of the Commercial and Mixed Use land use categories and those public properties in the Institutional land use category that lie within the area defined by the Commercial and Mixed Use properties in the boundary.

The 2004 survey of existing conditions within the City found the following contributors to blight and impediments to economic development in portions of the City:

- defective street layout (short blocks, irregularly spaced intersections which increase traffic congestion in the area);
- traffic congestion at the intersection of SR 100 and SR 21 within the heart of the City's Downtown;
- small non-conforming lots with an inferior lot layout;
- unsanitary/unsafe conditions (potential septic tank failures on small downtown lots, inadequate water pressure for fire flow);
- inadequate parking (practical and by City Code);
- deficient water system;
- irregular streetscape elements, including unsafe sidewalks;
- lack of centralized sewage collection and treatment system.

A survey of parking conditions performed in April 2004 specifically supported the determination of blight pursuant to Section 163.340(8), F.S.

The pattern of buildings, streets, alleys, parking and pedestrian access within the City can only be improved through a public-private partnership that addresses the negative attributes of blight through redevelopment activities. Public and private funds are necessary for the successful implementation of the Action Plan for Redevelopment contained in the Community Redevelopment Plan (CRP) adopted by the Community Redevelopment Agency.

The CRP identifies that the following conditions contribute to blight within the CRA:

Economic Underutilization is generally experienced in the Downtown area because of;

- a lack of central sewer service for non-residential development (at the time the CRA was established and now available);
- Inadequate parking in the downtown core of the City. Most downtown parking occurs within the right of way of Lawrence Boulevard (SR 21) and is subject to removal if Lawrence Boulevard is widened or improved to meet current design guidelines. The quantity of on-street parking is inadequate to serve the businesses downtown even if retained.
- Inadequate pedestrian circulation within the downtown core of the City. On-site parking is not provided by most businesses along Lawrence Boulevard or the side streets; alleys to the rear of commercial buildings facing Lawrence Boulevard and side streets within the downtown are utilized to meet parking needs. Pedestrian access to businesses from the rear alleys (either from rear entry points to the business or between buildings to the front access and sidewalks serving other businesses) is limited, reducing the potential use of alleys for overflow and employee parking.

The Community Redevelopment Plan identifies specific strategies and projects that are intended to improve the economic vitality of the community redevelopment area. The Community Redevelopment Area Board meets on a regular basis to identify projects, implement solutions and update its action plan. The CRA adopts an annual capital budget to allocate TIF revenue to identified redevelopment projects.

Urban Sprawl

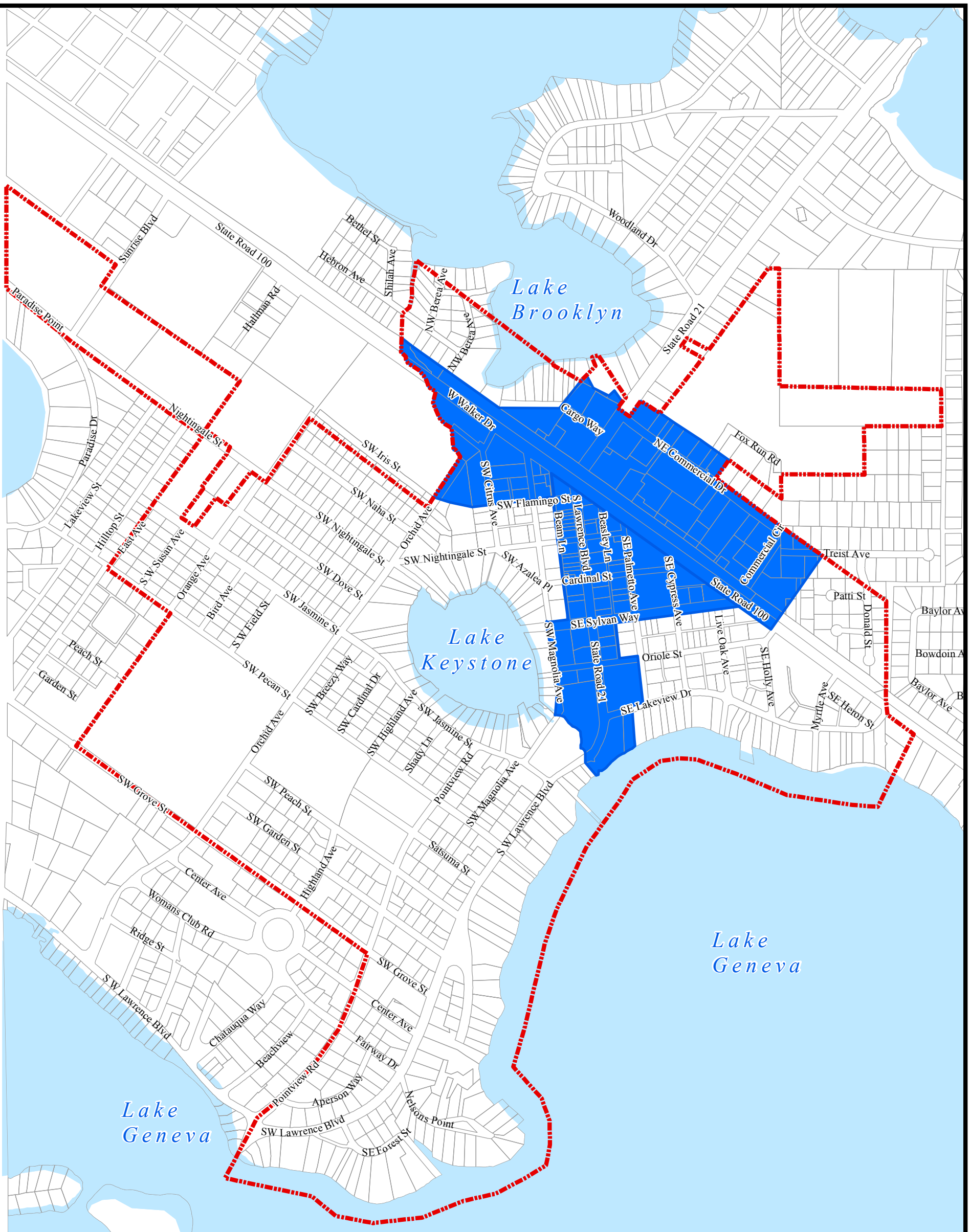
The pattern of development within the City differs from the surrounding unincorporated County where undeveloped tracts can be thousands of acres in area. Overall, development within the City is compact, and while not served by transit, the scale of the street pattern in the City is pedestrian and bicycle friendly: on street parking acts to calm traffic; short block lengths generate multiple intersections that increases access to parcels; and many alternative routes for bicycle, pedestrian and vehicular modes exist. The mix of residential, government, medical, recreation and commercial/service uses currently in the City and the Future Land Use designations on vacant land set the stage for a mixed use community that serves its residents and the surrounding area in a compact, pedestrian and bicycle friendly environment.

Future development within the City will continue the land use pattern established by the existing development using development and design standards that continue the energy efficient land use patterns, address energy conservation and reduce greenhouse gas emissions

The City does not currently exhibit the characteristics of urban sprawl and the goals, objectives and policies of the Plan will be used to measure proposed changes to the future land use designations within the City for indicators of urban sprawl that would affect the character of the community. Redevelopment plans will be reviewed for consistency with the City's community character and the adopted Community Redevelopment Plan and will be

Redevelopment Area Boundary

City of Keystone Heights

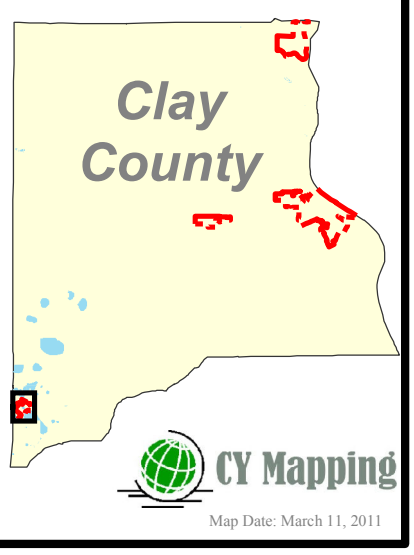


Community Redevelopment Area

N

500 0 500 1,000 Feet

Source:
Redevelopment Area - Keystone Heights Community Redevlopment Plan, 2010



CY Mapping

Map Date: March 11, 2011

required to retain and improve upon the energy efficient, compact urban pattern of the City today.

The existing pattern of development maximizes the use of existing facilities and services. Redevelopment plans guided by the Community Redevelopment Plan promotes infill development, economic revitalization and the reuse and redevelopment of existing structures and infrastructure,

Future Land Use Categories

The City has adopted standards of intensity and density for each future land use designation. The following provides a description of the planned uses within each land use designation.

Residential

The Residential land use category is a single use category that permits residential uses and supporting infrastructures uses such as lift stations, stormwater facilities and recreation uses associated with planned developments. The maximum density of use permitted is six (6) dwelling units per acre conditioned upon the availability of central water and wastewater services. Development without central wastewater service but served by central water is limited to a maximum density of 4 units per acre.

Mixed Use

The central core of the City lies in the Mixed Use land use designation. The parcels within the Mixed Use designation that fronts on Lawrence Boulevard between SR 100 and City Hall (SE Lakeview Drive) are currently developed with commercial uses; these uses are permitted to remain despite their inconsistency with the Mixed Use Land use mix requirements. provided individual structures are not expanded. The areas of the Mixed use category comprised of the parcels that do not have direct access to Lawrence Boulevard South (SR 21) are characterized by a full integration of single family residential units and small office and service establishments. There are no vacant parcels in the Mixed Use category off Lawrence Boulevard; on Lawrence only two parcels, one 30 feet and the second 22 feet wide, are vacant. Both residential and commercial uses are permitted on a parcel and required within each block. The area of the City designed for mixed use has a defined, small grained grid street network with alleys to the rear of the lots. The mix of uses is controlled on a per block basis to insure that a mix of uses is maintained despite the individual ownership of lots within the block. A maximum mix of commercial to residential land area is established by policy; no more than 50 percent of any block may be developed for non-residential use. The City reviews each proposed development or redevelopment plan within this land use designation to insure that the mix is maintained. Because the lots are individually owned, buffers are required between abutting non-residential uses on adjacent lots, regardless of the ownership of the parcel. Vacant land within the Mixed Use category is limited to scattered lots. While the City reviews and approves changes in use within existing structures on a regular basis there has not been new development on a vacant parcel within the MU land use designation in over

10 years. The City has historically approved changes in non-residential uses but not the conversion of one use to another.

While the historical stability of the individual lot pattern and pattern of use is projected to remain though the planning period, the City does provide incentives for redevelopment and investment that would produce a greater mix of housing types within the City. Currently single family dwellings represent 99 percent of the housing stock in the City; the demand for multi-family units is projected to increase throughout the planning period. The MU land use designation on the FLUM is the appropriate category based on location, scale and total area to promote redevelopment through the aggregation of individual lots to create a higher density, integrated mixed use area in the City.

The first incentive offered by the City for a redevelopment plan is an increased density when residential is located above non-residential use. Applicable to the residential component of the MU development, the increase in density is a 100 percent bonus, allowing up to 12 units per acre for projects with vertical integration of a minimum of 50 percent of the residential units in the development. The non-residential bonus is to eliminate the cap on the percentage of land area within any given block if a minimum of 50 percent of the residential use is integrated vertically.

In addition to controlling the mix of uses when lots in a block are under different ownership, the City encourages a mix of uses within a parcel or assembly of parcels under a Planned Unit Development site plan. As an incentive for the use of sustainable development practices and/or greenhouse gas reduction strategies, the City allows a 100 percent density bonus on residential density in the MU land use category.

Vacant land within the City is very limited. The City will develop criteria for the review of redevelopment within the boundary of its CRA and throughout the City that insures a thorough review of the character and quality of the proposed redevelopment plans for consistency with the City's character, its goals, objectives and polices for future use and for a measurable contribution to the energy efficiency and compact, urban pattern of development in the City.

The maximum density for residential use~~s~~ in the MU category is 6 units per acre without incentives. The maximum intensity of commercial use is 10,000 square feet per acre

Design standards are included in the Land Development Regulations to require appropriate landscaping, screening and buffering to assure a smooth transition of land use intensities.

Commercial

The Commercial land use designation on the Future Land Use Map recognizes developed commercial parcels within the City and nine vacant commercial parcels located north of SR 100. Commercial development in the City occurs on small lots (less than one acre) with individual structures on each parcel. The City recognized the need for redevelopment of its

non-residential areas in 2006 when it established a Community Redevelopment Area. The CRA boundary encompasses all of the land with Commercial and Mixed Use Land Use designations.

The Commercial land use designation is a single use designation applicable to the Downtown Core and the highway commercial parcels along SR 100 and SR 21 (Lawrence Boulevard). The City has a local street dedicated to commercial uses (Commercial Circle) where larger parcels of single use retail and service businesses are located. The character of each area is different:

Downtown Core

The downtown includes two urban sections of SR 21 south of SR 100; the core is a three-block corridor stretching from SR 100 to Cardinal Street and portions of Magnolia and Palmetto Avenues between Cardinal Street and SR 100. The Downtown Core is typical of small towns in Florida, with older commercial buildings that front the sidewalk covering the majority of the lot. Businesses include a variety of retail stores and several office and medical uses. There are approximately 20 downtown businesses including auto repair, bank, service station, professional offices, medical offices, athletic store, drug store, hardware store, variety store, beauty salon, and a County office housing the Clerk of the Court. There is no vacant land in the Downtown Core; future redevelopment will be guided by the City's adopted Community Redevelopment Plan, the comprehensive plan and criteria in the land development regulations.

The City reviews applications for changes in use within the Downtown Core on a regular basis. Expansion of existing businesses is requested, but new construction within the Core is rare. This is projected to continue throughout the planning period.

South of Cardinal Street, commercial uses front on SR 21 but within individual structures with parking and larger setbacks within the lot. This southern area is located between Cardinal and Oriole Street with public uses being located south of Oriole Street (City Hall, Natural Park) changing the character and intensity of use along SR 21 at that point. The commercial area is the South Commercial Core.

Highway Commercial along SR 100 and SR 21

Outside of the Commercial Core and South Commercial Core and north of the public uses that define the southern limits of the South Commercial Core, SR 21 and SR 100 provide frontage within the City to support highway commercial uses that serve the pass through traffic on these two state roads. The intersection of these two roads supports convenience commercial and fast food establishments. The SR 100 frontage cannot be accessed within the City because of the Palatka-Baldwin Trail; access to uses along SR 100 East is provided from Green Way, a service road that parallels SR 100. These uses are not associated with regional through traffic but instead serve the City residents and surrounding community; banks and medical services that need visibility in the community but not necessarily the access directly

to a major road. The majority of the vacant commercial parcels are located along SR 100 East. SR 100 West is served by Cargo Way, a service road that is located behind the parcels that front on SR 100. This geometry allows the development to be located closer to SR 100 and supports fast food restaurants and convenience drugstore uses.

SR 21 frontage north of SR 100 has a future land use designation of Commercial; in 2010 only one parcel of land was vacant in this corridor. Parcel depth is shallow and businesses are well established. While included in the CRA boundary, redevelopment would require compliance with current stormwater requirements. These standards could not be met on an individual parcel basis, so redevelopment that would increase the impervious area is not likely unless there were consolidation of parcels in a larger plan.

The construction of highway commercial uses were approved in the last ten years and represent all of the non-residential construction permits within the City with the exception of a regional bank office. Vacant commercial land with frontage on SR 100 is available on the east side of SR 21 with access limited to the service road (Green Way). These parcels will likely be developed for service and regional office uses on individual parcels within the planning period

Commercial Circle

Commercial Circle is the location within the City for larger commercial, office and service uses mixed with light industrial (warehouse). Residents of the area know that service businesses like hardware, medical and auto repair are located on Commercial Circle

The largest vacant commercial parcel (2.43 acres) fronts on Commercial Circle.

Development of vacant land on Commercial Circle is anticipated to occur throughout the planning period; redevelopment is not anticipated in this area based on the age of structures.

Private schools with an attendance of less than 100 students are permitted in the Commercial Land Use designation. Private schools with greater enrollment and public schools are permitted in the Institutional Land Use category.

Development and redevelopment within the Commercial land use designation is required to submit Site plans required for review to ensure that adequate parking and efficient circulation is provided to serve the proposed use and that sufficient landscaping and screening is provided to address compatibility of adjacent uses.

Institutional

This category is reserved for public buildings and non-profit organizations including religious organizations, public grounds, private schools with enrollment of greater than 100 and public schools. No expansion of acreage is projected within the planning period and there are no vacant parcels with the Institutional designation. Increased intensity of use proposed for a

developed parcel would be subject to review as a change in use or for expansion (structure) subject to the City's land development regulations. A controlling factor is the in ability of most sites to provide adequate stormwater treatment to meet current permit requirements.

Industrial

The existing industrial and office complex of Clay Electric is the only industrial land use identified on the Future Land Use Map. The Industrial designation within the City is 9.28 acres in area; an additional 4 acres of land under the ownership of Clay Electric is located along the southwest border of its lands in the Industrial land use category; this land is intended to buffer the adjacent residential use and is designated Residential on the FLUM. The present activities at Clay Electric will continue consistent with specific performance criteria in the LDRs. Specific prohibitions are applicable in this category for any activity or use which endangers the water quality or quantity of the Floridan Aquifer.

The City does not permit heavy industrial uses such as manufacturing or fabrication and based on need does not project a need for an increase in industrial land use during the planning period.

Light Industrial

The Light Industrial land use designation applies to five parcels located off Fox Run Road. A roofing business and light warehouse uses are interspersed with vacant parcels; the total area is 3.58 acres with 1.5 acres vacant. The parcel size and proximity to residential uses limits the development of the vacant parcels to very low intensity industrial such as warehousing.

Recreation/Open Space

There are 31 acres of public recreation and open space land within the City; all are accessible for public use. The City continues to improve the Skate Park located on Nightingale and Sunrise and maintain the facilities at other parks in this land use category. The existing recreational facilities are adequate to meet the demand of the projected future population.

New residential development in the City may provide recreation facilities to serve the residents of the development; facilities that are not open to the general public are included in the inventory of recreation facilities available to meet the level of service but are not included in the Recreation /Open Space land use category.

Conservation

The lakes within the city limits represent a natural and cultural resource to the city and surrounding areas. The area of lakes Geneva and Brooklyn within the City and Lake Keystone lie within the Conservation land use category. The abutting uses are residential and recreation; the existing uses are consistent with the Future Land use designations. Use within the Conservation land use category is limited to water dependent uses which can only be

conducted on, in, over or adjacent to the water, requiring direct access to and use of the water and which are permitted in the landward adjacent land use (residential or recreation/open space use). Development within the Conservation Land use designation shall be an accessory use to the primary adjacent landward use, subject to applicable regulatory permits.

Future Land Use Densities/Intensities

The following land use densities and intensities (floor area ratios) are the maximum allowable per acre for the specified land use category.

Residential	- 6 dwelling units
Mixed Use	- 6 dwelling units and 0.80 FAR
Commercial	- 0.25 FAR
Light Industrial	- 0.30 FAR
Industrial	- 0.40 FAR
Institutional	- 0.30 FAR
Recreation	- 0.10 FAR
Conservation	- not applicable (not private ownership)

Future Land Use Map

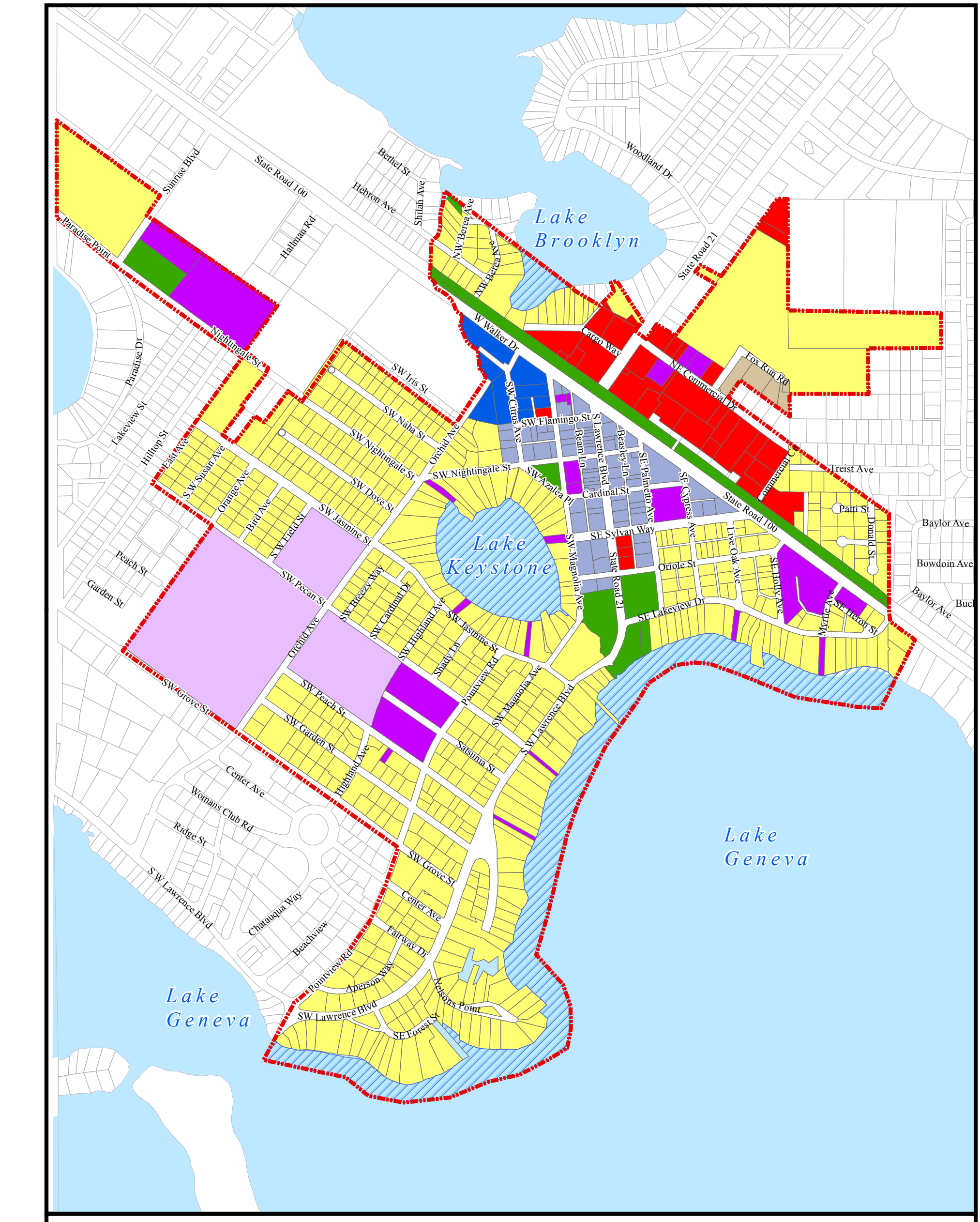
The eight categories on the Future Land Use Map describe the existing and planned future character of the community.

Table 5
FUTURE LAND USE MAP

Future Land Use Designation	Acreage	Percent of Developable	Vacant Acres
Residential	314.82	64.12 %	75.49
Mixed Use	25.27	5.15 %	0.00
Commercial	28.37	5.78 %	10.35
Industrial	14.23	2.90 %	1.57
Institutional	87.86	17.90%	8.38
Recreational	20.36	4.15 %	0.00
Conservation	72.7	NA	0.00
Total Area	**563.61**		**95.79**
Total Developable	**490.91**		

2025 Future Land Use

City of Keystone Heights



The City's future development plans include annexation when the services can be provided to meet the projected demand of the potential development within an annexed parcel/area. Annexed properties that are developed may continue to be served by on-site well and septic if central service is not available, but must connect when services are determined to be available. Service providers for the City have projected demand for their respective service area and availability at the time of annexation must be in evidence.

The future of the City lies in the preservation of its character both in new development approvals and through incentives to preserve its history and historical structures. The Heritage Commission is charged with recommending to the City those actions considered reasonable to undertake in order to provide incentives for historic preservation. The City will review and revise as necessary its land development regulations to establish performance standards and design criteria to guide new development and redevelopment such that the character and quality of the City is maintained.

The energy efficient land use pattern exhibited by the current development pattern within the City will serve as a guide for new development such that through streets, short blocks and mixed housing types continue to be provided within the City.

Of highest priority for the preservation of the City's character and unique attraction to its citizens and within the region are the freshwater lakes within and adjacent to the City limits. The lakes support beaches and fishery resources, are significant recreation resources to the City and larger region and are the essence of the character of the City. In coordination with area stakeholders the City has actively monitored changes in the lake levels and participated in the decision-making process and to facilitate public participation in critical decisions related to the health and vitality of these unique regional and local water resources.

FUTURE LAND USE

GOALS, OBJECTIVES AND POLICIES

Goal LU 1 The City will manage growth and development to ensure the health, safety and welfare of its residents and visitors and foster a balanced natural, physical, social and economic environment.

OBJECTIVE

LU 1.1 The City will review all development plans to insure that the proposed intensity and density of use does not exceed the ability of the land to support the proposed use and that public facilities are available to support the development at the adopted level of service.

Policies

LU 1.1.1 The City will review all proposed development for consistency with the provisions of this Plan and the Land Development Regulations which at a minimum shall:

1. Regulate the subdivision of land;
2. Regulate the use of land and waterbodies consistent with the Plan and ensure the compatibility of adjacent land uses;
3. Provide for open space;
4. Ensure the protection of native vegetation and trees;
5. Protect the conservation areas designated on the Future Land Use Map;
6. Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management;
7. Protect potable water wellfields and aquifer recharge areas;
8. Ensure safe and convenient traffic flow on and off-site and accommodate vehicle parking needs;
9. Provide that development orders and permits issued shall not result in a reduction below the adopted level of service standards adopted in this Plan;
10. Protect against adverse impacts to wildlife and their habitats;
11. Ensure the availability of suitable land for utility facilities necessary to support proposed development.

LU 1.1.2 Prior to the issuance of a final development order or permit, proposed developments will be reviewed to ensure that future land uses are compatible with the topography and soil conditions in the area.

LU 1.1.3 All development orders will be conditioned on the availability of facilities and services at the adopted level-of-service standards in this Plan. To ensure that the adopted levels of service are met, the City shall maintain a concurrency management system as a part of its land development regulations.

The City shall require that all developments requiring a development permit (as defined in Chapter 163.3164 F.S., including comprehensive plan amendments) shall, at the time the subject permit application is filed, submit information which demonstrates that all urban services needed by the proposed development can and will be provided concurrent with the new development.

OBJECTIVE

LU 1.2 The City shall review new development and redevelopment to ensure the preservation and protection of floodplains, wetlands, marshes, upland native vegetation communities, wildlife and fisheries.

Policies

LU 1.2.1 The City shall review proposed development to determine if wetlands exist on site and require that impacts to wetlands within a development are permitted by the appropriate regulatory agency including the St Johns River Water Management District and the Department of Environmental Protection.

LU 1.2.2 The City shall regulate development within the 100-year floodplain to require residential structures to be elevated one (1) foot above the base flood elevation and non-residential structures to either be elevated one (1) foot above the base flood elevation or flood-proofed as certified by a registered professional engineer or architect.

Development in areas of special flood hazard shall comply with the following:

1. Applications for subdivision approval shall include a soils map indicating the location on the property of soil types identified by U.S. Soil Conservation Service, descriptions and a map showing any portions of the property located in areas of special flood hazard as required by Land Development Regulations.

2, Development proposals for sites larger than 5 acres or greater than 50 lots shall provide base flood elevation data.

3. Dredging and filling of lands within floodplains shall not be permitted to adversely impact upon the natural functions of the 100-year floodplain, and shall be carried out, only in strict accordance with state or federal permits.

4. Proposed development shall be located or clustered on the portions of the site outside areas of special flood hazard, wherever possible.

5. No hazardous waste shall be generated, stored, or disposed of within the 100-year floodplain.

LU 1.2.3 The City hereby designates all lakes within the City to be environmentally sensitive/stressed and designates each lake or portion thereof within the City limits as Conservation Land Use.

LU 1.2.4 New on site septic systems and replacements for existing systems installed after January 1, 2011 and permitted by the Health Department for installation on residential lots abutting Lake Geneva, Keystone Lake or Lake Brooklyn shall be located on the street side of the lot.

LU 1.2.5 Development and redevelopment within the High Recharge Area of the Floridan Aquifer shall be limited to an impervious area of 30 percent of the lot area.

LU 1.2.6 The storage of hazardous materials shall not be permitted within the High Recharge Area of the Floridan Aquifer.

LU 1.2.7 The City shall coordinate with the SJRWMD and participate in the rule-making process when minimum flows and levels are reviewed for lakes that abut or lie within the City to insure that any changes do not adversely affect the fisheries historically associated with these freshwater lakes.

LU 1.2.8 The City will coordinate with the St Johns River Water Management District to maintain or recover adopted minimum flows and levels for lakes within and adjacent to the City and prevent violation thereof such that environmental values associated with the aquatic and wetlands ecology of the area including: recreation in and off the water; fish and wildlife habitats and the passage of fish; maintenance of fresh water storage and supply; aesthetic and scenic attributes; filtration and absorption of nutrients and other pollutants; sediment loads; water quality; and navigation are protected.

LU 1.2.9 The current surface water levels of Lake Brooklyn and Lake Geneva are below the adopted minimums established in Rule 40C-8.031, Florida Administrative Code. The City will work directly, and indirectly through education and its community participation efforts to coordinate with the SJRWMD in the development of its required recovery and prevention strategies that may provide phasing or a time table which will allow for the continued provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures. During the SJRWMD's update to the Water Supply Plan, the City shall advocate for the SJRWMD to consider the need for water resource or water supply development, additional regulatory

measures including water shortage orders and implementation of additional water conservation measures.

LU 1.2.10 Waterfront development /redevelopment shall be regulated to provide setbacks to natural waterbodies:

a. All structures shall be set back a minimum of 50 feet landward of the property line or Ordinary High Water Line, whichever is more restrictive. Setbacks for waterfront structures on Lake Geneva, Lake Keystone and Lake Brooklyn shall be governed by the historical Ordinary High Water Line established by the Florida Department of Environmental Protection / U.S. Corps of Engineers. These setbacks shall not apply to water dependent uses including bulkheads, boardwalks, docks, and boathouses when constructed pursuant to permits issued by the applicable regulatory agency.

b. All septic tanks and drain fields associated with on-site sewage disposal systems shall be set back a minimum of 100 feet landward of the waterfront property line or Ordinary High Water Line, whichever is more restrictive.

All new on-site sewage disposal systems or replacements installed for existing systems shall be located on the landward side of the primary structure on the property unless the application of this requirement precludes the replacement or installation.

LU 1.2.11 The City shall limit development and redevelopment within a 500 foot radius of existing wellfields for potable water supply wells. Within the wellhead protection zone, all uses and activities shall comply with the Wellhead Protection Rule 62-521, F.A.C:.

a. domestic wastewater treatment facilities shall be prohibited.
b. unlined reclaimed water storage systems are permitted, subject to permitting under Part III of Chapter 62-610, F.A.C.
c. domestic wastewater residuals land application sites shall be prohibited.
d. new discharges to groundwater of industrial wastewater shall be prohibited unless otherwise allowed under Chapters 62-660,62-670, 62-671, and 62-673, F.A.C.
e. new Class I and Class III underground injection control wells are prohibited.
f. new Class IV underground injection control wells are prohibited except as permitted under Chapter 62-521.400.
g. solid waste disposal facilities are prohibited.
h. new generators of hazardous waste (excluding household hazardous waste) are prohibited unless evidence of compliance with secondary containment requirements of 40 C.F.R. Part 264 Subpart I is provided.

i. hazardous waste treatment, storage, disposal and transfer facilities requiring permits under Chapter 62-730, F.A.C. are prohibited.

j. aboveground and underground tankage of hazardous waste regulated under Chapter 62-730, F.A.C. is prohibited.

k. new aboveground storage tanks regulated under Chapter 62-762, F.A.C. are prohibited. Replacement or upgrading of an existing aboveground storage tank or addition of new aboveground tanks which are regulated under Chapter 62-762, F.A.C. at a facility with other such aboveground tanks are permitted. Provided that the replacement or new tanks meet the applicable provisions of Chapter 62-762, F.A.C.

l. Storage tanks which meet the auxiliary power provisions of subsection 62-555.320(6), F.A.C. for operation of a potable water well and storage tanks for substances used for the treatment of potable water are permitted.

m. emergency equipment, including storage tanks, necessary to provide power to ensure a continuous supply on an emergency basis of public water supply, electrical power, sewer service, telephone service or other essential services that are of a public benefit are permitted.

LU 1.2.12 Areas designated by the SJRWMD as high recharge to the Floridan aquifer (8 inches or more per year) shall be protected from incompatible land uses to ensure adequate recharge rates and water quality maintenance.. The following restrictions shall apply:

a. All development within the high recharge areas shall have maximum impervious surfaces of 30 percent of total lot area, provided that at least 25% of the site is dedicated to native and/or drought-resistant vegetation areas, and containment using concrete surfaces is provided for all areas where material are stored and transferred.

b. Direct discharge of stormwater, via sinkholes, drainage wells, etc., shall be prohibited.

c. All development within the high recharge area shall be designed to have 100 percent retention of on-site runoff for a 25-year/24-hour storm.

d. Any new Floridan aquifer wells in the designated high recharge area shall be cased to SJRWMD standards to ensure that they do not provide a means of contamination to the Floridan aquifer.

e. Inspections of existing septic tanks and drainfields within the high recharge area shall be required when such septic tank or drainfield or related dwelling unit is altered, enlarged or replaced, if the system has not been inspected within three years.

LU 1.2.13 The City will require the evaluation of water demand to be included in the data and analysis provided in support of all proposed amendments to the Future Land Use Map. Amendments which project an increase in water demand will be required to show that water supply is available to meet the increased demand.

OBJECTIVE

LU 1.3 The City will condition development approvals, including land use amendments, on the provision of necessary public facilities and services at the adopted level of service standard.

Policies

LU 1.3.1 The City will maintain a concurrency management system that requires necessary public facilities and services to be in place at the adopted level of service concurrent with the impacts of the development.

LU 1.3.2 The City may approve development orders or permits if such are conditional on the availability of facilities and services necessary to serve the proposed development and for which the utility or service entity authorizes the provision of service concurrent with the impact at the same time as the land uses are authorized. The provision of services may be insured through Fair Share or Development Agreements. Mitigation for impacts to State Road 100 shall be approved by the Florida Department of Transportation.

Water Supply shall be available in an approved or temporary Consumptive Use Permit or plans for Alternative Water Supply.

LU 1.3.3 All new non-residential development shall be served by central wastewater facilities. New residential dwellings not constructed on lots within a subdivision platted prior January 1, 2010 shall be served by central sewer.

The use of existing onsite sewage treatment and disposal systems serving land uses within the City may continue in a manner consistent with the requirements specified by Chapter 381.00655(2)(b) F.S. The Clay County Utility Authority may, with the approval of the County Health Department, waive the requirement of mandatory onsite sewage disposal connection for individual residential lots not within a subdivision platted after January 1, 2010 if it determines that such connection is not required in the public interest due to public health considerations.

LU 1.3.4 The City shall acquire or require dedication of adequate lands for parks and recreation to meet the existing and future recreational needs, as identified in the Recreation and Open Space Element of the Plan.

LU 1.3.5 All development shall be required to connect to the central water system operated by the Clay County Utility Authority.

LU 1.3.6 The City shall insure that future public potable water well fields will be located in areas where they will be least impacted by development and contamination. Existing and future public potable water well-fields shall be protected from possible contamination by limiting the type of development permitted within 500 feet of the wellfield. Within 500' the following uses are prohibited:

1) land fills;
2) facilities for the bulk storage, handling or processing of materials on the Florida Substance list;
3) activities that require the storage, use or transportation of restricted substances, agricultural chemicals, hazardous toxic waste, medical waste and petroleum products.
4) feedlots or other commercial animal facilities;
5) mines; and,
6) acid manufacture, cement, lime manufacturing, distillation of bones, manufacture of explosives; fat, tallow, or lard rendering; garbage or dead animal reduction, automobile wrecking or junkyards; and, paper and pulp manufacturing.
7) Wastewater Treatment Plants, percolation ponds,
8) Excavation of waterways, or drainage facilities, which intersect the water table.

New installations shall be subject to the restrictions in Rule 62-521.4000 FAC.

LU 1.3.7 The City shall ensure the availability of suitable land for utilities to support development requiring dedication of utility sites required to provide capacity to serve the development at the time of plat approval or final development plan approval.

OBJECTIVE

LU 1.4 The City shall establish Future Land Use categories with defined permitted uses and applicable standards for densities and intensities of use for each category**.**

Policies

LU 1.4.1 The Future Land Use categories are declared to be a part of the adopted Future Land Use Policies. The identified densities and intensities of use are the maximum allowable per acre of each land use category.

a. Residential : Residential dwellings including single family, single family attached, mobile home and multi-family units. Recreation facilities designed to serve the development in which it is located shall be permitted including parking to serve the recreational use. Home occupancies shall be permitted, subject to the applicable land development regulation. Maximum density in this category is 6 units per acre.

b. Mixed Use: Commercial, service, office and residential uses on individual lots or the same lot in individual structures or vertically integrated. The mix of uses is controlled on a per block basis to insure that a mix of uses is maintained despite the individual ownership of lots within the block. A maximum mix of commercial to residential land area within any block shall be no more than 50 percent commercial to residential use.

The maximum residential density in this category is 6 units per acre; residential units located above non-residential uses shall be considered one half of a residential unit for the purposes of measuring the maximum density of a development (permitting a maximum of 12 dwelling per acre) when at least 50 percent of the residential units are vertically integrated.

The maximum intensity of commercial use in this category is 35,000 square feet per acre (0.80 FAR). When commercial use is associated with vertically integrated residential units on a site and a minimum of one half of the residential units are vertically integrated, the land area of the site shall be attributed to both residential and non-residential use in the calculation of use in the block.

Parcels within the Mixed Use designation that front on Lawrence Boulevard between SR 100 and City Hall (SE Lakeview Drive) are currently developed with commercial uses; commercial use without a mix off residential use is permitted to continue provided individual structures are not expanded despite their inconsistency with the mix requirements of this land use designation.

c. Commercial: Commercial retail, office, service (including private schools with enrollment less than 100) and non-profit uses. The maximum intensity of use is 15,246 square feet per acre (0.25 FAR).

d. Light Industrial: Warehouse, indoor storage, auto repair and processing, packaging or fabricating within an enclosed building. The specific use and intensity appropriate in a particular light industrial area varies as a function of the availability of public services and access, and compatibility

with surrounding uses shown on the Future Land Use Map. Maximum Floor Area Ratio is 0.30.

e. Industrial: Warehouse, storage and distribution, light manufacturing including processing, packaging or fabricating within an enclosed building and outdoor storage of equipment, vehicles and materials. The specific use and intensity appropriate in a particular industrial area varies as a function of the availability of public services and access, and compatibility with surrounding uses shown on the Future Land Use Map. Maximum Floor Area Ratio is 0.40.

f. Institutional: Public buildings, public utilities, non-profit organizations including religious organizations, public grounds, private schools with enrollment of 100 or greater and public schools. Maximum floor area ratio permitted is 0.30.

g. Recreation/Open Space: Parks, recreation facilities and open space owned by the public; access restrictions may apply to facilities owned by the Clay County School District. Maximum Floor Area Ratio is 0.10.

h. Conservation: Development is limited to water-dependent uses which can only be conducted on, in, over or adjacent to the water requiring direct access to and use of the water and that do not adversely affect the natural resources including freshwater marshes and fisheries, subject to applicable regulatory permits. Water dependent Conservation uses are limited to those permitted in the landward adjacent land use (residential or recreation/open space use) and shall be an accessory use to the primary adjacent landward use.

OBJECTIVE

LU 1.5 The City will encourage the elimination or reduction of uses inconsistent with the City's character and adopted future land use map series and support redevelopment and renewal of blighted areas, consistent with the adopted Community Redevelopment Plan..

Policies

LU 1.5.1 Proposed amendments to the Future Land Use Map shall be reviewed for compatibility with adjacent land uses, whether an existing incompatibility with an adjacent use is reduced by the change and the proposed amendment's consistency with the City's character with regard to scale of the proposed development, need for additional residential and/or non-residential use within the City of the type and/or density permitted in the proposed land use category and consistency with the adopted Community Redevelopment Plan.

LU 1.5.2 The City shall monitor the mix~~ing~~ of residential and commercial land uses for parcels not exempt from the mix requirements of the Mixed Use land use designation to insure consistency with the required maximum ratio of commercial to residential land area of 50% per City block. Where existing uses exceed the established maximum, a change in use shall only be approved if the inconsistency is reduced or for vertically integrated residential over non-residential such that there is no change in inconsistency.

LU 1.5.3 The City shall identify and work toward the elimination of existing land uses that are inconsistent with the City's character and encourage the redevelopment of these areas consistent with the Future Land Use Map Series.

LU 1.5.4 To maintain the City's character, the City shall include in the Land Development Regulations specific design guidelines and standards for buffering, construction of curb cuts, landscaping and signage associated with proposed development adjacent to arterial roads. In addition to requiring compliance from new development, redevelopment and changes in use shall be subject to those guidelines and standards identified as critical to the character of the City without variance.

LU 1.5.5 Commercial development or uses with the exception of home occupations shall not be allowed in areas designated as Residential on the Future Land Use Map.

LU 1.5.6 Existing social service clubs located in the residential land use category shall be vested for the activities that are ongoing as of July 1, 1991.

LU 1.5.7 The City will require a minimum 25 foot landscape buffer between lands in the Industrial and Light Industrial Land use designations and all other land use~~s~~ designations except where a natural buffer that provides comparable buffering or street right of way separates the uses. When a street right of way separates the Industrial use from other uses, no storage or industrial operations shall be permitted to be visible from the non-industrial lands.

LU 1.5.8 The City shall insure that the character of the City is retained under any redevelopment plan through site plan and design review of redevelopment proposals. The energy efficiency of the compact street network, connectivity between uses, pedestrian and bicycle environment and landscape criteria critical to the character of the City will be retained using performance standards and minimum criteria in the adopted land development regulations.

LU 1.5.9 The City shall implement the Action Plan for Redevelopment included in its Community Redevelopment Plan. The Action Plan will be reviewed and updated annually to include those actions determined to contribute to redevelopment within the Community Redevelopment Area and increase the economic vitality of the CRA.

LU 1.5.10 The City will require new development to continue the energy efficient land use pattern established by existing development within the City by implementing land development regulations in 2011 that address maximum block length, connectivity at external project boundaries to adjacent parcels, and the provision of bicycle and pedestrian facilities within new development.

OBJECTIVE

LU 1.6 The City will conduct a survey in 2011 to identify historic and archaeological resources within the City. Standards for restoration and protection of significant resources will be developed and adopted by December 31, 2012.

Policies

LU 1.6 .1 The City shall protect significant archaeological and historic sites as defined by the Florida Bureau of Historic Resources, through appropriate site development and building conservation provisions.

LU 1.6.2 The City shall consider incentives and assistance to the private sector to preserve historic and archaeologically significant features of the City.

LU 1.6 .3 The City shall coordinate closely with other governmental agencies, including local, state and federal Preservation Boards and agencies to exchange data and information, to develop sufficient knowledge and protection of historic and archaeological resources within the City.

OBJECTIVE

LU 1.7 The City shall encourage innovative development through mixed use, landscaping, land clearing, signage and historic preservation provisions in its Land Development Regulations to be updated by December 31, 2011.

Policies

LU 1.7.1 The City's land clearing ordinance shall limit land clearing in hardwood hammocks to that required for structures, access and parking.

LU 1.7.2 The City shall provide an incentive to developers for the preservation of existing trees on a site.

LU 1.7.3 The City shall develop and enforce sign regulations which protect the character of residential and business areas of the City by restricting the display of a sign to the land, buildings or use to which it is appurtenant and regulating the size and location of signs in the City .

LU 1.7.4 The City shall review its adopted ordinances including zoning and subdivision codes for consistency~~t~~ with this plan by December 31, 2011 and adopt revisions required to provide consistency by June, 2012.

LU 1.7.5 To the extent a lot or structure is non-conforming and could not otherwise be reconstructed, existing structures built on lots platted prior to 1930 shall be allowed to be rebuilt on the original building plot area in the event of loss of the unit to natural disaster or fire.

LU 1.7.6 The City shall encourage the private sector in the production of new dwelling units of various types, and sizes and costs to meet the housing needs of the existing and anticipated populations of the City, consistent with the City's character. Non-traditional housing types such as group living arrangements and single residential occupancy units will be encouraged if shown to meet the needs of the population of the City and will be considered using Planned Unit Development zoning procedures.

OBJECTIVE

LU 1.8 The City will discourage the proliferation of urban sprawl by limiting annexations to those properties to which central services are available at the adopted level of service and requiring development of annexed lands to occur at a minimum residential density of 3 units per acre.

Policies

LU 1.8.1 At the time the City considers an annexation request, it shall evaluate the ability of the City and private service providers to serve the proposed development with necessary public facilities and services at the adopted level of service and shall only annex already developed areas or areas that are contiguous with existing developed areas in the City for which services can be provided at the adopted level of service standards in this Plan.

LU 1.8.2 The minimum density of residential development approved for land annexed after January 1, 2010 shall be 3 units per acre.

OBJECTIVE

LU 1.9 The City shall consider energy demand, supply and infrastructure in its land use and development decisions.

Policies

LU 1.9.1 The City shall maintain the mix of residential and non-residential uses (commercial, service and office) within its Mixed Use land use category to encourage the use of pedestrian and bicycle modes for work and non-work related trips.

LU 1.9.2 The City will encourage attached dwellings and upper story residential use in its residential and Mixed Use land use categories to reduce the building lifetime energy use associated with residential uses.

LU 1.9.3 The City will continue to pursue grants to complete its sidewalk network on existing City streets, giving priority to the completion of sidewalks on streets that provide access to the neighborhood schools located in the City.

LU 1.9.4 The City shall require the construction of sidewalks on both sides of all new streets constructed in the City.

LU 1.9.5 The City will coordinate with the Florida Department of Transportation to improve traffic calming on State Road 21 in the downtown core (South Lawrence Boulevard) to improve the safety and desirability of the pedestrian environment.

LU 1.9.6 The City shall require the retention of existing trees and the provision of new shade trees within residential and non-residential development such that a minimum percentage of the site is shaded during the summer months.

LU 1.9.7 The City shall invest public funds toward redevelopment within the Community Redevelopment Area to increase walkability, the pedestrian environment and reduce energy use through landscaping, awnings and increased non-vehicular trips.

LU 1.9.8 The City shall promote the establishment of Passive Energy generation projects to facilitate the reduction of fossil and other carbon-based fuel energy demand and the reduction of greenhouse gas emissions.

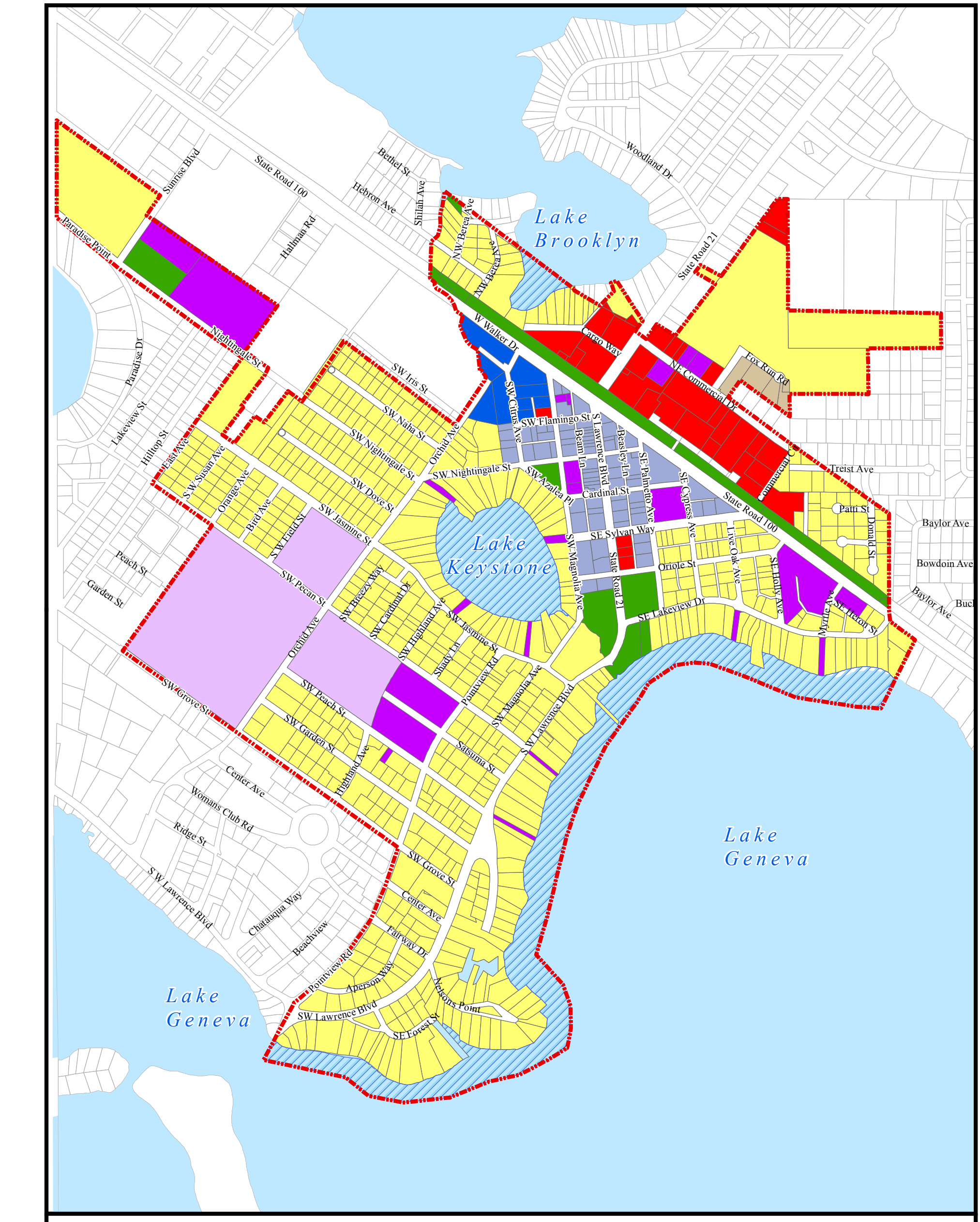
LU 1.9.9 The City will develop criteria for the review of redevelopment within the boundary of its CRA and throughout the City that insures a thorough review of the character and quality of the proposed redevelopment plans for consistency with the City's character, its goals, objectives and polices for future use and for a measurable contribution to the energy efficiency and compact, urban pattern of development in the City.

The City adopts and incorporates the following maps as the Future Land Use Map Series of the 2025 Comprehensive Plan:

2025 Future Land Use Map
Central Service Areas Map
Floodplain and Wetlands Map
Lakes & Freshwater Beaches Map
Soils Map
Aquifer Recharge Map

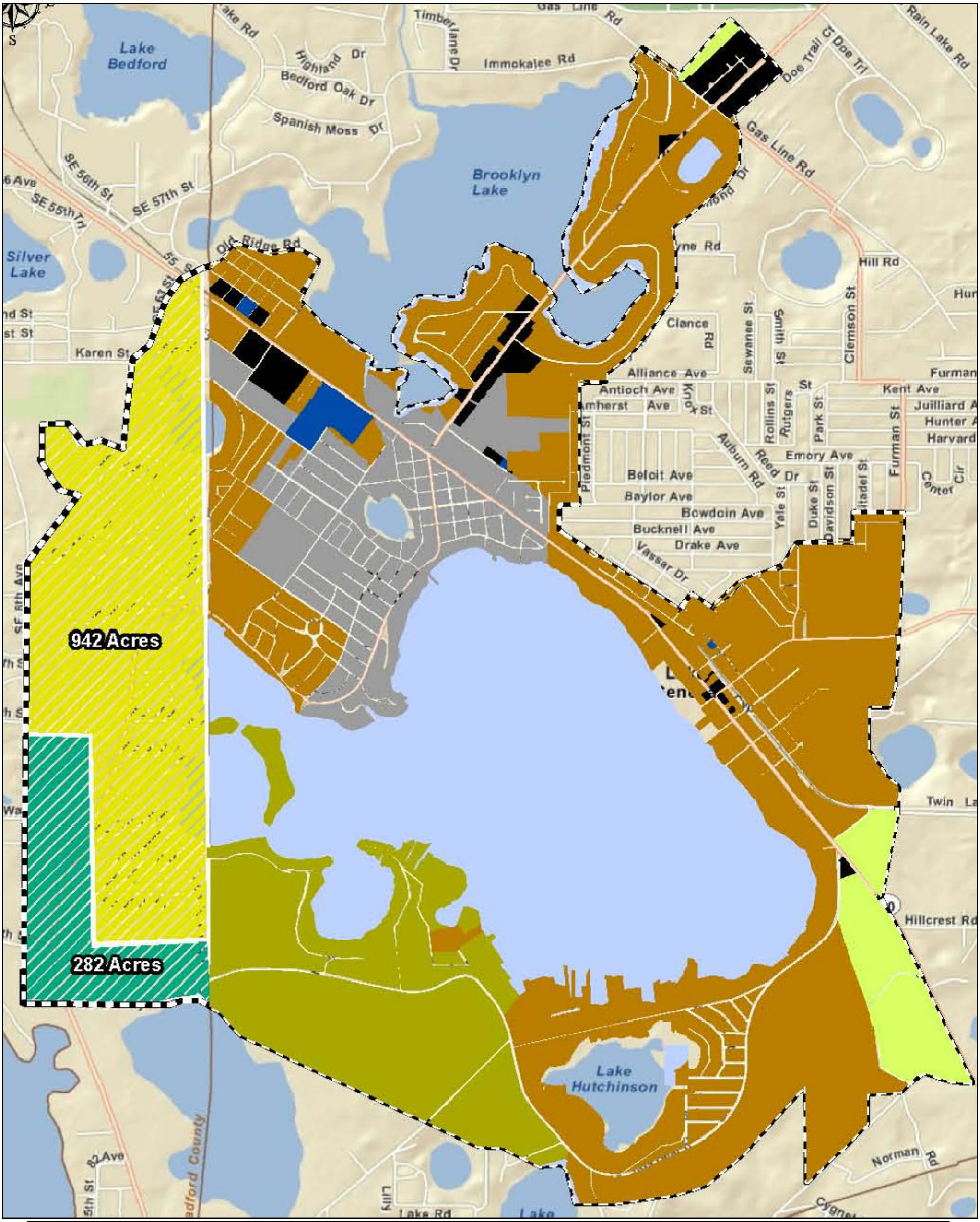
2025 Future Land Use

City of Keystone Heights



Central Service Area

City of Keystone Heights



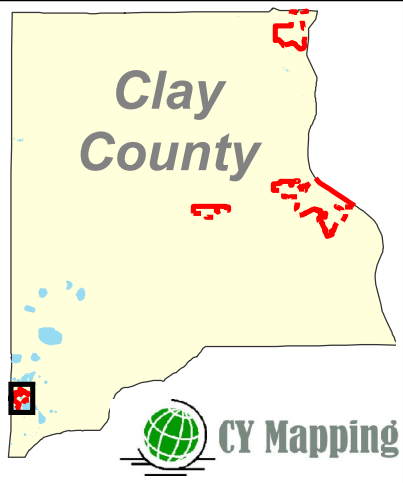
N

(Not to Scale)

Central Water Service Area

Central Wastewater Service Area

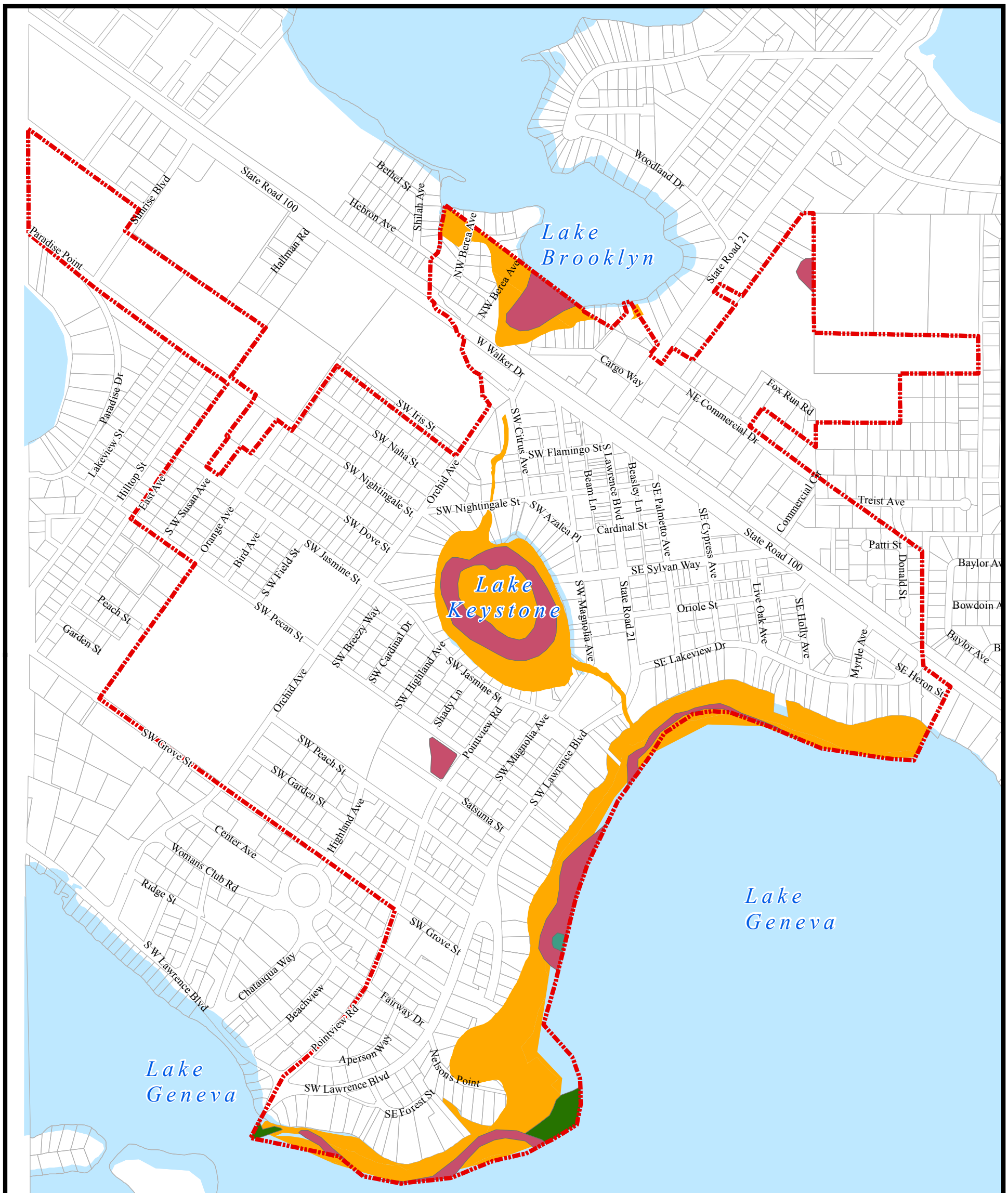
Source: Clay County Utility Authority, 2010



Map Date: March 11, 2011

Floodplain and Wetlands

City of Keystone Heights



100 Year Floodzone

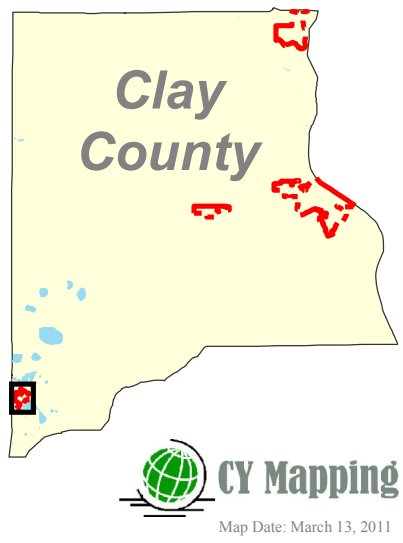
Wetlands

- Freshwater Marsh
- Wet Prairies
- Mixed Scrub-Shrub Wetland

N

500 0 500 1,000 Feet

Source:
FEMA Flood Zones - FEMA
Wetland - SJRWMD, 2004

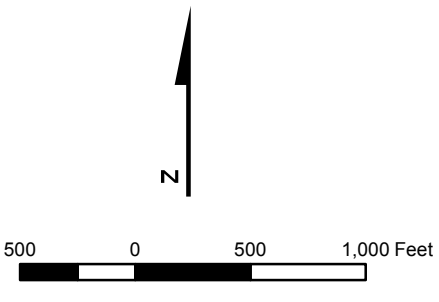


CY Mapping

Map Date: March 13, 2011

Lakes and Freshwater Beaches

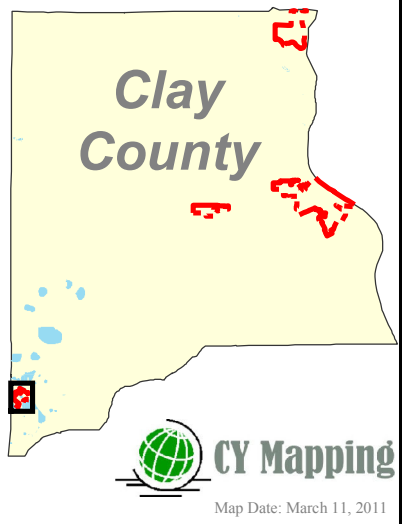
City of Keystone Heights



Freshwater Beach

Lakes

Source:
Freshwater Beach - City of Keystone Heights, 2011.

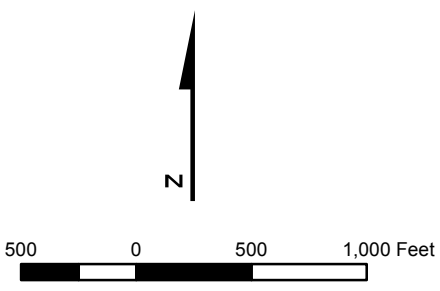


CY Mapping

Map Date: March 11, 2011

Soils

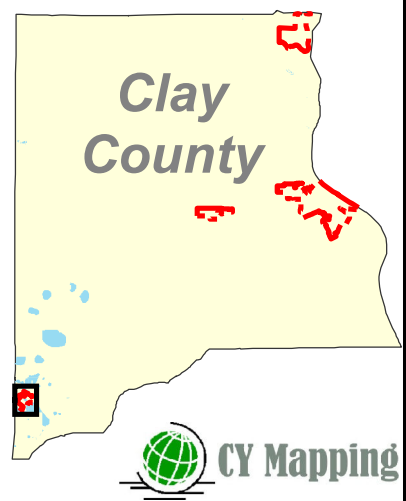
City of Keystone Heights



Soils

- ALLANTON
- MANDARIN
- ORTEGA
- PENNEY
- RIDGEWOOD
- SCRANTON
- TROUP
- URBAN LAND

Source:
Soils - SSURGO

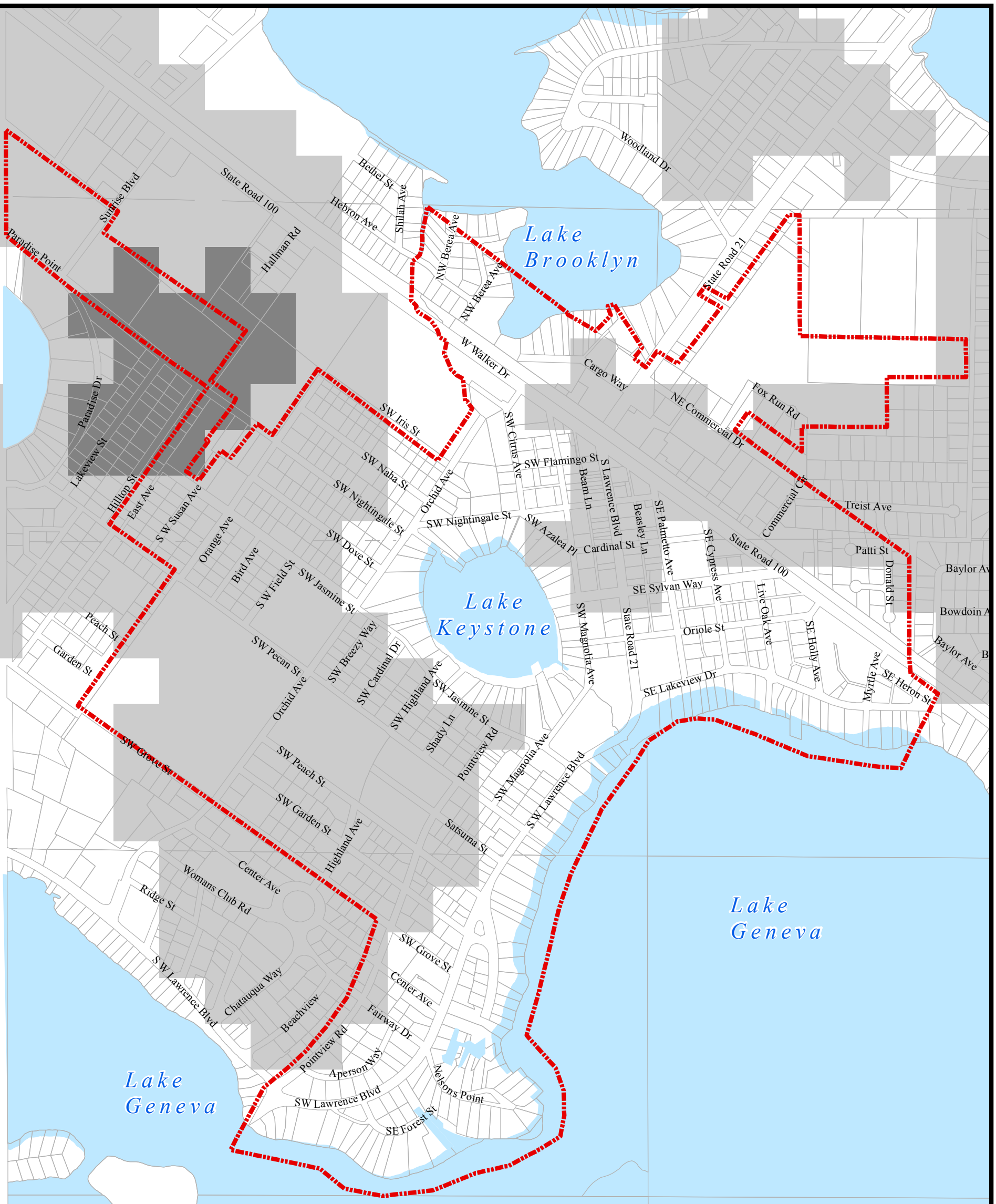


CY Mapping

Map Date: March 13, 2011

Aquifer Recharge

City of Keystone Heights



Recharge Range

- 4.001 - 8 In/Yr
- 8.001 - 12 In/Yr

Source:
Aquifer Recharge - SJRWMD, 2005

CY Mapping

Map Date: March 13, 2011

HOUSING ELEMENT

INTRODUCTION

The purpose of the Housing Element is to quantify housing needs, identify deficiencies in housing supply, locate substandard and blighted areas, and develop policies to correct existing housing deficiencies. The City of Keystone Heights has not previously experienced substantial growth in population or housing supply and is not projected to experience substantial growth within the 2025 planning horizon. Recent annexations into the City have increased the area of the City by 28.38 acres; combined with lands changed to Residential Land Use in 2006, approximately 51 acres have been designated for residential land use in the past three years. The annexations are a result of the availability of central water and wastewater service within the City limits. The provision of these central services is anticipated to draw population from the rural areas of unincorporated Clay County and Bradford County that lie adjacent to the City.

While the City designated a Community Redevelopment Area pursuant to Chapter 163, Part III, Florida Statutes in 2006, the blight identified is related to non-residential uses within the City.

The Housing Element examines the characteristics and conditions of the existing housing stock in the City in order to assess the physical condition of the housing stock and the affordability of housing at its 2000 rent and price levels. Future housing needs are projected and analyzed by type, tenure, rent, and price. These needs are then compared to forecasts based upon current market conditions to anticipate deficiencies, as well as problems associated with over-supply of certain types of units.

Existing Conditions

Data on existing housing conditions was obtained from the 2000 Census of Population and Housing as summarized by the Florida Housing Data Clearinghouse. This source provides the most complete set of data available.

Housing Units by Type, Tenure and Age

The City is dominated by single family dwelling units, with fewer than 2 percent of all residential units being multi-family units. Mobile homes represented 4 percent of the total housing stock in 2000.

In 2000 there were a total of 540 non-seasonal residential units within the City limits and 12 seasonal /vacant units for a total of 552 residential units. Of these, 523 were single family, 7 were multi-family/duplex units and 22 were mobile homes. Eighteen of the residential units in the City were found to be substandard. Of the non-seasonal units, thirty one, or 5.7 % were vacant in 2000.

The number of housing units in the City increased by 27 units between 1990 and 2000. During this time the population has increased from 1,315 to 1,349. The average household size in 1990 was 2.22 persons per household; in 2000 the average household size increased to 2.65. The household size increase experienced between 1990 and 2000 is in part explained by the growth in the surrounding planning area. The City of Keystone Heights is influenced by this growth. It can be deduced that more families are moving into the area and into the City.

TABLE 1
2000 HOUSING UNITS BY TYPE

Type	**Units**	**Percent Total Units**
Single Family	523	94.7 %
Multi-Family	7	1.3%
Mobile Home	22	4.0 %
TOTAL	**552**	**100%**

TABLE 2
2005 HOUSING UNITS BY TENURE

	Quantity	**Percent Total Units**
Owner Occupied	434	83 %
Renter	90	17 %

Homeownership within the City, at 83 %, was higher than the statewide average of 70.3% in 2005.

Thirty one (31) percent of the housing in the City was constructed before 1960; just less than 16 percent has been constructed since 1990. The total number of housing units in the City was 591 in 2011.

TABLE 3
HOUSING UNITS BY AGE

Age	Units	Percent Total Units
1939 or earlier	37	29 %
1940-1949	34	
1950-1959	102	
1960-1969	71	12 %
1970-1979	121	21 %
1980-1989	99	16.7 %
1990-1994	50	14.8 %
1995-2000	38	
2000-2010	39	6.5%

In comparing the type, tenure and age of housing in the City to that of the County it is noted that while almost 95 percent of the housing units in the City are single family, in the much larger unincorporated County, single family residential units represent just over 70 % of the total housing units. In the City prior to 2005, multi-family units could only be served with individual wastewater package treatment plants; this severely limited the construction of multi-family units. The availability of central wastewater services is anticipated to change the mix of housing types in the future; in 2009 the City approved a subdivision with 128 multi-family townhouse units.

Housing Development 2000-2010

The City has issued 39 building permits between 2000 and 2010. All permits issued have been for single family dwellings. These additions increase the inventory of single family homes within the City to 591 at the end of 2010.

Special Needs and Mobile Home Housing Inventory

There are no group homes, subsidized housing complexes or mobile home parks within the City limits. Individual mobile homes are located on quarter acre lots in the Southwest area of the City, between Nightingale Street and Pecan Street. There are no farmworker housing units within the City.

Historically Significant Housing

The City will work through its Heritage Commission to undertake a historic and archaeological survey of structures and archaeological features within the City in 2011. The results will be utilized to determine protection measures and incentives for the preservation of historical and archaeological resources. The City has not previously documented historically significant housing within its jurisdiction.

Physical Characteristics / Condition

Substandard Housing is defined as units lacking complete kitchen or plumbing facilities, those without heating and those that are occupied by greater than 1 person per room (overcrowded). In addition, the structural condition is used to identify substandard units in need of rehabilitation/replacement.

For the purpose of assessing the condition of housing in the City, the following criteria were applied:

	Fair to Good Condition	**Substandard Condition**
Foundation	No apparent defects	■ Substantial sagging and leaning ■ Lacking foundation (walls on ground) ■ Eroded on cracked piers ■ Giving way
Roof	Shows some sign of wear One or fewer rotted eaves Slight sagging	■ Substantial sagging ■ Open hole ■ Caving in ■ Rotted or missing material
Walls / Chimney	Chipped paint Hairline cracks Wood lacking paint or other protection Missing or rotted material over small area	■ Holes, cracks, rotted material over a large area ■ Leaning out of plumb
Doors / Windows	Cracked window Slight damage to screen	■ Few doors, windows or screens or few in good condition ■ No windows or doors in good condition
Other	Gutters and downspouts broken or missing Porch slightly damaged	■ Inadequate original construction (huts, sheds, etc.) ■ Combination of several minor defects
Mobile Homes	Tied down in good condition	■ Damaged siding or roof such as rusting, torn or missing material ■ Beyond repair

In 2000, twenty units, or 3.9 percent of all units, were determined to have greater than 1.01 persons per room, 4 units had no heating fuel and two units did not have complete plumbing facilities. All units within the City had kitchen facilities in 2000. Only 6 units within the City are substandard for reasons other than overcrowding with no units identified as substandard on the basis of structural condition.

There has been little change in the character of housing the City since 1990. With Keystone Lake forming the center of the City, housing in the four quadrants of the City can be described as follows:

1. North Keystone Heights

This area is north of State Highway 100 and includes land on both sides of State Highway 21. Residential vacant land on the east side of SR 21 is located behind commercial strip uses that front the state highway. Access to approximately 40 acres of vacant residential land in a single parcel is located between commercial uses. In this area of the City, developed residential uses are located at the far western City limits along SR 100 with access provided from SR 100 and local streets originating in Clay County. Homes on the west side of SR 21 are oriented to Lake Brooklyn. Most of the homes are well maintained and have been built along the shores of Lake Brooklyn. Residential uses in this area are served by paved roads that continue into unincorporated Clay County.

2. Northwest Keystone Heights

This area lies south of SR 100 and is bordered on the north and west by the Clay Electric Cooperative headquarters, on the south by the City Limit and on the east by Orchid Avenue. The neighborhood contains 111 homes. It is a mix of residential building types within eight square blocks and is the location of the 22 mobile homes within the City. This neighborhood includes the senior / junior high school of Keystone Heights. The homes in this neighborhood are small single family dwellings with one, two and three bedrooms. There are vacant lots interspersed throughout the neighborhood allowing for more growth. Some of the vacant lots are owned by adjacent home owners for additional yard space.

The City annexed almost 14 acres of vacant land into this area in 2008; the vacant land is in a single parcel located on the western limits of the City.

3. Southeast Keystone Heights

This neighborhood lies south of State Highway 100; its western limit is Orchid Avenue. The area lies north of Jasmine Avenue and includes all the area east to Lake Geneva. This area contains the oldest housing and the Central Business District of Keystone Heights. There are a total of 1,340 dwelling units. The land uses are a mixture of residential, institutional and commercial retail and services. The eastern limit of this neighborhood has several vacant lots. There are several home occupational uses ands other homes have been renovated to accommodate small businesses.

4. Southwest Keystone Heights

This neighborhood lies south of Jasmine Avenue, east of Orchid Avenue and extends southward and eastward to Lake Geneva. This area contains 253 housing units. It has the most recently constructed housing in Keystone Heights. Many of the original platted lots are only 50 feet in width and as a result larger homes are situated on double lots. Many of the houses along Lake Geneva are heavily wooded. This area includes many older homes and a few duplexes. New growth is occurring throughout the neighborhood on the remaining vacant lots.

Housing Affordability

The affordability of housing through the state of Florida is an issue that affects the City of Keystone Heights and Clay County. The availability of affordable housing within the urban service area of the City to meet the needs of the City's population can serve to limit urban sprawl that could otherwise result if affordable housing is not available.

This section identifies the 2000 rent levels within the City and analyzes the housing affordability among renters using the widely accepted standard that for housing to be considered affordable, housing costs should not exceed 30 percent of income.

2000 Rent Levels

Table 4 provides information from the 2000 Census on the monthly rent levels in the City for occupied units for which rent has been specified.

TABLE 4
2000 SPECIFIED RENTER-OCCUPIED HOUSING UNITS

Rent (monthly)		**Units**	**Percent Total Units**
	Less than $200	4	4.3 %
	$200-$299	6	6.5 %
	$300-$499	22	23.9 %
	$500-$749	44	47.8%
	$750-$999	14	15.2 %
	$1000 - $1499	0	0
	$1500 or more	0	0
	No cash rent	2	2.1 %
	TOTAL	92	100 %

The monthly rent in 2000 within the City compares favorably to the County for rents below $499 per month: 34.7 % of the rental units in the City rented for $499 or less compared to 18 % within the unincorporated County. The median rent in the City in 2000 was $563 per month, compared with $641 statewide. For monthly rents between $500 and $999, the percentage of units in this range is almost the same in the City as in the unincorporated County (63 % compared to 65 %).

The value of specified owner-occupied units in 2000 are lower than those in the unincorporated County as a whole, with over 73 percent of the owner-occupied units in the City valued at less than $99,000; this compares to 42 % in the County. In 2000, 24.9 percent of owner occupied units in the City were valued between $100,000 and $199,999 compared to over 47 percent of the units in the unincorporated County.

In the neighboring Keystone Heights Planning District of Clay County, the value of owner-occupied housing is comparable to the values within the City when analyzing all units less than $199,000. While 54 % of the owner-occupied units in the Keystone Heights Planning District were valued at less than $99,000 in 2000 compared to 73.3 percent in the City, all units valued less than $199,999 represent 94 percent of the owner-occupied units in the Keystone Heights Planning District and 98 percent of the units in the City.

TABLE 5
VALUE OF SPECIFIED
OWNER-OCCUPIED HOUSING UNITS

Value		**Units**	**Percent Total Units**
	Less then $50,000	39	10.2 %
	$50,000 to $99,000	241	63.1 %
	$100,000 to $149,999	81	21.2 %
	$150,000 to $199,999	14	3.7 %
	$200,000 to $299,000	7	1.8 %
	$300,000 to $499,000	0	0
	$500,000 to $999,999	0	0
	Greater than $1,000,000	0	0
	TOTAL	382	100 %

A monthly cost burden can be calculated for owner occupied units in the City. The monthly cost is based on the mortgage and selected monthly costs associated with home ownership.

TABLE 6
MONTHLY COST OF OWNER-OCCUPIED UNITS, 2000

Monthly Cost		Units	Percent Total Units
	Less than $300	0	0
	$300 to $499	14	3.7 %
	$500 to $699	63	16.5 %
	$700 to $999	97	25.4 %
	$1000 to $1499	33	8.6 %
	$1500 to $1999	14	3.7 %
	Greater than $2000	0	0
	Not Mortgaged	161	42.1 %
	TOTAL	382	100 %

Based on the rents and monthly cost of owner-occupied units within the City, a rent or cost to income ratio can be calculated. Within the City, over 40 percent of the owner-occupied units are not mortgaged. These units are recognized in the number of owner-occupied units in the cost to income ratios of less than 20 percent burden identified in Table 8 below.

Almost 24 percent of renters in the City have a rent burden greater than 30% ; over 50 percent have a burden of less than 20 %. In number of units, this represents only 22 of the rental units in the City. Table 7 identifies that for owner-occupied units, 13.9 percent have a cost burden greater than 30 percent and 70 percent have a cost burden of less than 20 percent.

The rent to income ratio in 2000 within the City can be compared to that in the adjacent unincorporated County (Keystone Heights Planning District); 51 percent of the renter households in the City have a cost burden of less than 20 % while only 41 % of the renters in the unincorporated County experience this ratio of rent to income. In the City, 23.9 % of renters have a burden of greater than 30% ; this compares to 18.8 percent of the renters in the adjacent County. This comparison shows that there are a greater percentage of renters with a low or relatively high cost burden in the City than in the County where a greater percentage (40 percent versus 25 percent) of the renters have a burden between 20 and 30 percent.

A high percentage of the rental units in both the unincorporated County and City are either single family homes or mobile homes and not multi-family units; in the County's Keystone Heights Planning District there were only 87 multi-family units in the entire district and only 7 multi-family units in the City in 2000. The lack of multi-family units to rent in the City contributes to concentration of renters at the low and relatively high end of the rent burden scale. The addition of new multi-family or single family attached units to the housing stock may change this pattern but as new structures, they are likely to command rent in the higher range.

TABLE 7
RENT TO INCOME RATIO, 2000

Cost Burden		Units	Percent Total Units
	Less than 20%	47	51 %
	20 % to 24 %	14	15.2 %
	25 % to 29 %	7	7.6 %
	30 % to 34 %	6	6.5 %
	35% or more	16	17.4 %
	Not Computed	2	2.2 %
	TOTAL	92	100 %

TABLE 8
COST TO INCOME RATIO, 2000

Cost Burden		Units	Percent Total Units
	Less than 20%	269	70.4 %
	20 % to 24 %	32	8.4 %
	25 % to 29 %	29	7.6 %
	30 % to 34 %	12	3.1 %
	35% or more	40	10.5 %
	Not Computed	0	0
	TOTAL	382	100 %

The cost to income ratio for owner-occupied housing in the City is more favorable than the ratio in the adjacent unincorporated County where 62 percent of the owner-occupied households are under a burden of less than 20 percent of income and 13.2 percent have a burden greater than 30 %.

Thirty percent of the City's households (158) were headed by a person age 65 or older in 2005. This is slightly higher than the state as a whole where 27 percent of households are headed by a person age 65 or older. Of these senior households, 90.5 percent own their own homes. Thirty-four senior households pay more than 30 percent of their income for rent or mortgage costs.

FUTURE HOUSING NEEDS

Demographic Projections

Historic Population Growth

The population of the City of Keystone Heights experienced a large percentage increase between 1980 and 1990 and has exhibited very low but steady growth since 1990. While the increase between 1980 and 1990 was over 24 percent, the number of new residents was only 259 persons or an average of about 26 persons per year. The most recent increases (1990 to 2005) represent an increase of less than 5 persons per year.

TABLE 9
HISTORIC POPULATION

	City of Keystone Heights
1980 Census	1,056
1990 Census	1,315
% change 1980-1990	*24.53%*
2000 Census	1,345
% change 1990-2000	*2.28%*
2005 Estimate	1,386
% change 1990-2005	*3.0%*

The population projections utilized for the 2015 Comprehensive Plan are those prepared by the Shimberg Center for Affordable Housing. The 2000 Census population for the City was 1,345. Projected future population increases between 2010 and 2025 average approximately 3 persons per year.

TABLE 10
POPULATION ESTIMATES AND PROJECTIONS

	Population	**Difference**
2000 Census	1,345	
2005 Estimate	1,386	41
2010 Projection	1,413	27
2020 Projection	1,450	37
2025 Projection	1,462	12
TOTAL		**117**

Households by Size

The projected number of households by size is based on 2000 Census data. This information is the main factor in determining the future housing needs of the City. Overcrowding standards of at least one person per room, combined with the information on future household size, allows the City to project the future housing need by size (rooms).

TABLE 11
PROJECTED HOUSEHOLD SIZE

	Number of Households						
Household Size	**2005**	**2007**	**2010**	**2015**	**2020**	**2025**	**Increase**
1 to 2 persons	268	271	276	279	290	299	**31**
3 to 4 persons	195	198	200	202	207	212	**17**
5 persons or more	58	57	58	59	61	63	**5**
TOTAL	**521**	**526**	**534**	**542**	**558**	**574**	**53**

Source: 2000 U.S. Census of Population and Housing
Florida Housing Data Clearinghouse, 2009

Households by Income

The 2000 Census identified a median household income of $39,519 in 1999 dollars.

TABLE 12
HOUSEHOLD INCOME

Household Income	**1999**	**% of total**
Less than $10,000	31	6.2%
$10,000 to $14,999	23	4.6%
$15,000 to $24,999	55	10.9%
$25,000 to $34,999	102	20.3%
$35,000 to $49,999	95	18.9%
$50,000 to $74,999	117	23.3%
$75,000 to $99,999	38	7.6%
$100,000 to $149,999	30	6 %
$150,000 to $199,999	3	0.6%
$200,000 or more	9	1.8%

Source: 2000 U.S. Census of Population and Housing

Florida Housing Data Clearinghouse, 2009

Household Size

The household size within the City in 2005 was 2.64. Household size is projected to decrease through the planning period to 2.54.

TABLE 13
HOUSEHOLD SIZE
1990-2025

Year	Household Size
1990	2.22
2000	2.64
2010	2.64
2020	2.59
2025	2.54

Vacant and Seasonal Households

The basis for the housing unit needs projection for the City is the estimates and projections of households presented above. The household projections are converted into housing units through assumptions concerning vacant housing. Vacancies consist of year round units that are unoccupied as well as all units held for occasional use (both year-round and non-year round units). Occasional use vacancies are the seasonal housing within a community.

Within a well functioning housing market, the vacancy rate of rental units ranges from five (5) to eight (8) percent and the vacancy rate of for-sale units ranges from three (3) to five (5) percent. At these vacancy rates there are sufficient opportunities and choices among those seeking housing and competition among those supplying housing. Based on the number of dwelling units in 2010 (591) and the number of projected households for 2010, the vacancy rate in the City in 2010 was 10 percent. The housing market in 2010 cannot be viewed as representative, so the 2000 average vacancy rate for rental and for-sale units of 5.7 percent is utilized for the long range planning accomplished in this element. Seasonal units are projected to remain at 2 percent of the total units.

The housing unit projections below have been developed from the population projections, projected number of units by household size and the maintenance of vacancy and seasonal units at the percent of the total units experienced in 2000.

TABLE 14
HOUSING UNIT NEED PROJECTION

Year	Occupied	Vacant	Seasonal	Total
2005	521	19	12	552
2007	526	19	12	557
2010	534	19	12	565
2015	542	20	12	574
2020	558	21	12	591
2025	574	22	12	608

There were 552 housing units in the City in 2000. The City has issued no permits for demolition of removal of units between 2000 and 2010. New construction within the City limits has provided 39 units since 2000, increasing the available units in 2010 to 591; the need for additional housing units between 2009 and 2025 is 17.

Housing Needs

There were 591 housing units in the City in 2010, 562 were single family, 7 were multi-family and 22 were mobile homes. Of the multi-family units (2 or more units in a single building), all 7 were duplexes. There are no multi-family structures with greater than 2 units per building in the City in 2009; this is a function of the lack of availability of central wastewater treatment within the City limits. With the availability of central services and the annexation of lands of sufficient size to accommodate new, subdivision development, multi-family units are anticipated to comprise a larger percentage of the total residential units within the City.

Because of the lack of central services in the area, development within the City represents the only opportunity for multi-family development within the surrounding unincorporated areas of Clay, Bradford and Putnam Counties. The number of mobile homes within the City has not changed in the last 20 years and is not anticipated to change through the 2025 planning horizon. Single family units comprised 95 percent of the housing units in the City in 2000; multi-family units comprise 1.2 percent of the total. In unincorporated Clay County single family units represent 70 percent of the total units, multi-family units are 10 percent of the total and mobile homes represent 20 percent of the total. It is reasonable to project an increase in the percentage that multi-family units represent of the total residential units in the City at the end of the planning period to five percent.

TABLE 15
HOUSING PROJECTION BY TYPE

Type	2005	2010	2015	2020	2025
Single Family	523	531	534	544	556
Multi-family	7	12	18	25	30
Mobile Home	22	22	22	22	22
TOTAL	552	565	574	591	608

TABLE 16
PROJECTED NEED BY TYPE

Type	2005	2010	2015	2020	2025	TOTAL
Single Family	0	7	3	10	12	33
Multi-family	0	5	6	7	5	23
Mobile Home	0	0	0	0	0	0
TOTAL		12	9	17	17	56

Table 17 contains estimates and projections of housing need by tenure for the planning period. According to the Housing Data Clearing Housing projections, there will be a need for an additional 48 owner-occupied units and 4 rental units during the planning period (2005-2025). These estimates are for occupied units only, and do not include vacant units that may be available for occupancy by potential home buyers or renters. Information was insufficient to make a reliable estimate of the number of future vacancies by tenure.

TABLE 17
HOUSING PROJECTION BY TENURE

Tenure	2005	2010	2015	2020	2025
Owner - Occupied	434	441	450	470	482
Renter Occupied	90	92	90	91	94
TOTAL	524	533	540	561	576

TABLE 18
PROJECTED NEED BY TENURE

Tenure	2005	2010	2015	2020	2025	TOTAL
Owner - Occupied	0	7	9	20	12	48
Renter Occupied	0	2	0	0	2	4
TOTAL	0	9	9	20	14	52

Projected Cost Burdened Renter and Owner Occupied Households

In addition to type and tenure, estimates and projections of the number of cost burdened renter and owner occupied households have been developed using the 30 percent standard for the allocation of household income for housing. Cost burdened households are those that pay more than 30% of income for housing; severely cost burdened households pay greater than 50% of income for housing. In 2005, 107 (20%) of households in the City paid more than 30% of income for housing. This compares to 29% of households statewide. In 2005, 44 households (8%) paid more than 50% of income for housing.

Low income households are defined as those with income less than 80% of the area median income (AMI). The distribution of households by income within the City indicates that 34.5 percent of households in 2005 were low income households; this is projected to increase to 36 percent of households in the City in 2025.

The number of severely cost burdened households with less than 80% of the AMI is projected to increase very slightly between 2005 and 2025 for both owner-occupied and renter-occupied units. The increase in affordable housing need for owner-occupied units through 2025 is 7 and only 1 for renter occupied units. Of 342 households in the City with incomes greater than 80% AMI, 24 (7%) paid greater than 30% of income for housing and only 2 paid greater than 50% of income for housing.

Elderly households are defined as those households headed by a person age 65 or older. In 2005, there were 158 elderly households within the City (30.2 percent of all households). Just over ninety percent of the elderly households in the City own their home. Twenty two percent of elderly households in the City paid greater than 30% of income for housing in 2005.

TABLE 19
OWNER-OCCUPIED
AFFORDABLE HOUSING NEED SUMMARY

Household Income as % of AMI	2005	2010	2015	2020	2025
< 30%	14	14	14	16	17
30.01% to 50%	10	10	10	11	12
50.01% to 80%	9	9	9	10	11
TOTAL	33	33	33	37	40

TABLE 20
RENTER-OCCUPIED
AFFORDABLE HOUSING NEED SUMMARY

Household Income as % of AMI	2005	2010	2015	2020	2025
< 30%	5	5	5	5	6
30.01% to 50%	4	4	4	4	4
50.01% to 80%	0	0	0	0	0
TOTAL	9	9	9	9	9

Vacant Land

In 2008, an analysis of the Clay County Property Appraiser's vacant lands data and the City's Adopted Future Land Use Map indicates a total of 52.77 vacant acres within the City with a Residential Land Use designation. The Mixed Use Land Use category permits residential use however there are no vacant lands with a Mixed Use land use designation within the City.

Except for those 39.37 acres annexed in 2007 in the North Keystone Heights area and the 13.88 acres annexed in 2008 in the Northwest Keystone Heights area (53.25 acres of the total 52.77 acres of vacant land with residential potential), vacant lands with residential potential are single lots scattered throughout the City. Parcels adjacent to these scattered lots are developed so without demolition and aggregation, these scattered lots represent an opportunity for lot divisions to the minimum lot size permitted under the applicable zoning

while meeting the minimum lot size for on-site sewer applicable to newly created lots. These lot divisions represent a very limited opportunity for residential development. If each lot were developed with one residential unit, the total development potential associated with the scattered lots is 74 units. The scattered lots occur throughout the City:

TABLE 21
VACANT LOTS BY AREA

Area	Lots
North	21
Northwest	12
Southeast	8
Southwest	33

Source: Clay County Property Appraiser, 2009

The development potential associated with the 39.37 acres annexed in 2007 has been established by a rezoning to Planned Unit Development in 2009: 76 single family units and 128 townhouse units. Residential development potential associated with the 13.88 acres annexed in 2008 is calculated at the maximum development potential in the Residential Land Use category (6 du/acre):

TABLE 22
TOTAL RESIDENTIAL DEVELOPMENT POTENTIAL

Area	Acres	Residential Potential
North [1]	39.37	204
Northwest [2]	13.88	83
Scattered [3]	NA	74
TOTAL		**361**

[1] Approved Plan
[2] Max FLU
[3] 1 unit per vacant lot

Housing Delivery Process

This section of the Housing Element analyzes the housing delivery system in Keystone Heights as a part of Clay County with regard to land, services, financing and government regulations. Since almost all housing in Keystone Heights and the County is provided by private sector developers, this analysis will focus on the constraints upon the proper functioning of the private housing market. Some of these constraints are due to governmental service delivery and environmental factors limiting the assembly of land for residential development, while other constraints are related to the capital markets that provide real estate financing.

The availability of land for private development is a crucial variable influencing the development decision-making process. Land availability is dependent upon both natural and man-made constraints as well as governmental actions taken to protect or preserve environmentally sensitive areas. With recent annexations, the shortage of vacant land for residential development experienced prior to 2006 has been alleviated and sufficient land is now available to meet the projected need for additional housing within the City.

The Clay County Utility Authority operates the central water and wastewater systems within the City; prior to 2005 the central water system was operated by a franchised private utility company and there was insufficient facility capacity to serve the City and other lands within the service area. The CCUA has upgraded the facilities and is expanding capacity in 2009 to accommodate projected demand within its service area. Central wastewater service became available in the City in 2006. The availability of central wastewater services opens the door for the provision of multi-family housing with greater than 2 units per building within the City for the first time.

The availability and terms for housing financing are key factors in residential investment and development decisions. Availability of mortgage money and the affordability of both rental and owner-occupied housing are dependent upon conditions in the capital markets. Conditions in 2009 due to the extreme recession have all but removed mortgage funds from the market. Stricter qualifications have changed access to mortgage funding, however even well-qualified purchasers find it difficult to secure financing. The lack of available funds has stalled the housing market with the inability to sell affecting the ability to purchase. The capital market in 2009 is not expected to continue and should not be the basis for a discussion of the availability of mortgage funds through the planning period. The private sector is anticipated to meet all of the projected housing need identified in this element by type, tenure, cost and rent.

Upgrading Substandard Housing

While the City designated a Community Redevelopment Area in 2006, the designation is limited to the non-residential properties in the City and those with a mixed use land use and zoning designation. Only the mixed use land use and zoning permit residential use within the CRA boundary. The CRA established its boundaries on the basis of a blight determination

based on inadequate parking/ infrastructure within the limits of the CRA, not based on the condition of structures within the boundary.

Despite 31 percent of the housing in the City having been constructed prior to the 1960's, maintenance of the housing stock is good. Structure deficiencies in housing units within the City are minimal, supporting rehabilitation and conservation instead of demolition.

With approximately one percent (six units) of the housing stock substandard for reasons other than overcrowding and none for substandard construction, the need for specific programmatic housing rehabilitation is not warranted. The existing police power and building regulations have been effective in maintaining the housing stock over time.

Provision of Mobile Homes, Foster Care Homes and Group Homes

The City of Keystone Heights has four percent of its housing stock in mobile homes. While this is a reduction from 8 percent in 1976, the absolute number has only dropped from 27 to 22. There are over sixty lots where zoning would allow mobile homes. Of the lots that allow mobile homes, there were 3 vacant lots in 2006. If developed with mobile homes, t~~T~~his would provide for a total of 25 mobile homes in the City. No barriers other than zoning exist in other areas of the City.

Presently, there are no foster care or group homes within the City limits. Park of the Palm Retirement Center abuts the City limits on the north side of SR 100; services include a group convalescent center with twenty units. Group homes could relocate in the multi-family zoned areas in the City by right. Foster care homes can be located in all single-family areas with up to six (6) foster children. Homes with greater than 6 unrelated persons while not permitted in the areas zoned for single family use, would be permitted in multi-family areas by right.

The main deterrent in locating any group facility in the City was the lack of central sewage waste treatment. With the provision of central wastewater service within the City in 2006, this impediment has been eliminated.

Provision of Farmworker Housing

Rural and farmworker housing needs are non-existent within the City.

Provision of Sites for Affordable Housing

There is only a slight increase in need projected for affordable housing within the City through 2025. The projections prepared by the Florida Housing Data Clearinghouse were based on housing costs and projected increases in housing costs in 2005. The 2009 recession has served to reduce the cost of for sale units throughout the country; these unanticipated reductions in housing costs may serve to make more housing available to low income households in the City. This change may not be realized if unemployment increases and additional households become classified as low income. Given the changing state of the

economy, it is difficult to project the need for low and moderate income housing through 2025.

One example of an approach to address even the small projected increase in need is through direct coordination with private sector and not for profit developers in the delivery of these housing units. Public-private partnerships and 'sweat equity' programs are also examples of locally implemented programs that can achieve successful results.

The City coordinates with the County under the State Housing Initiative Partnership (SHIP) program and is available to coordinate with the not for profit group, Clay County Habitat for Humanity, to meet the projected increase in need.

Additionally, the City can encourage the provision of affordable housing through its permitting process by deferring or eliminating permit fees, expediting permit review and approval of variances that allow accommodation of affordable housing within the City.

Government regulations can adversely affect the provision of housing in two ways: by increasing the cost to deliver housing when unnecessary regulations are applied and by reducing the value or increasing the risk of investment when inadequate protections are in place. Building codes protect the public by ensuring that construction activities produce safe and decent housing. Zoning regulation provide for coordinated growth, neighborhood stability and by regulating the use of land, size of lots and structures, provide for the general public good. Keystone Heights applies the Standard Building Code for buildings, plumbing and mechanical activities and the National Electric Code for electric work. The City's Land Development Regulations became a unified code in 1992 that incorporates development standards, zoning regulations and design criteria.

The City permits group homes in with less than six unrelated residents in all residential districts and larger facilities are permitted in the Residential General Zoning District. These provisions allow for group homes and assisted living facilities within the City. In 2006, there were 10 vacant lots in the RG Zoning District and existing structures within this zoning district could be converted to group home use to meet demand.

Lots within the City are small, averaging 50 feet in width. Table 8 identifies that there are 33 scattered lots within the City; these lots are vested from the minimum lot size requirements for septic tanks because they were created prior to 1972; these lots create an ample supply of small lots with adequate infrastructure to address the projected need for affordable single family units.

Historic Preservation and Rehabilitation

The City, through it Heritage Commission, will undertake a survey of historical structures in 2011. The results of the survey will be used to develop appropriate incentives for the preservation of resources identified and will allow documentation of the resources within the City. Incentives will be incorporated into the City's Land Development Regulations upon completion of the survey and an assessment of the appropriate incentives to implement.

Provision of Infrastructure

Since 1991, the City has made improvements to its infrastructure that have changed the quality of life for all of its residents and created the opportunity for a more diverse housing stock: the City utilized grant funds to pave all the unpaved roads within the City limits (with the exception of Fox Run) and worked with the Clay County Utility Authority to partner for the construction of a central wastewater treatment facility using grant and CCUA funds.

These improvements have eliminated the largest impediments to growth in the City that were cited in the 2001 Comprehensive Plan. With regard to housing, there are no infrastructure impediments within the City.

HOUSING ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal H 3 **Provide for the availability of adequate, safe, sanitary and affordable housing to meet the needs of present and future residents.**

OBJECTIVE

H 3.1 The City shall maintain or reduce the 2010 level substandard housing.

Policies

H 3.1.1 The City shall minimize sub-standard housing conditions by continuing the dissemination of public awareness materials for local, state and federal resources providing funding and assistance for preventative maintenance.

H 3.1.2 The City shall develop a system to inventory substandard housing every five years, based upon securing adequate local, state, or federal funding sources through a Housing Authority or other agency. The purpose of the inventory shall be to identify those units suitable for rehabilitation and those appropriate for demolition. The inventory shall be based on the following evaluation criteria:

1. Standards (units to be conserved) : structure appears to provide safe and adequate shelter and has no defects or only slight defects which are normally corrected during the course of regular maintenance.

2. Substandard (units to be rehabilitated): structure requires more than routine or minor repairs or improvements. Typical deficiencies include foundation defects indicated by sagging or leaning, extensive rotting of eaves or porch flooring, numerous holes or cracks in walls, broken screens or windows, and similar defects which can be economically repaired relative to the overall value of the structure.

3. Substandard Warranting Clearance: structure appears unsafe for occupancy or dilapidated to the point that it would not be economically prudent to repair relative to its overall value and, therefore, may warrant clearance.

H 3.1.3 The City shall work to stabilize neighborhoods determined to be declining in the substandard housing inventory by directing residents of the area to low interest loan programs implemented by the Clay County Housing Finance Authority or to the County's SHIP program. Units determined to be Substandard Warranting Clearance will be referred to the Clay County Building Department for review and condemnation as appropriate.

Subject to financial feasibility, the City shall include public infrastructure improvements such as paving, streetlights, sidewalks and drainage that it determines are necessary to maintain neighborhoods in its Five Year Schedule of Capital Improvements.

OBJECTIVE

H 3.2 The City shall provide appropriate land use categories and land development regulations to allow for a variety of housing types and values to meet the needs of the existing and future residents including very- low and low income families.

Policies

H 3.2.1 The City shall review its land development regulations, including the zoning ordinance and subdivision regulations in order to identify and eliminate unnecessary requirements which may add to the cost of the housing delivery system.

H 3.2.2 The City shall grant variances that are determined to be necessary to encourage infill development on vacant lots within the City and that do not affect the health, safety and welfare of the community.

H 3.2.3 The City enforce its fair housing ordinance in accordance with the Florida Fair Housing Act, Chapter 760.020, Florida Statutes, in order to provide housing opportunities for all residents desiring housing regardless of age, race, handicap, disability, sex or family size.

H 3.2.4 The City shall continue to provide for the preservation and continuation or re-use of historic structures and properties.

H 3.2.5 The City shall continue to allow group homes with greater than 6 unrelated persons and foster care facilities licensed or funded by the Florida Department of Children and Family Services in the Residential General Zoning District and shall monitor the availability of land for such uses.

The City shall, in its land development regulations, allow for the integration of group living and foster care facilities into appropriate residential areas to foster non-discrimination and deinstitutionalization.

H 3.2.6 The City shall include in its land development regulations provisions for one or more of the following to streamline the permitting process and minimize costs and delays for housing. Incentives may be increased for affordable housing projects:

1. A 'fast track' or one stop permitting process through its development review process.
2. A reduction or waiver of processing fees for affordable housing projects.
3. Concurrent review of multiple permit applications.

H 3.2.7 The City shall maintain a Heritage Commission to provide public record keeping and regulatory incentives and standards to assist in the preservation and use of historic properties and facilities.

H 3.2.8 The City shall include the private sector in the review of or revisions the regulatory and permitting process that affects the provision of housing in the City as a requirement in the Land Development Regulations.

H 3.2.9 The City shall ensure that infrastructure and public facilities are provided for mobile homes and manufactured homes within the City. Manufactured housing shall be permitted in all zoning districts that permit residential units.

H 3.2.10 The City shall coordinate with Clay County to encourage and facilitate joint applications for federal, state and local subsidy programs for housing and neighborhood improvement.

H 3.2.11 The City shall coordinate with the Clay County Housing Finance Authority to identify and promote local, state and federal funding sources and implementation programs to aid in the provision of affordable housing and relocation housing for very-low, low and moderate income households and will make such information available to the public and residential developers.

Goal H 4 The City shall develop standards, plans and principles to address energy efficiency in the design and construction of new housing.

OBJECTIVE

H 4.1 By 2012 the City shall establish a committee to assess the implementation of energy efficient codes and standards that encourage the creation and maintenance of energy efficient housing within the City.

Policies

H. 4.1.1 The City shall consider incorporating local energy efficiency codes for new home construction and renovation of existing homes to increase the energy efficiency.

H 4.1.2 The City shall consider requiring new home construction projects to become LEED certified.

H 4.1.3 The City shall encourage innovative methods of energy conservation / efficiency, including the installation of green roofing.

INTERGOVERNMENTAL COORDINATION ELEMENT

INTRODUCTION

The City of Keystone Heights is located in Clay County, Florida. The City also owns and manages the Keystone Airpark located in Clay and Bradford counties, It is the purpose of this element to describe the relationships that exist between the City and other units of local, state and federal government including the School Board and utility providers. This element inventories the entities with which relationships are maintained, describes the existing intergovernmental coordination mechanisms, analyzes the effectiveness of the existing mechanisms, identifies new mechanisms and establishes goals objectives and policies to guide future coordination based on the comprehensive plan's blueprint of the future growth within the City.

Intergovernmental Coordination Inventory

While there are several governmental entities that have close ties to the City of Keystone Heights, all the governmental entities listed form together a matrix of relationships which viewed comprehensively provide the services and facilities, regulate private activity and interrelate so that the quality of life in Keystone Heights will be maintained. The table identifies those units of government providing services but not having regulatory authority over the use of the land. Included are the adjacent counties, the Clay County School Board and utility providers which provide services within the City. Regional and State agencies with land use or environmental regulatory authority with whom the City coordinates are also identified. The coordinating office for the City is the City Manager's Office.

Table 1.
Intergovernmental Coordination Matrix

Entity	Service	Relationship
Clay County	Fire Protection	Informal
	Police Protection	Informal
	Aviation	Informal
	Solid Waste Disposal	Formal
Division of Emergency Management	Emergency Management Preparedness	Formal
Bradford County	Aviation	Formal
	Fire Protection	Informal

School Board	Concurrency Review	Formal
Clay Habitat for Humanity	SHIP Program	Informal
Clay Council on Aging	Social Service Transit Service	Informal
Dept of Health	Indigent Care Septic Tanks WIC	Informal
Northeast Florida Regional Council	Development Review Dispute Resolution	Formal
St Johns River WMD	Water Management Development Review Land Management	Informal
Dept. of Community Affairs	Development Review Affordable Housing Emergency Management	Formal
Dept. of Corrections	Inmate labor	Formal
Dept. of Environmental Protection	Environmental Protection Development Review	Formal
Dept of Revenue	TRIM Millage	Formal
Dept of State	Historic Resources	Informal
Dept of Transportation	Concurrency Maintenance	Informal Informal
Division of Emergency Management	Emergency Management Preparedness	Formal
US ACOE	Environmental Protection	Informal
Clay Electric Cooperative	Development Review	Informal
Clay Utility Authority	Development Review Franchise	Informal Formal
Waste Hauler	Solid Waste Pickup	Formal

Intergovernmental Coordination Analysis

The effectiveness of existing intergovernmental coordination mechanisms in the City is evaluated below. The areas of general coordination are outlined first, with the analysis of specific problems and needs identified in the elements of the Comprehensive Plan following. For each, the analysis identifies if any problems or needs would benefit from improved or additional intergovernmental coordination. The last subsection evaluates the growth and development proposed in the Comprehensive Plan for consistency with the Comprehensive Regional Policy Plan adopted by the Northeast Florida Regional Council to determine if additional coordination would be appropriate.

Fire Protection
A state Mutual Aid Agreement provides for fire protection services on demand. Clay, Putnam and Bradford Counties as well as the City are parties to the agreement, This agreement allows each party to provide assistance in response to identified fire and rescue needs and has been found to be an effective coordination tool.

Police Protection
The existing informal agreements between Clay, Putnam, Alachua, and Bradford counties have been effective in providing police protection within the City.

Road Maintenance
The City maintains the local streets within its jurisdiction. It may receive assistance from Clay County on an incident basis using informal or formal contact.

The City has an effective formal arrangement for coordination with the Florida Department of Transportation concerning maintenance and improvements to SR 21 and SR 100 both inside and outside the City limits, within Clay County. The FDOT also reviews development proposals that require access to these two state roads and issues permits consistent with its Access Management standards.

The First Coast Transportation Planning Organization proposes to expand its planning boundary to include all of Clay County. Anticipated to occur after the 2010 Census, an expansion of the boundary will allow the City to more participate in the FCTPO to influence priorities for improvements to SR 100 and SR 21.

Aviation
The City has a formal interlocal agreement with Bradford County concerning land use and zoning in and adjacent to the Keystone Airpark. This agreement is mutually beneficial, protecting the Airpark from incompatible uses on adjacent lands located within Bradford County and providing for notice to Bradford County if any change in use at the Airpark is contemplated by the City or the Airpark Authority.

There is an informal agreement between the City and Clay County to collaboratively work to control the operation of the Airpark and the adjacent uses. This informal approach has been effective. A formal agreement will be developed by 2012.

Social Services
The City has arrangements with the following agencies to provide social services within the City including WIC:

Clay County Council on Aging
State Housing Initiatives Partnership (SHIP) Program
Department of Health

The existing coordination mechanisms are effective in meeting the needs of the citizens of the City.

Development Review
The City has historically experienced limited requests for new development or for redevelopment; in 2009 the rezoning and site plan for the first new residential subdivision in almost 100 years was approved by the City. Previously platted lots are further subdivided on a very infrequent basis; these divisions do not include the construction of any new infrastructure.

The mechanisms are in place to address the review of new development and/or redevelopment; most are informal due to the infrequency of requests from the City for review, however the informal process was determined to be effective in the review of the 2009 subdivision/ rezoning. These informal processes will continue until such time as the City experiences a significant growth in development proposals; or they are found to provide inadequate or inefficient coordination.

A formal agreement does exist between the City and the Clay County School Board in the area of concurrency for schools. An Interlocal Agreement between the two provides for formal review and approval of concurrency for any development that will impact the public school system that is not otherwise vested from such review. Further opportunity for coordination between the School Board and the City is afforded by the appointment of a School Board representative as a non-voting member to the City's Planning & Zoning Board. This appointment allows the School Board to receive information about planned development in advance of a request for a permit to construct; this allows all parties to understand any issues related to school capacity prior to approval of final development orders.

The informal process employed in the review of a 2009 plan amendment and rezoning for a residential subdivision was effective. Further review of the development plans (engineering and plat) will be performed on an informal basis, with the review expanded to include the Florida Department of Transportation, St. Johns River Water Management District, Clay County, and utility providers. State and Federal Environmental Permit coordination has not been historically necessary, however the City will monitor that required permits are obtained prior to the commencement of construction within the City. An informal agreement can be utilized due to the infrequency of such reviews with formal agreements adopted as determined to be necessary by the City and the applicable agency.

The City works with the Department of Health in the development review process to evaluate the suitability of soils on a residential lot for new septic tanks proposed for locations not required to connect to the central wastewater treatment system. This informal agreement for review becomes a formal approval by the Health Department if the installation of a new or the replacement of an existing septic tank is determined to be appropriate. The coordination has been effective.

The City has a formal relationship established by statute with the Northeast Florida Regional Council to perform development of regional impact review and to serve to facilitate dispute resolution and mediation of growth management issues as such may be required; the City has not had to utilize these services of the NEFRC to date.

Development of vacant land in the unincorporated areas surrounding the City limits occurs within the area of urban services established by the Clay and Bradford Counties. Historically, this development has been infill, on vacant lots within platted subdivisions as individual homes. Historically the rate and scale of development adjacent to the City has been such that there is not a direct impact on the land and residents within the City; this is not projected to change during the planning period.

Infrastructure

Solid Waste
Through an Interlocal Agreement, Clay County provides landfill space to meet the needs of the City's population and businesses. The City utilizes the County to perform its building permit inspections; records of all development activity in the City is readily available to the County for use in projecting solid waste demand within the City.

Water Supply
The City does not currently lie within the St. Johns River Water Management's Priority Water Caution Area. The SJRWMD has initiated the development of its 2010 Water Supply Plan and all of Clay County lies within a potential priority water resource caution area. The City will continue to coordinate with the SJRWMD on the issue of water supply and to meet provisions as required to comply with the water supply planning requirements of Chapter 163. 3177, F.S.

Utilities
The Clay County Utility Authority (CCUA) provides potable water to the residents of Keystone Heights. The utility provides water services to its designated service area, which includes Keystone Heights and unincorporated portions of Clay and Bradford Counties. The CCUA also operates a wastewater treatment plant within the City, serving the non-residential development within the City with planned expansions to allow service to be provided to new residential development in the future.

The City has a formal agreement with the CCUA to provide service and revenue to the City. Concurrency review of proposed development is coordinated with the CCUA, with verification of available capacity or the identification of funded improvements that would

meet the demand of the proposed development required prior to approval of a final development order. Further, the City is required to coordinate with the CCUA as the water supplier to the City to insure that prior to approval of a building permit or its functional equivalent, adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

The individual elements of the City's comprehensive plan focus on the impacts of additional growth on the City; each represents an opportunity to evaluate specific problems and needs for additional or enhanced intergovernmental coordination. This section summarizes the problems and needs that would benefit from additional or enhanced intergovernmental coordination to resolve problems and needs identified.

Future Land Use Element
The development of land adjacent to and near the City could adversely affect or change the character of the City. Additional coordination and notice of proposed changes to land use and zoning as well as an understanding of site plan or construction approvals is desirable between the City and Clay, Bradford and Putnam counties.

Additional and enhanced participation in the maintenance of minimum flows and levels by the St Johns River Water Management District is necessary for the City to protect the natural resource and recreational value associated with Lakes Brooklyn, Keystone and Geneva and to represent the importance these resources play in the character of the City.

Traffic Circulation Element
State Road 100 is an Emerging Strategic Intermodal System (SIS) facility and as such, is subject to the level of service standard established by the Florida Department of Transportation for SIS facilities. Additional coordination with the FDOT will be required if impacts to SR 100 from development within the City causes the level of service to be exceeded in the PM Peak Hour.

Housing Element
No issues require additional or enhanced intergovernmental coordination.

Recreation and Open Space Element
No issues require additional or enhanced intergovernmental coordination.

Community Facilities Element
No issues require additional or enhanced intergovernmental coordination.

Conservation Element
The Conservation Element identifies that the City will ensure an adequate supply of water to serve new development is available no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. The availability of adequate water supply is a function of the Consumptive Use Permit issued to the Clay County Utility Authority for facilities it operates that serve the City and surrounding unincorporated Clay

and Bradford Counties. The review of concurrency applications will be expanded to include a confirmation of adequate water supply from the CCUA.

If the St Johns River Water Management District determines in its 2010 Water Supply Plan that the City must address projected water supply deficiencies, the City will work with the SJRWMD to identify the appropriate plans to address the projected deficiencies.

Capital Improvements Element
No issues require additional or enhanced intergovernmental coordination.

Public School Facilities Element
Adoption of the Public School Facilities Element by the City in 2008 was accompanied by amendments to the Intergovernmental Coordination Element establishing the mechanisms for review of new development under school concurrency. These polices adequately address the mechanisms currently necessary to insure adequate school capacity to accommodate the impacts of new development in the City.

Coordination with the Strategic Regional Policy Plan

The historic rate of growth in the City is anticipated to increase somewhat through the 2025 planning period because of the availability of central wastewater services. The availability of this essential infrastructure allows residential development at densities that exceed the traditional density of the City and increases the attractiveness of land within the City for non-residential development over those lands within the unincorporated areas around the City.

A comparison of the City's comprehensive plan with the Northeast Florida Regional Council's Strategic Regional Policy Plan (SRPP) reveals that there are no inconsistencies between the two. As the NEFRC moves to update its SRPP, the City will participate in its development and ensure that issues of importance to the City are considered by the Regional Council.

If growth within the City increases to the extent that additional coordination with the NRFRC is indicated the City will initiate discussion with the Regional Council to coordinate implementation of appropriate mechanisms.

Area of Critical State Concern

The City does not include any area of critical state concern within its boundary.

INTERGOVENMENTAL COORDINATION ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal I. 8 Establish appropriate ~~a~~ mechanisms among the various levels of government and service providers that maximizes the use of federal, state, regional and county resources and services to improve and maintain the quality of life for citizens in the City of Keystone Heights.

OBJECTIVE

I 8.1 Maintain and improve as necessary, the formal and informal relationships that provide for coordinated implementation of the City's Comprehensive Plan with adjacent counties, state and federal agencies.

Policies

I 8.1.1 The City shall coordinate with the adjacent counties, the School Board, regional and state agencies to identify and solve issues related to plan implementation, development and funding in such areas as land use, transportation, utility services, drainage, recreational facilities and opportunities, public school facilities, resource and environmental protection, aviation and capital improvement programming.

I 8.1.2 The City shall utilize the Northeast Florida Regional Council to provide informal mediation or other form of dispute resolution if the City denies an owner's request for an amendment to the comprehensive plan. The City shall share equally in the cost of the mediation or other alternative dispute resolution.

I 8.1.3 The City shall utilize the Northeast Florida Regional Council to provide mediation assistance in cases of intergovernmental conflicts with adjacent counties and other agencies with which intergovernmental coordination is committed.

I 8.1.4 The City and the Clay County School Board shall maintain an interlocal agreement, the *Interlocal Agreement for Coordinated Planning, Public Educational Facility Siting and Review and School Concurrency in Clay County*, which establishes the process by which collaborative planning and decision making for public school siting and school concurrency are made.

I 8.1.5 The City shall provide to Clay County and the Clay County School Board annual data related to residential building permits issued and the permit

locations. The City's population projections and proposed amendments to its comprehensive plan shall be provided to the School Board and Clay County for use in its long range planning efforts.

I 8.1.6 The City shall foster enhanced participation in the maintenance of minimum flows and levels by the St Johns River Water Management District to protect the natural resource and recreational value associated with Lakes Brooklyn, Keystone and Geneva and to represent the importance these resources play in the character of the City.

OBJECTIVE

I 8.2 Coordinate consistency and concurrency reviews for transportation, public schools, solid waste, water and wastewater treatment and potable water supply, based on Level of Service (LOS) standards for public facilities the City.

Policies

I 8.2.1 The City shall coordinate with the CCUA, School Board, FDOT and Clay County to share data and produce an annual statement of available capacity for potable water facilities, water supply, wastewater treatment, solid waste, public schools, roads and recreation facilities that reflects the data generated by the service provider, including the City.

I 8.2.2 The City shall provide annual building permit data for residential building permits issued to assist the School Board in public school planning. The City shall include a representative of the School Board as a member of its Local Planning Agency.

I 8.2.3 The City, in cooperation with the SJRWMD, shall make materials developed by the SJRWMD related to water conservation programs including information on the use of water saving devices and drought resistant native vegetation in the landscape, the limitation on landscape watering to certain hours-and which promote public education and awareness of the benefits of water conservation.

I 8.2.4 The City shall coordinate annual monitoring of per capita water usage with the Clay County Utility Authority and coordinate the implementation of strategies to reduce water consumption on a per capita basis if the 2008 per capita demand is shown to increase for two consecutive years by 5 percent (cumulative) or if there is a single year increase of greater than 20 percent.

OBJECTIVE

I 8.3 The City shall act to ensure that planning and development related activities are coordinated with the comprehensive plans or other plans of adjacent local governments, the

NEFRC, the School Board and other entities providing services but not having regulatory authority over land use.

Policy

I 8.3.1 The City shall provide notice of its planning activities and development proposals that could require coordination to the adjacent counties, the School Board, the NEFRC and the CCUA and request comments related to necessary coordination with the comprehensive plan, facilities plan or policy plan of the recipient.

I 8.3.2 The City shall review the comprehensive plan amendments of the adjacent counties and changes to the Strategic Policy Plan of the Northeast Florida Regional Council in order to identify issues or inconsistencies that the proposed amendment(s) may create with the comprehensive plan of the City.

I 8.3.3 The City shall coordinate with Clay County for the provision of fire protection and EMS.

I 8.3.4 The City will coordinate with state and federal agencies concerning environmental permitting procedures.

I 8.3.5 The City shall coordinate with the Florida Department of Transportation to provide for the City's review and comment on the plans of the FDOT to maintain or improve SR 21 or SR 100 in order to determine consistency with the City's comprehensive plan and Community Redevelopment Plan.

I 8.3.6 The City will review its transportation level of service standards annually and compare the adopted level of service to that of the adjacent counties to determine if the adopted levels of service are compatible.

I 8.3.7 The City shall coordinate with Clay and Bradford counties by December 2011 to establish procedures to identify and implement joint planning areas for purposes of annexation, municipal incorporation and joint infrastructure service areas; as the water and wastewater service provider for the City and surrounding areas, the CCUA shall be included in development of these procedures.

I 8.3.8 The City shall coordinate with Clay and Bradford Counties by December 2011 to establish joint processes for the siting of facilities with county-wide significance that may be located within 5 miles of the City limits.

I 8.3.9 The City shall coordinate with the CCUA as the service provider for potable water to the City to insure that prior to approval of a building permit or its functional equivalent, adequate water supplies to serve the new development

will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

I 8.3.10 The City will coordinate with the Clay County Utility Authority to identify areas of existing residential development located within the high aquifer recharge area of the Floridan aquifer where the extension of central wastewater is most financially feasible and will use the results of this analysis to identify funding sources and incentives for the extension of said services.

I 8.3.11 The City shall maintain an interlocal agreement with Clay County to ensure the provision of adequate solid waste disposal capacity and to annually review the capacity of the Clay County landfill and update demand projections associated with development within the City.

OBJECTIVE

I 8.4 Future expansion of the Keystone Airpark shall be coordinated with Clay and Bradford Counties.

Policies

I 8.4.1 Pursuant to Section 333.03(1)(b), F.S., the City shall maintain its Interlocal Agreement with Bradford County that identifies the roles and responsibilities of each party concerning land use, zoning and development issues at that portion of the Airpark located in Bradford County.

I 8.4.2 Pursuant to Section 333.03(1)(b), F.S., by December 2011 the City shall enter into an Interlocal Agreement with Clay County to identify the roles and responsibilities of each party concerning land use, zoning and development issues at that portion of the Airpark located in Clay County.

Data and Analysis
2010-11 to 2014-15 CCSB Education Facilities Plan

Excerpt

1.4 Existing and New School Facilities

A new high school facility will be open this year bringing the total school campuses to 40. Additionally, a new elementary wing at Middleburg Elementary will be completed for the start of the 2010 school year. An inventory of existing schools is shown in Table 1.4 and their general locations are shown on Map 1.1.

The District does not utilize any leased or loaned facilities for classroom purposes. However, 43% of the District's student stations identified in Florida Inventory of School Houses (FISH) are housed in satisfactory relocatable buildings. There are currently no relocatable classrooms scheduled for replacement during the next five years.

Based on current FDOE COFTE forecast elements, there are no plans to construct any new schools in the next ten years. The School District has identified the possibility that a total of 15 schools could be needed by school year 2030-31. The proposed new schools for the 5, 10 and 20 year periods are shown in their general locations in Table 1.4.1 and Map 1.2. General locations of future school sites will be based on the school site policies in the interlocal agreement and comprehensive plans of the local governments.

RECREATION AND OPEN SPACE ELEMENT

Introduction

The City owns and maintains recreation and open space facilities within its corporate limits. These facilities are open to the public, providing recreation opportunities for the residents of the City. The City evaluates opportunities to expand and improve its existing facilities and to acquire additional land/facilities annually through its budget process and by pursuing grants and donations.

Existing Recreation and Open Space Facilities

The City of Keystone Heights provides recreation facilities normally associated with small municipalities such as tennis courts, basketball courts and small passive parks that act as gathering places. Parks are the venue for the farmer's market and holiday festivals in the City. Unique to an inland location, the City owns and maintains a public beach providing access to Lake Geneva. Ball fields and other recreational facilities that require large tracts of land are not available to the public within the City, however the Clay County School District maintains ballfields for student use adjacent to the two public schools. The Palatka-Lake Butler State Trail parallels SR 100 within the City and provides a linear trail through the City.

The City meets the needs of its population with the facilities it offers. In nearby Clay County, Twin Lakes Park offers a baseball field, three soccer fields., two tennis courts, a playground and restroom facilities on 50 acres. Twin Lakes Park is located approximately 3 miles from the City, south on State Road 100. The trailhead for the Palatka-Lake Butler State Trail is located at Twin Lakes Park. North on SR 21, the County owns Little Rain Lake Park, a 34 acre park that is leased to the Keystone Recreation Association. Little Rain Lake Park includes football fields, baseball fields, T-Ball fields, a basketball court, tennis courts and covered pavilions.

The Mike Roess Gold Head Branch State Park is located north of the City, approximately 6 miles north of the City on State Road 21. Developed in the 1930's, Goldhead is a 2,000 acre park offering hiking and wildlife viewing and access to the Florida Trail. Access to Little Lake Johnson provides swimming, fishing and boating opportunities; full camping facilities are also available at Goldhead State Park. An eight foot wide bike trail along SR 21 connects the City core with Goldhead State Park.

In addition to the residents of the City, citizens of unincorporated Clay, Bradford, Putnam and Alachua counties that live in proximity to the City utilize recreation and open space facilities within the City.

Within the City of Keystone Heights are parks and recreation facilities operated by the City and the Florida Department of Environmental Protection, Office of Greenways and Trails. There are no private recreation providers within the City and the recreation facilities

associated with the elementary school and combination Junior High/ High School in the City are not open to the public. Table 1 lists the number of parks and recreational facilities available to the public. As shown, the table identifies the type (i.e. user based, resource based) and number of facilities provided at each park. -The table also characterizes the condition of these facilities as good, acceptable or poor. A description of each facility in Table 1 is provided. Figure 1 shows the location of the recreational facilities in the City. The facilities identified in Table 1 comprise the comprehensive system of public sites for recreation within the City.

Table 1
Recreation and Open Space within the City 2010

Park Name & Type	Facilities	Lighting	Condition	Responsible
Theme Park U	1 Basketball Court 1 Tennis Court 1 Child Play Area	Y Y N	Fair Fair Good	City City City
Keystone Beach R	Freshwater Beach 1 Pavilion 2 Volleyball Courts Picnic Area w/ grills 1 Child Play Area Restrooms Stabilized Parking	N N N N N N Y	Poor Good Good Good Good Good Poor	City City City City City City City
Recreation Park U	Exercise Trail Skate Pad Dog Park Toddler BMX Picnic Area w/ grills Restrooms Gravel Parking	N N N N N N	Good Good Good Good Good Good	City City City City City
Natural Park R	Large Pavilion Trails	N	Good	City
Leona Terry Azalea Park	Gazebo Exercise Stations	N N	Good Good	City City
Palatka-Lake Butler State Trail U	10 wide trail 6.5 mile length	N	Good	FDEP/OGT

A = User Based; R = Resource Based

Theme Park is located behind City Hall, with access from Lawrence Boulevard (SR 21), Oriole Street and Southeast Lakeview Drive. The majority of the City's active recreation facilities are located in this park. The basketball and tennis courts are lighted and are used heavily for lessons (tennis) and free play. Sharing the overall 2.48 acre site with City Hall and the Keystone Heights' Library, the park is approximately 1.86 acres in size. Parking is provided along Lawrence Boulevard as parallel parking and across SE Lakeview Drive in the parking lot for Keystone Beach. Surrounded by homes, many residents walk to Theme Park. Facilities are in fair condition; the tennis court needs to be reconstructed and the basketball court needs to be restriped. The parking area is in poor condition. The children's area is well maintained and the equipment is less than 5 years old. *Theme Park* is the site of the Farmers' Market for the City.

Keystone Beach is located at the intersection of SR 21 and Lakeview Drive East. The park is approximately 2.22 acres in size and provides 530 feet of frontage (beach) on Lake Geneva. While lakes in the area have seen the water level drop significantly, Lake Geneva maintains a water level that supports the beach access and activities. As the only public beach within Clay County, Keystone Beach serves the residents of the unincorporated County as well as users from surrounding Bradford, Alachua and Putnam counties. Facilities are in good condition, however repairs to heavily used areas such as the restrooms, children's play equipment and beach are an ongoing activity for the City.

The *Recreation Park* is the newest recreation facility within the City; purchased in 2005 and improved with joint funding from a FRDAP Grant, the City has improved this park with parking and restrooms, a toddler BMX, a skate pad, exercise trail and picnic areas. This park is approximately 3.75 acres in size. Due to the recent rise in construction costs, the skate pad has not been outfitted with skate park equipment and Phase I development of the park is smaller than anticipated. Skate pad and other improvements are necessary to complete the park master plan. The City will continue to pursue additional grant funding and to allocate resources toward completion of this park.

Natural Park was created by the City in 1999 using FRDAP grant funds. Nature Park is 3.14 acres in size, offering a passive recreation facility within the heart of the Downtown. The park includes a large pavilion reflective of historical architecture in the area. Weddings and family gatherings occur in the park.

Leona Terry Azalea Park is located at the corner of SW Magnolia Ave and SW Nightingale Street. The park is 0.9 acres in size and is improved with a fitness trail and gazebo available for group events.

The portion of the *Palatka-Lake Butler State Trail* (PLB Trail) that is located within the abandoned Norfolk-Southern Rail line that lies parallel to SR 100 within the City was completed in 1998. The segments on either side of the City, extending to the Bradford County and Putnam County lines, were completed in 2008, creating the 5.2 mile trail within Clay County. The completed trail in Clay County is part of the overall 47-mile PLB Trail that will extend from the Lake Butler area to Palatka. Upon completion of the segment within

Clay County in 2008, the Florida Department of Environmental Protection took over maintenance of the trail under its Greenways and Trails program.

The portion of the PLB Trail that runs through Keystone Heights ties into an eight-foot wide, 6 mile bike path (SR 21 Path). Located adjacent to SR 21, the SR 21 Path connects the PLB Trail to Mike Roess Gold Head Branch State Park. Completed in 2009, residents and visitors alike utilize the bike path to walk, run and bicycle between the City and Gold Head Branch State Park.

Recreation and Open Space Analysis

Parks and recreation are subject to the statutory requirements for concurrency management pursuant to Section 163.3180(1), Florida Statutes. Concurrency management requires the local government to establish a level of service for parks and recreation facilities such that development approvals are not granted unless the level of service standard is maintained. Specifically, parks and recreation facilities to serve new development shall be in place or under actual construction no later than 1 year after issuance of a certificate of occupancy or its functional equivalent by the City. When land is necessary to meet the established level of service, the acreage for the necessary facilities must be dedicated or be acquired by the City prior to its issuance of a certificate of occupancy or its functional equivalent, or, alternatively, funds in the amount of the developer's fair share shall be committed no later than the local government's approval to commence construction.

Level of service standards for parks and recreation facilities are typically established on a population basis, for example requiring 2 tennis courts per 5,000 population. The facilities each community finds to be valuable can differ based on demographics, existing facilities, resources available to acquire and then maintain new facilities, and opportunities based on natural and cultural resources in the community.

Demographics

The population projection for the City indicates an increase in population of 117 between 2009 and 2025. Much of the population increase is projected to occur in the over 65 age group during this period. This causes the demographics to shift slightly over the planning period, with population aged 0-19 and 50-64 staying the same through 2025 while the age group between 20 and 49 decreases and the age group of 65 and up increases. The shift only represents a very small number of persons, with the age group between 20 and 49 losing 16 persons and the age group over 65 increasing by 94 persons.

As the City continues to invest in recreation and open space facilities the changing demographics will be considered when determining priorities.

Table 2
Population Projection
2008- 2025

Keystone Heights	Permanent Population
2009	1,408
2025	1,462

Recreational Standards

The Florida Department of Environmental Protection (FDEP), Division of Recreation and Parks, updated the Statewide Comprehensive Outdoor Recreation Plan (SCORP) in 2000 as part of the federal requirements associated with participation in the Federal Land and Water Conservation Fund. Also known as *Outdoor Recreation in Florida 2000*, the *2000 SCORP* is used by many local governments as a benchmark in recreation planning, but it is important to note that the document addresses needs at a large, regional and statewide scale first. The level of service standards are generally applicable to areas with greater population than the City.

The use guidelines established in the *2000 SCORP* are significantly higher than the standards applicable in 1987. The change reflects an acknowledgement of the importance of recreation and physical activity for good health and psychological well-being.

While the City should look to standards established by the *2000 SCORP* as a guide to establishing its level of service standards, the current inventory of recreation and open space facilities and the lack of vacant land within the City limits also influences the City's decisions with regard to future facilities and open space.

As noted in the *2000 SCORP*, outdoor recreation activities can be described as activity-based or user-oriented. The provision of user-oriented outdoor recreation is limited only by the funds and available land to construct the desired facility while resource based outdoor recreation is dictated by the availability of the supporting natural or cultural resource. In Keystone Heights, the public beach on Lake Geneva and Natural Park are resource-based facilities because they depend on the natural and cultural resource being located within the City; the other recreation facilities offered within the City are a function of available land and financial resources.

Resource-based Facilities

Resource-based facilities are dependent on the availability of the resource within a jurisdiction; the only public freshwater beach in Clay County is located in the City and the historic resource preserved by Natural Park represent the two resource based facilities in the City. The *2000 SCORP* identifies two site guidelines for freshwater beaches: one based on linear feet of beach per population and one based on overall square footage per population. A

standard based on population is identified for beach access with parking; this standard recommends 0.5 acres per 1,000 population. Keystone Beach provides 530 linear feet of frontage on Lake Geneva and is 2.22 acres in size. Application of the standard for beach access with parking indicates that the 2.22 acre site would serve a population of 4,400. The City's 2009 population is estimated at 1,409 and projected to be 1,462 in 2025.

For Natural Park, the use guideline established as a linear trail standard that does not apply to the City's facility. Picnicking is a resource –based activity included in the *2000 SCORP*; the standard established is one area per 5,000 population (minimum). Natural Park is 3.14 acres in size and contains multiple picnic tables/areas. This park exceeds the picnic standard established by the *2000 SCORP* for the City's projected population through 2025.

User-based Facilities

The standard for user- based facilities identified in the SCORP 2000 are provided in Table R-3 so that an analysis of the sufficiency of existing facilities to meet the needs of the future population can be assessed in the following sections. Standards for facilities that the City may consider as additional facilities in the future are noted to guide future decision-making.

Table 3
User-based Outdoor Recreation Facilities
Population Guidelines

Facility	Guideline	
	Minimum	Median
Basketball Court	1 court / 500 pop	1 court / 5,000 pop
Equipped Play Area (Tot Lot)	1 area / 500 pop	1 area /10,000 pop
Urban Jogging/ Hiking Trail	1 trail / 10,000 pop	1 trail/ 15,000 pop
Shuffleboard Court	1 court / 1,000 pop	1 court / 6,000 pop
Tennis	1 court / 1,067 pop	1 court / 2,000 pop
Racquetball / Handball Court	1 court / 2,500 pop	1 court/ 10,000 pop

Source: *Outdoor Recreation in Florida 2000, FDEP, 2001*

An analysis of existing user-based recreation facilities identifies areas where current facilities do not meet the minimum and/or median standard identified in the *2000 SCORP* for the current year (2009). Facilities that fail to meet the minimum level of service standard may meet the median standard:

Table 4
Existing User-Based Recreation Facilities
Included in 2000 SCORP
2009 Level Of Service

Facility	Inventory	2009 Level of Service [1]	Meets Minimum Standard	Meets Median Standard
Basketball Court	1	1 per 1,408 population	no	yes
Equipped Play Area	2	1 per 704 population	no	yes
Urban Jogging/ Hiking Trail	1	1 per 1,408 population	yes	yes
Tennis	2	1 per 704 population	yes	yes

[1] 2009 Population of 1,408

In addition to the types of facilities listed in the *2000 SCORP*, the City owns and maintains the following facilities:

Table 5
Existing User-Based Recreation Facilities
Not Included in 2000 SCORP
2009 Level Of Service

Facility	Inventory	2009 Level of Service [1]
Volleyball Courts	2	1 per 704 population
Dog Park	1	1 per 1,408 population
Covered Picnic (Pavilions)	2	1 per 704 population

[1] 2009 Population of 1,408

The City adopted level of service standards in its 2001 Comprehensive Plan in 1991. These standards were reviewed during the preparation of the 2007 Evaluation and Appraisal Report and the deletion of a level of service standard for swimming pools was recommended. The City does not provide a public pool and has determined that it will not be able to provide this type of recreation facility within the 2025 planning period.

In addition to recreation facilities, the 2000 SCORP includes guidelines for parks by type. Neighborhood Parks are described as walk-to parks located along streets where people can walk or bicycle without encountering heavy traffic. Neighborhood parks include play structures, court games, tennis courts, volleyball courts , open areas and landscaping. These parks should be located within one-half mile of the population intended to be served and

should be provided at a standard of 2 acres for each 1,000 population. Neighborhood Parks within the City are Theme Park, Keystone Beach, and Recreation Park. There are 7.83 acres of neighborhood park acreage within the City. At a level of service standard of 2 acres per 1,000 population, the neighborhood parks within the City will serve a population of 3,915, more than double the City's population.

Community Parks generally serve two or more neighborhoods and serve a population of up to 5,000. Community parks are intended to be large in scale; the minimum size is 20 acres. No community parks are located within the City, however two community parks and one state park are located near the City limits. Twin Lakes Park offers a baseball field, three soccer fields., two tennis courts, a playground and restroom facilities on 50 acres. Twin Lakes Park is located approximately 3 miles from the City, south on State Road 100. In addition to the facilities listed, Twin Lakes Park operates as the trail head in Clay County for the Palatka-Lake Butler Trail. A second community park, Little Rain Lake Park ,is located north on SR 21. A 34 acre park that is leased to the Keystone Recreation Association, Little Rain Lake Park includes 2 football fields, 6 baseball fields, 2 T-Ball fields, 1 basketball court, 2 tennis courts and 4 covered pavilions. The community parks provided by Clay County are not included in the City's inventory of facilities and the City does not provide community park facilities. The City has not established a level of service standard for community parks.

Mike Roess Gold Head Branch State Park is located approximately 6 miles north of the City on State Road 21. Developed in the 1930's, Goldhead is a 2,000 acre park offering hiking and wildlife viewing and access to the Florida Trail. Access to Little Lake Johnson provides swimming, fishing and boating opportunities. Full camping facilities and cabins are also available at Goldhead State Park.

Level of Service Standards

The balance to be struck for a City the size of Keystone Heights is one between the desires of the population and elected officials to provide sufficient recreation and open space to enhance the quality of life for its residents and the funding available to maintain and increase the existing inventory. Once acquired, recreation and open space facilities require continual maintenance and repair.

The City has evaluated the needs of its current population and the effect changing demographics may have on the need for additional facilities or changes to the focus of existing facilities. The City has determined that it will continue not to provide recreational ball fields normally found in community parks within its boundaries. These facilities require acreage that is not available as vacant land in the City and the acquisition of developed property for these facilities is not considered financially feasible.

For the 5 year and 10 year planning horizons of 2016 and 2021 and throughout the 2025 planning horizon of the comprehensive plan the City has established facility and neighborhood park level of service standards to address the needs of its citizens.

Facility Level of Service

The City has adopted a level of service for recreation facilities based on the standards recommended in the 2000 SCORP, the availability of land and resources for additional facilities, and the level of service provided by existing facilities:

Table 6
Recreation Facility Level of Service
2009- 2025

Facility	Level of Service
Freshwater Beach	0.5 acres per 1,000 population
Basketball Court	1 per 2,000 population
Equipped Play Area	1 per 1,000 population
Urban Jogging/ Hiking Trail	1 per 5,000 population
Tennis	1 per 2,000 population
Volleyball Courts	1 per 1,000 population
Dog Park	1 per 2,000 population
Covered Picnic (Pavilions)	1 per 1,000 population

Neighborhood Park Level of Service

The City encourages outdoor recreation and physical activity in its fine neighborhood parks. Well maintained, shaded by mature trees and located within walking distance of the residents of the City, Theme Park, Keystone Beach and Recreation Park offer a variety of recreational and outdoor opportunities. The acreage within these existing parks is sufficient to meet the recommended level of service for neighborhood parks identified in the 2000 SCORP. The City has adopted the level of service standard of 4.5 acres per 1,000 population.

Open Space Level of Service

The City recognizes the value of passive open space within its downtown; Natural Park and Leona Terry Azalea Park provide public gathering space for picnics and the appreciation of nature. Together, these two parks represent 4.04 acres of open space within the City.

Natural Park is an undisturbed area in the heart of downtown that serves as open space readily available to the public on foot, bicycle or by car. The City establishes a level of service standard of 2.5 acres per 1,000 population for open space in recognition of the quality of life this park and open space in general brings to the citizen's of the City.

Needs Analysis

The purpose of the needs analysis is to relate existing and future recreation demand to existing facilities (supply) with a measure (standard) that indicates whether additional facilities are needed to meet the standard established.

Recreational supply and demand analysis is projected for the 10-year planning period in five year increments. The analysis quantifies the need for recreational facilities and open space in the base year and subsequent years during the planning period. The need in the second five year period was calculated based on the assumption that all recreational facilities and open space required in the previous five years were acquired and constructed.

Table 7
Existing Needs Analysis

Facility	2009 Inventory	Adopted Level of Service	2009 LOS [1]
Neighborhood Parks			
Theme Park	6.42 acres	3.5 ac / 1,000 pop	4.55 ac/ 1,000 pop
Keystone Beach			
Recreation Park			
Recreation Facilities			
Freshwater Beach	2.22 ac	0.5 ac / 1,000 pop	1.57 ac / 1,000 pop
Basketball Court	1	1 / 2,000 pop	1.42 / 2,000 pop
Equipped Play Area	2	1 / 1,000 pop	1.42 / 1,000 pop
Urban Jogging/ Hiking Trail	1	1 / 5,000 pop	3.55 / 5,000 pop
Tennis	2	1 / 2,000 pop	2.84/ 2,000 pop
Volleyball Courts	2	1 / 1,000 pop	1.42 / 1,000 pop
Dog Park	1	1 / 2,000 pop	1.42 / 2,000 pop
Covered Picnic (Pavilions)	2	1 / 1,000 pop	1.42 / 1,000 pop
Open Space			
Natural Park	4.04 acres	2.5 ac / 1,000 pop	2.86 ac / 1,000 pop
Leona Terry Azalea Park			

[1] 2009 Population of 1,408

Table 8
Future Needs Analysis
2014 and 2019

Facility	2009 Inventory	Level of Service	2014 LOS [1]	2019 LOS [2]
Neighborhood Parks				
Theme Park	7.83 acres	4.5 ac / 1,000 pop	5.48 ac / 1,000 pop	5.41 ac / 1,000 pop
Keystone Beach				
Recreation Park				
Recreation Facilities				
Freshwater Beach	2.22 ac	0.5 ac / 1,000 pop	1.56 ac / 1,000 pop	1.55/ 1,000 pop
Basketball Court	1	1 / 2,000 pop	1.40 / 2,000 pop	1.38 / 1,000 pop
Equipped Play Area	2	1 / 1,000 pop	1.40 / 1,000 pop	1.38 / 1,000 pop
Multi-purpose Field	1	1 / 2,000 pop	1.40/ 2,000 pop	1.38 / 2,000 pop
Urban Jogging/ Hiking Trail	1	1 / 5,000 pop	3.55 / 5,000 pop	3.5 / 5,000 pop
Tennis	2	1 / 2,000 pop	2.8/ 2,000 pop	2.76 / 2,000 pop
Volleyball Courts	2	1 / 1,000 pop	1.40 / 1,000 pop	1.38 / 1,000 pop
Dog Park	1	1 / 2,000 pop	1.40 / 1,000 pop	1.38 / 1,000 pop
Covered Picnic (Pavilions)	2	1 / 1,000 pop	1.40 / 1,000 pop	1.38 / 1,000 pop
Open Space				
Natural Park	4.04 ac	2.5 ac / 1,000 pop	2.8 ac / 1,000 pop	2.76 ac / 1,000 pop
Leona Terry Azalea Park				

[1] 2014 Population of 1,428
[2] 2019 Population of 1,446

No additional facility needs were identified solely on the basis of projected population growth in the City.

The City annexed two parcels of land of sufficient size for development; previous annexation requests were associated with individual single family lots at the periphery of the City limits. Without a history of larger annexations, the City has not projected an increase in its

population projection through 2025 that would be attributed to the annexation of land into the City. The City will evaluate the effect of larger annexations on its future population in the next Evaluation and Appraisal Report cycle. In the interim, the City will apply the adopted level of service for Neighborhood Parks and Open Space to new developments within the City that create more than 10 lots. The application of the adopted LOS shall be made on a per dwelling unit basis by multiplying the number of units by the household size for the City. Neighborhood parks and open space created as a result of a development plan may be located within the development and limited in use to the residents of the community or lands external to the development may be provided. The City shall not be responsible for the construction of improvements or maintenance of facilities provided as a result of development unless the property is donated to the City and such responsibility is accepted.

Capital and Maintenance Costs

No capital improvement costs are associated with the maintenance of the adopted facility and neighborhood park recreation level of service standard. Maintenance costs for the existing recreation facilities are not insubstantial; these funds are budgeted annually by the City. Maintenance and periodic improvements to facilities are necessary due to everyday use; Keystone Beach will require stormwater improvements and the City's public tennis courts and basketball court are in need of improvement.

The City has used the Florida Recreation Development Assistance Program to assist in funding the development of Natural Park and Recreation Park. The City will continue to pursue funding from this and other sources to augment its resources. Continued improvements to the Recreation Park are anticipated throughout the planning period; the land was acquired by the City and improvements funded under a FRDAP Grant that outlined a phased approach to improvements over a 10 year period.

The City will provide matching funds as required to obtain grants and will fund the ongoing maintenance of facilities within its boundary.

Prioritization of Future Actions

Priorities for recreation and open space within the City are to first maintain the existing facilities in good condition such that they are safe and available to the public for use; second , for the continued improvement of Recreation Park consistent with the Master Plan for this park; and third, to pursue unforeseen opportunities if new funds/ funding sources become available. The aging of the City's population through the planning period will be recognized in the City's decision-making process when new funds or funding sources become available.

RECREATION AND OPEN SPACE ELEMENT

GOALS, OBJECTIVES AND POLICIES

Goal R 7 The City shall provide private and public parks, recreation facilities and open space at the adopted level of service to meet the health, safety and welfare needs of City citizens.

OBJECTIVE

R 7.1 The City's system of neighborhood parks, recreation facilities and open space shall be maintained through year 2025 to meet the cultural, social and health needs of the City as determined by its recreation levels of service.

Policies

R 7.1.1 The City shall adopt and maintain the level of service standard of 3.5 acres per 1,000 population for neighborhood parks:

R 7.1.2 The City shall adopt and maintain the following level of service for recreation facilities (all population is permanent population):

Freshwater Beach	0.5 ac per 1,000 population
Basketball Court	1 per 2,000 population
Equipped Play Area	1 per 1,000 population
Urban Jogging / Hiking Trail	1 per 5,000 population
Tennis Court	1 per 2,000 population
Volleyball Court	1 per 1,000 population
Dog Park	1 per 2,000 population
Covered Picnic Area	1 per 1,000 population

R 7.1.3 The City shall adopt and maintain a level of service standard of 2.5 acres per 1,000 population for open space.

R 7.1.4 During the development review and permit process, the City will require developers of tracts to provide open space areas and neighborhood parks.

The City will apply the adopted level of service for Neighborhood Parks and Open Space to new developments within the City that develops more than 10 dwelling units. The application of the adopted LOS shall be made on a per

unit basis by multiplying the number of units by the household size for the City.

Neighborhood parks and open space created as a result of a development plan may be located within the development and limited in use to the residents of the community. Lands external to the development may be provided. The City shall not be responsible for the construction of improvements or maintenance of facilities provided as a result of development unless the property is made available to the City and such responsibility is accepted.

R 7.1.5 The City will maintain existing parks, recreation facilities and open space within the City in good in order to continue to make facilities available to the public at the adopted level of service.

R 7.1.6 Recreation sites that include environmentally sensitive lands and are developed for any recreation use other than passive enjoyment of the natural environment shall be designed to locate all non-passive activities such that the preservation or conservation of environmentally sensitive lands is maintained.

R 7.1.7 The City will coordinate its efforts with surrounding counties in preserving the public access to lakes in the area and within the City.

R 7.1.8 The City shall update the inventory of parks, recreation facilities and open space annually in its Annual Capacity Statement to determine the continued adequacy of the facilities to meet the level of service standard (quantity) and to determine its maintenance priorities for the upcoming year.

R 7.1.9 The City shall require development that abuts the Palatka-Lake Butler State (PLB) Trail to preserve all trees 4" in caliper or greater that lie within 40 feet of the right of way line for the Trail in order to retain existing shade cover. Development adjacent to the Trail shall be required to provide two times the number of shade trees otherwise required in the vehicular use area buffer that lies adjacent to the right of way for the PLB Trail.

R 7.1.10 The City will continue to pursue grants and matching funds to complete Natural Park and recreation Park and to improve the level of service of recreation facilities available to its residents.

OBJECTIVE

R 7.2 Preserve public access to the City's parks, recreation and open space, including Keystone Beach to meet the recreational needs of City residents and visitors.

Policies

R 7.2.1 Development or activities which reduce public access to parks, recreational facilities or open space from existing access routes shall be prohibited from obtaining a development permit or order, unless such change is demonstrated to promote the public health, safety and welfare and/or aesthetics of the City.

R 7.2.2 The City shall provide bicycle racks at each park and at Natural Park (open space).

OBJECTIVE

R 7.3 The City shall ensure the provision of open space by the City at the adopted level of service levels and require all new residential and non-residential development to provide open space within each development and preserve environmentally sensitive areas and native habitats.

Policies

R 7.3.1 The City shall require a minimum of 20 percent open space within new residential and non-residential development; a maximum of 40 percent of the open space may consist of areas dedicated to stormwater retention.

R 7.3.2 The City shall include incentives within the Land Development Regulations that serve to encourage private residential and non-residential developments to provide additional parks, open space and recreation facilities in order to improve the quality of life of the residents of the City .

TRAFFIC CIRCULATION ELEMENT

Introduction

Keystone Heights is a city located in southwest Clay County with a 2000 population of 1,345 and a projected population of 1,462 in 2025. The community is located approximately 30 miles west of Green Cove Springs, the County seat and 65 miles southwest of Jacksonville. Travel is oriented toward economic and employment centers outside of Keystone Heights and with a high percentage of work trips terminating outside of the County in ~~to~~ Gainesville and Jacksonville.

The population of Keystone Heights is projected to increase 1.3 percent within the next five years and 2.1 percent through 2015. In addition to serving its residents, the City functions as an activity center for retail and services for the surrounding rural populations in Clay and Bradford counties. Through traffic represents the majority of the trips within the City in any 24 hour period as well as during the peak hour, so the projection of future volumes in the City of Keystone Heights is not only a function of increasing households and businesses within the City but also the growth in surrounding areas.

The City is not required to adopt a Transportation Element, Ports & Aviation Element or a Transit Element because it is located outside an urban area of a Metropolitan Planning Organization and has a population of less than 50,000. The Traffic Circulation Element addresses roads within the City, including establishing a level of service for State Road 100 that is consistent with Rule 9J-5.019(4)(c), FAC. As an Emerging Strategic Intermodal System (SIS), State Road 100 is subject to a minimum level of service standard of C. The City has adopted a level of service standard of C for SR 100.

Traffic Circulation Data

Major Roads

State Road 100

State Road 100 (SR 100) is a two lane undivided roadway that runs northwest to southeast through the City. Named Walker Drive within the City limits, it has been functionally classified as an urban minor arterial and is part of the federal-aid primary system. Truck volumes on SR 100 within the City are 6 percent of the daily volume. State Road 100 is part of the Strategic Intermodal System as an Emerging facility.

In 2003, Florida created Florida's Strategic Intermodal System (SIS), a high-priority network of transportation facilities critical to its economic competitiveness and quality of life. The SIS comprises the state's largest and most strategic transportation facilities, including major air, space, water, rail, and highway facilities. The SIS facilities are the primary means for moving people and freight; the SIS is Florida's highest statewide priority for transportation capacity improvements. As such, capacity improvements to the SIS are funded over capacity improvements to other state roads.

As an Emerging SIS facility, the Florida Department of Transportation (FDOT) establishes the applicable minimum level of service and must participate in the negotiations and approval of proposals to mitigate impacts from development on SR 100. Because SR 100 is an Emerging Facility however, it is not eligible for prioritized funding of capacity improvements.

FDOT maintains two traffic count stations on State Road 100 immediately inside the City limits; one at the northwestern limits of the City and one at the southeastern limits. Traffic counts are taken annually by FDOT and adjusted; the 2008 counts (producing 2009 volumes) and the adopted maximum service volume (MSV) in the PM Peak for Level of Service C (Areas Transitioning Into Urbanized Areas) are provided in Table 1.

TABLE 1
State Road 100
2009 Traffic Volumes

Segment	2009 PM Peak Volume	Maximum Service Volume[1]
SR 21 to NW City Limits	1,003	1,370
SR 21 to SE City Limits	1,012	1,370

[1] FDOT Generalized Tables, Table 5

State Road 21

State Road 21 is a two lane undivided urban minor arterial that runs northeast to southwest through Clay County intersecting with SR 100 in Keystone Heights. It is a part of the state highway system and the federal-aid primary system. State Road 21 is named Lawrence Boulevard within the City limits, with SR 100 acting as the point between south and north. South Lawrence Boulevard is the segment of SR 21 on which downtown core businesses are located; traffic calming through the core is achieved with on street parking and reduced speed limits. At approximately 8 percent, truck volumes are relatively high at both count locations

on SR 21 in the City given the urban environment, on street parking and pedestrian traffic in the City limits.

FDOT maintains two traffic count stations on State Road 21 inside the City limits; one approx. 500 feet north of the SR 21 /SR 100 intersection that defines the commercial area of the City and one in the residential area of the City, south of Keystone Beach and City Hall. Traffic counts are taken FDOT and adjusted; the 2008 counts and the adopted maximum service volume (MSV) in the PM Peak for Level of Service D (Areas Transitioning Into Urbanized Areas) are provided in Table 2.

TABLE 2
State Road 21
2009 Traffic Volumes

Segment	2009 PM Peak Volume	Maximum Service Volume
N City Limits to SR 100	912	1,480
SR 100 to S City Limits	492	1,480

[1] FDOT Generalized Tables, Table 5

Local Roads

The City's local road network is a grid street system which serves to distribute traffic such that there are no major points of congestion. Each road is two lanes and undivided; most local streets include sidewalks within the right of way. Traffic volumes are very low on the local streets not listed on the Concurrency Road Network with bicycles and pedestrians accommodated in the street when sidewalks are not present. Local roads predominantly serve residential dwellings, with direct access to the street. Certain streets do serve non-residential traffic:

- Located north of SR 100, Commercial Circle serves only non-residential industrial and commercial uses.
- Cargo Way serves as a rear entrance /service road for highway type businesses that front on SR 100 west of SR 21; Green Way serves the same purpose east of SR 21.
- South of SR 100, commercial uses are served for a two block depth on SE Cypress Avenue, SE Palmetto Avenue, and SW Beasley Avenue.
- Five blocks of SW Magnolia Avenue serve non-residential uses; the southern two blocks support non-residential uses only on one side of the street.

Traffic calming is achieved within the City on local roads with speed bumps. The controlled speed on local roads increases pedestrian and bicycle safety within the City.

The junior/senior high school and elementary school within the City are located off Orchid Avenue.

The City does not obtain annual traffic counts on any local roads within it jurisdiction. At the time a concurrency reservation application is submitted to the City, the applicant is required to perform a three day count and adjust the count using FDOT factors. The City utilizes the count data to determine if a deficiency in level of service is created by the proposed development. If a deficiency is indicated, the City requires the developer to mitigate the impacts.

The four local roads within the City that are listed below comprise the local road portion of the Concurrency Roadway Network. Each are two lane roads with speed limits of 25 miles per hour. Utilizing the Level of Service (LOS)/ Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module, the daily capacity on the local roads within the City is 6,700 daily vehicle trips at the adopted LOS D; using the FDOT-D2 rural peak hour factor of 0.10 the PM Peak hour capacity at LOS D is 670 vehicles.

The City has determined that the local roads within its jurisdiction are policy constrained such that widening to four lanes is not compatible with the character of the community. Block lengths are approximately 300 to 500 feet and the alternative routes created by the grid pattern reduce intersection congestion and through traffic on any single segment. Widening of any local roads would negatively alter the character of the City by creating a hierarchy of roads resulting in through traffic patterns that change the grid pattern that is the basis for the character and quality of life in the City. Mitigation of impacts to the four local roads below (impacts that cause the road to operate at less than the adopted level of service of D) shall be directed to operational or mobility improvements such as sidewalks and bike lanes. Mitigation will be calculated on the cost to widen the impacted facility without additional right of way; funds collected under Fair Share Agreements that mitigate impacts on non-state roads will be directed to an adopted set of improvements that increase mobility in the area of the City where the impacts occur. The City will adopt a Mobility Improvements Plan in 2012 to establish the priorities for increased non-vehicular mobility.

Orchid Avenue

Orchid Avenue runs northeast to southwest within western Keystone Heights. It forms a collector in the City's traffic circulation system. It serves to provide access for the elementary and junior/senior high schools within the City and as such, is included in the City's Concurrency Road Network. Traffic counts will be undertaken in 2011 to establish a baseline count; the volumes are projected to fall below the maximum service volume; the count will be used to establish the 2011 LOS.

Nightingale Street

Nightingale Street is a collector that runs east/west in the southwestern part of the City connecting Orchid Avenue to South Lawrence Boulevard (SR 21). Nightingale is included in the City's Concurrency Road Network. Traffic counts will be undertaken in 2011 to establish a baseline count. The volumes are projected to fall below the maximum service volume; the count will be used to establish the 2011 LOS.

Pecan Street

Pecan Street is a collector that runs east/west in the southwestern portion of the City and connects the school area to South Lawrence Boulevard (SR 21). Pecan Street is included in the City's Concurrency Road Network. Traffic counts will be undertaken in 2011 to establish a baseline count. The volumes are projected to fall below the maximum service volume; the count will be used to establish the 2011 LOS.

Commercial Circle

Commercial Circle is a collector service commercial establishments in the northeast section of the City. Commercial Circle is included in the City's Concurrency Road Network. Traffic counts will be undertaken in 2011 to establish a baseline count; the volumes are projected to fall below the maximum service volume. The count will be used to establish the 2011 LOS.

Other Local Roads

An inventory of all the roadways within the City of Keystone Heights is maintained by the City. The roadway inventory includes the majority of local roads within the City limits, their pavement width, right of way width, drainage design type (inlets or swales), functional classification, pavement condition and posted speeds. The local roads provide access primarily to single family residences within the City. The maintenance of local roads is performed by the City.

There are no rail, air or port facilities within the City.

Pedestrian and Bicycle Facilities

Sidewalks are found adjacent to the arterial roadways within the City and also adjacent to most local roads within the City.

The Norfolk-Southern Rail line that operated in a right of way that abuts the northern right of way of State Road 100 within the City limits was purchased after the railroad was abandoned and improved for bicycle and pedestrian use in 1998. The 100 foot right of way is improved with a ten foot wide bicycle/pedestrian facility that continues beyond the City limits, making up the *Palatka-Lake Butler State Trail* (PLB Trail).

The portion of the PLB Trail that is located within the City was completed in 1998. The segments on either side of the City, extending to the Bradford County and Putnam County lines, were completed in 2008, creating the 5.2 mile trail within Clay County. The completed trail in Clay County is part of the overall 47-mile PLB Trail that will extend from the Lake Butler area to Palatka. Upon completion of the segment within Clay County in 2008, the Florida Department of Environmental Protection took over maintenance of the trail under its Greenways and Trails program.

The portion of the PLB Trail that runs through Keystone Heights ties into an eight-foot wide, 6 mile bike path constructed by the Florida Department of Transportation. Located adjacent to SR 21, the bike path connects the PLB Trail to Mike Roess Gold Head Branch State Park. Completed in 2009, residents and visitors alike utilize the bike path to walk, run and bicycle between the City and Gold Head Branch State Park.

Existing Traffic Circulation Analysis

Existing Roadway Levels of Service

In 2010, all roadways within the City are operating above the adopted level of service.

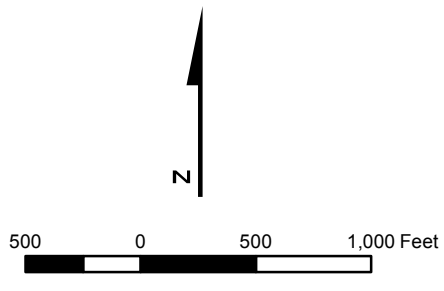
TABLE 3
2010 ROADWAY LEVELS OF SERVICE
CONCURRENCY ROADWAY NETWORK

Segment	Adopted PM Peak LOS	2009 PM Peak Volume	Maximum Service Volume	2010 PM Peak LOS
SR 100 from SR 21 to NW City Limits	C	1,003	1,370 [1]	C
SR 100 from SR 21 to SE City Limits	C	1,012	1,370 [1]	C
SR 21 from N City Limits to SR 100	D	912	1,480 [1]	C
SR 21 from SR 100 to S City Limits	D	492	1,480 [1]	B
Orchid Avenue	D	[3]	670 [2]	[3]
Nightingale Street	D	[3]	670 [2]	[3]
Pecan Street	D	[3]	670 [2]	[3]
Commercial Circle	D	[3]	670 [2]	[3]

[1] FDOT Generalized Tables, Table 5
[2] Level of Service (LOS)/Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module with PM Peak Factor of 0.10 [3] Counts to be taken in 2011; LOS to be based on 2011 counts.

2010 Road Network

City of Keystone Heights

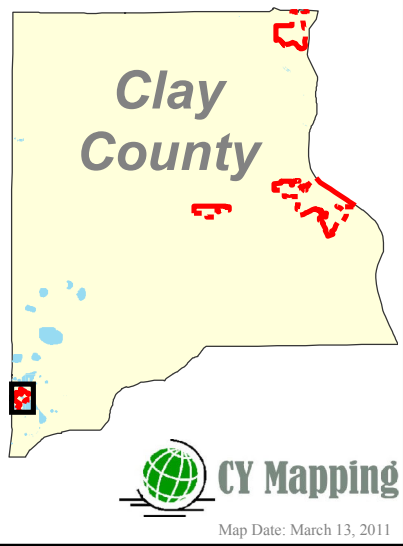


Urban Minor Arterial
FDOT Maintenance
2 land undivided

Local Road
City Maintenance
2 land undivided

PLB Trail

SR 21 Path



CY Mapping

Map Date: March 13, 2011

Existing Deficiencies

There are no existing deficiencies relative to transportation levels of service in the City of Keystone Heights. There are however improvements that could be made in the existing system that would improve traffic circulation and safety. The priority improvement is:

Re-Alignment of the SR 100 / SR 21 intersection at a 90 degree angle

The realignment of SR 21 at its intersection with SR 100 has been discussed with FDOT since the early 1990's. If improvements to State Road 100 are made to address capacity deficiencies or if accident records indicate a safety issue, the City will coordinate with the FDOT to prioritize the realignment of this intersection.

Future Traffic Projections

Traffic counts between 2008 and 2010 show declining volumes on State Road 21 and State Road 100. The economy and price of fuel have affected individual vehicle miles traveled in general and are likely the cause of the reduced traffic volumes in these recent years. This trend may continue and is worth monitoring, however projections of future traffic volumes on these two state roads should reflect a minimal increment of growth. The assumed growth is 2 percent annually through the planning period on SR 100 and 1 % on SR 21. The City will monitor actual counts each year to adjust the projections to reflect changes in travel behavior.

Traffic counts on local roads on the CRN will be taken every five years after the initial counts in 2011 to monitor the volumes and determine if unanticipated increases in traffic volumes are being experienced. New development and redevelopment within the City is required to distribute traffic generated by the proposed development/redevelopment to the CRN; while the City will undertake traffic counts every five years, all applicants for a concurrency reservation certificate are required to undertake a traffic count at the time of application to verify the availability of capacity.

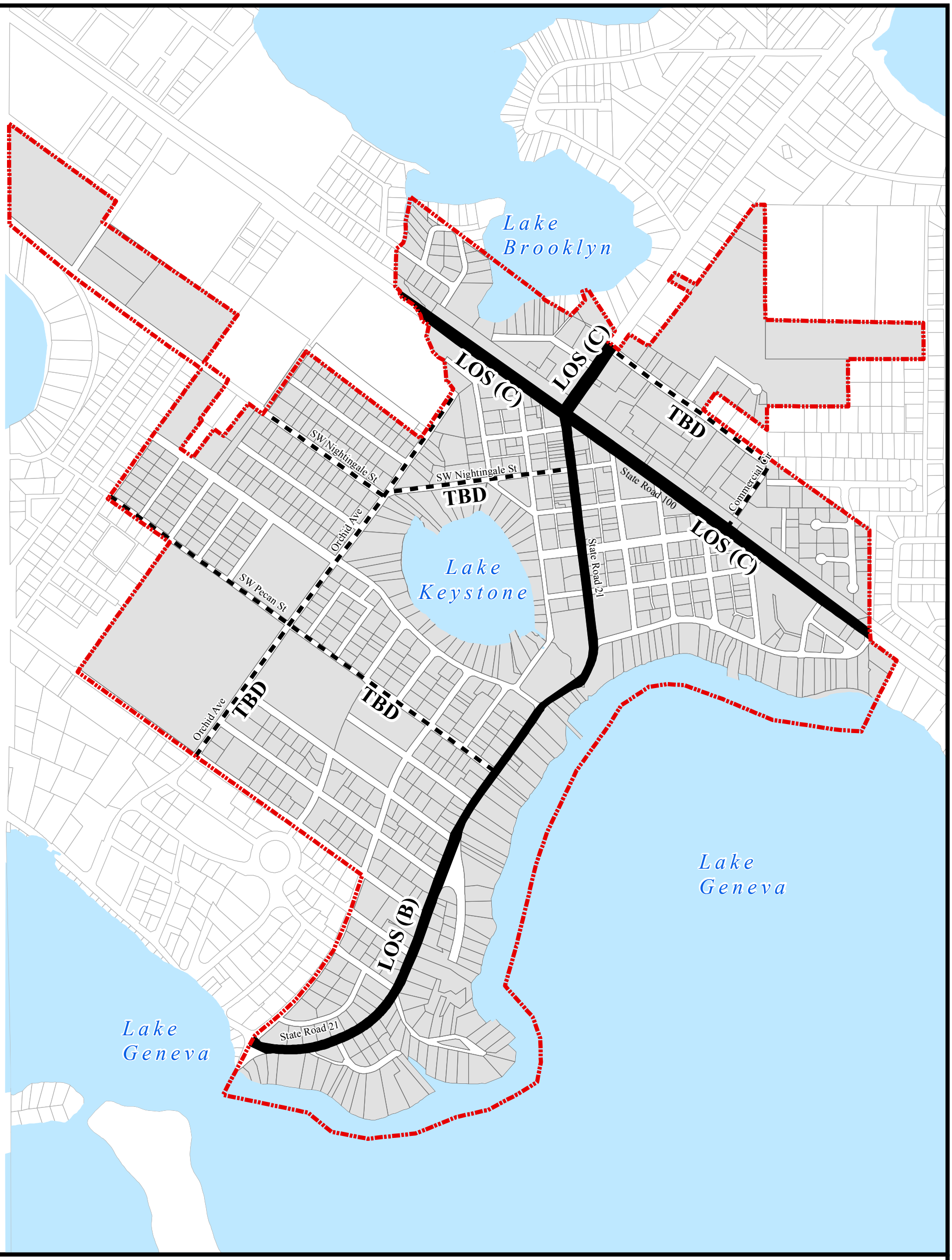
The impacts of future development on the roadway network within the City may create deficiencies in level of service. The City has implemented a concurrency management system in order to monitor the level of service on an annual basis and will utilize the most current traffic count data to measure existing level of service, assess impacts of proposed development on the level of service and to project traffic volumes on local roads, State Road 21 and State Road 100.

Final development orders within the City will be conditioned upon the determination that the public facilities, including transportation facilities, are available to serve the proposed development as required by Section 163.3180, Florida Statutes.

The City will adopt a Fair Share Ordinance in 2011 that will allow development on a particular parcel despite the fact the development could not satisfy transportation concurrency

2010 Roadway Level of Service

City of Keystone Heights

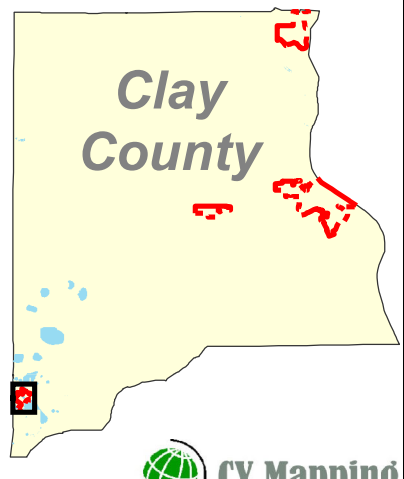


Jurisdiction		Level of Service
Local	- - -	To Be Determined
State	▬	2010 LOS

N

500 0 500 1,000 Feet

Source:
FDOT and City of Keystone Heights



CY Mapping

Map Date: March 13, 2011

where such approval is consistent with Section 163.3180 (11) and (16), Florida Statutes. Mitigation shall represent a cooperative effort between the City and the private landowner; proportionate fair share mitigation shall be calculated consistent with statutory requirements and the City's Fair Share Program.

TABLE 4
2015 and 2025 PROJECTED
ROADWAY LEVELS OF SERVICE

	PM Peak		Projected PM Peak			
Segment	LOS	MSV[1]	2015 Volume	2015 LOS	2025 Volume	2025 LOS
SR 100 from SR 21 to NW City Limits	C	1,370 [1]	1,186	C	1,395	D
SR 100 from SR 21 to SE City Limits	C	1,370 [1]	1,167	C	1,277	C
SR 21 from N City Limits to SR 100	D	1,480 [1]	1,058	C	1,158	C
SR 21 from SR 100 to S City Limits	D	1,480 [1]	565	B	620	B
Orchid Avenue	D	670 [2]	[3]	[3]	[3]	[3]
Nightingale Street	D	670 [2]	[3]	[3]	[3]	[3]
Pecan Street	D	670 [2]	[3]	[3]	[3]	[3]
Commercial Circle	D	670 [2]	[3]	[3]	[3]	[3]

[1] FDOT Generalized Tables, Table 5
[2] Level of Service (LOS)/Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module with PM Peak Factor of 0.10.
[3] Projections to be developed after counts are taken in 2011; LOS to be based on projections so developed.

The City of Keystone Heights is not located within the jurisdiction of any Metropolitan Planning Organization (MPO). In May 2010, the First Coast Transportation Planning Organization (FCTPO) passed a resolution seeking to revisit its Planning Area Boundary subsequent to the findings of the 2010 Census. The anticipated action will be to expand the TPO boundary pursuant to its Envision 2035 LRTP to include the four county area that is the First Coast, including the City of Keystone Heights. There are no public transportation authority plans that have an impact or are affected by this traffic circulation element. Roads are maintained by the City's Public Works Department.

2025 Road Network

City of Keystone Heights

Urban Minor Arterial
FDOT Maintenance
2 land undivided

Local Road
City Maintenance
2 land undivided

Significant Pedestrian & Bicycle Facilities
OGT Maintenance
FDOT Maintenance

N

500 0 500 1,000 Feet

Clay County

Source:
FDOT and City of Keystone Heights

CY Mapping

Map Date: March 13, 2011

Analysis of Future Needs

Future roadway needs are based on the City's adopted level of service standard for the PM Peak Hour of C for State Road 100 and D for all other roads within the City limits. The comparison of the future projected travel demand on the minor arterials and collectors within the City with the FDOT's Generalized Peak Hour Two-Way Volumes For Florida's Areas Transitioning into Urbanized Areas identifies that State Road 100 will operate below the adopted level of service after 2015 and before the end of the planning period (2025). All other roads are projected to operate at or above the adopted level of service in 2015 and 2025.

As a facility on the Strategic Intermodal System but classified as an Emerging Facility means that State Road 100 will not receive priority for funding of improvements to address deficiencies. The FDOT establishes improvement priorities for SR 21 and SR 100 in its Five Year Work Program because the City does not currently lie within the boundary of any Metropolitan Planning Organization. There are plans to expand the boundary of the First Coast Transportation Planning Organization (FCTPO) to include all of Clay County; under this proposed expanded boundary, the City will be included in the FCTPO and priorities for funding of improvements will be made through the FCTPO's Long Range Transportation Planning process.

To provide data to support its annual CIP update, the City will monitor the traffic counts on SR 100 to determine whether traffic volumes are increasing at rates greater than projected and work with the FDOT to prioritize improvements as necessary. During the development of its Mobility Improvement Plan (MIP) the City will work with the FDOT to determine if funds that may be collected to mitigate the impacts to state roads could appropriately be assigned to specified mobility improvements in the MIP.

The City will consider adoption of a Transportation Concurrency Exception Area as it completes it Mobility Plan in 2012.

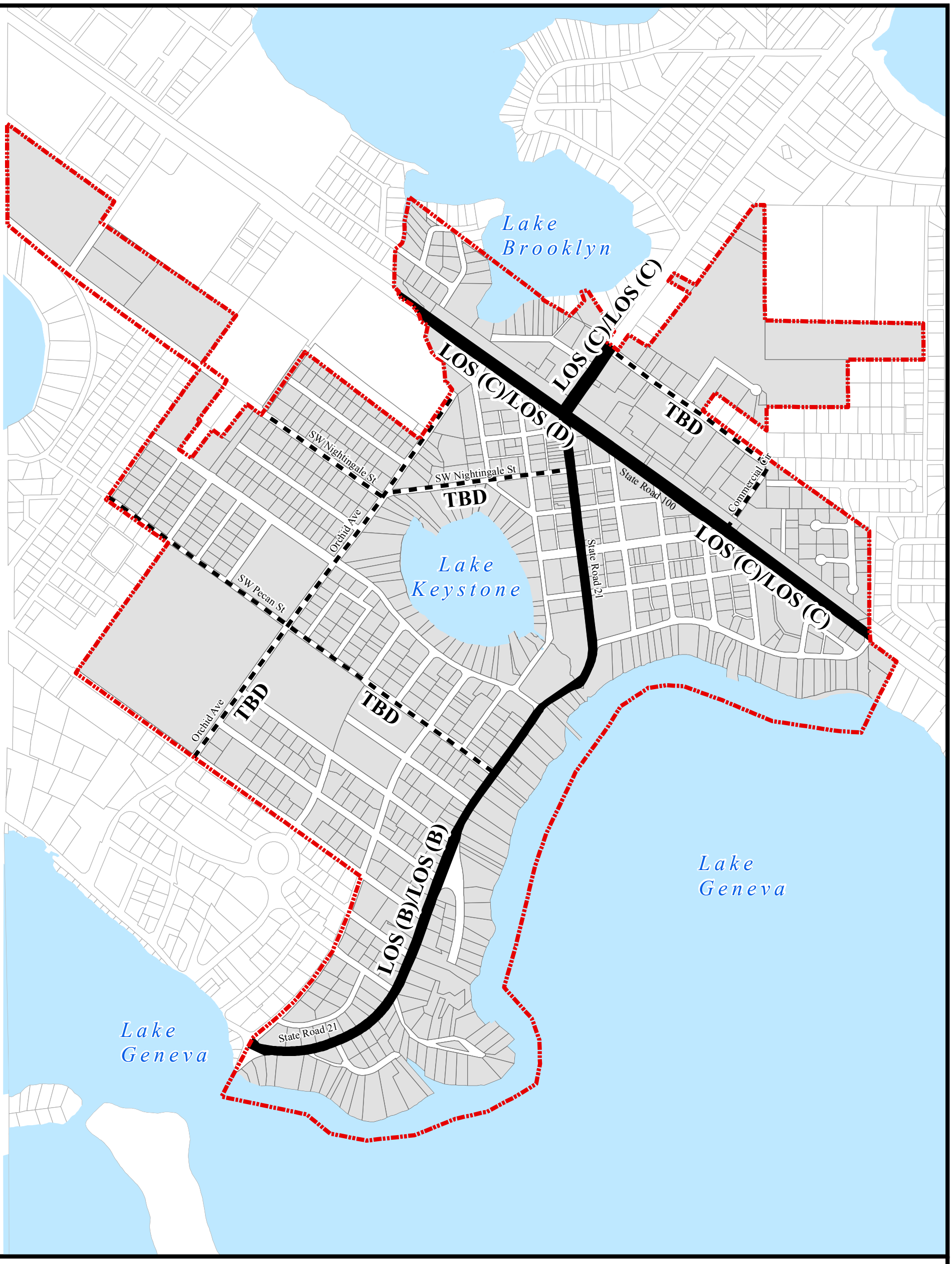
The right of way associated with local roads in the City is sufficient to accommodate the infrastructure currently constructed. The City will update its pedestrian and bicycle plan in 2011. Additional right of way needs may be identified to accommodate prioritized bicycle and pedestrian improvements in the planning period.

Transportation Strategies to Address Greenhouse Gas Emissions

The City is not served by fixed route transit. Fixed route transit can reduce vehicle miles traveled and connect concentrations of population (housing) in need of transportation assistance to work opportunities. Despite its walkability, transit friendly grid street network, mixed use pattern and high (relative) density of population, the actual population of the City is low, less than 1500 persons, and the distance to non-residential destinations outside the City are very great. Densities outside the City are rural and would not support fixed route transit service so it is not anticipated that transit service will be provided within

2025 Roadway Level of Service

City of Keystone Heights



Jurisdiction

Local

State

Level of Service

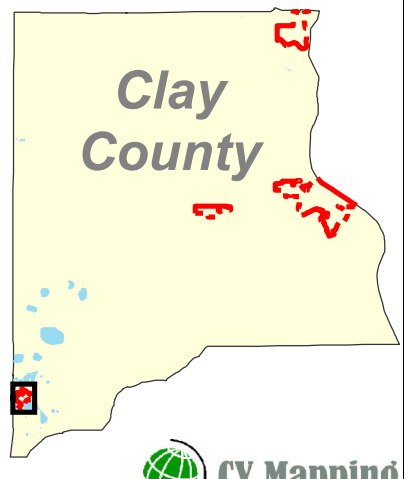
To Be Determined

2016 LOS / 2025 LOS

N

500 0 500 1,000 Feet

Source:
FDOT and City of Keystone Heights



CY Mapping

Map Date: March 13, 2011

the planning period (to 2025). Short distance circulator transit service (trolley or van) within the City is a possibility if the population and mix of uses supports the service; the age of the population makes this desirable even though the distances to be traveled are very short.

A component of energy efficient development patterns is the provision of pedestrian and bicycle connections. Generally travel by bicycle and by walking is accommodated on the sidewalks and on the pavement of the residential streets of the City. The City will utilize its current inventory of streets (Roadway Inventory) to identify the right of way width, cross section, pavement width, sidewalk characteristics and the presence of on street parking in order to identify preferred paths for each mode and to identify improvements that would contribute to the connectivity between uses and increase safety. Improvements will be prioritized based on the contribution to safety and the reduction of vehicular travel.

Development plans for non-residential and mixed use development will be required to include appropriate access to the site for the modes included in the City's plan and to provide access by alternative modes within the development parcel limits. Improvements determined to be appropriate will be provided at the time of development.

The physical design of new development within the City will address non-vehicular connectivity, compact development and alternative transportation modes to maintain the compact, energy efficient pattern established by the existing development in the Town. External connectivity from the development parcel will facilitate access by non-vehicular modes, contribute to the energy efficiency of a particular site, reduce vehicle miles traveled and improve the transportation characteristics of the City overall.

The City will utilize its Roadway Inventory in its MIP to develop appropriate level of service standards for pedestrian and bicycle modes. The standards will integrate the alternative modes and provide for a safe, efficient and energy efficient multimodal transportation system that furthers the reduction of greenhouse gas emissions.

TRAFFIC CIRCULATION

GOALS, OBJECTIVES AND POLICIES

Goal TC 2 Develop and maintain a well balanced and integrated system which is consistent with the desired land use pattern, conserves energy and protects the natural environment. The transportation system shall provide for the safe, convenient and efficient movement of people and goods throughout the City of Keystone Heights.

OBJECTIVE

TC 2.1 The City shall continue to provide the ~~a~~ safe, efficient and effective traffic circulation system that exists within the City limits by annual review of the level of service report and roadway inventory to identify capital and maintenance actions necessary to maintain and improve the traffic circulation system.

Policy

TC 2.1.1 The City hereby adopts a PM Peak Hour Level of Service standard C for State Road 100 within the City limits and LOS standard D for all other roadways within the City.

TC 2.1.2 The City shall update and maintain its pavement management program which establishes standards, records, tracks and schedules all re-paving and new paving for all roadways within the City. To the extent possible, additional maintenance will be directed towards those roadways determined in the inventory to require maintenance to avoid or delay future resurfacing or major repaving.

TC 2.1.3 The City shall prepare an annual level of service report to include the following roadway segments (the Concurrency Roadway Network):

State Road 21 – Northern City Limits to SR 100
State Road 21 – SR 100 to Southern City Limits
State Road 100 – Northwestern City Limits to SR 21
State Road 100 – SR 21 to Southeastern City Limits
Pecan Street
Orchid Avenue
Nightingale Street
Commercial Circle
The annual report shall utilize the most current traffic counts to identify the existing and projected level of service for the five year planning horizon.

TC 2.1.4 The City shall maintain and amend as necessary the Future Traffic Circulation Map to depict the functional classification and adopted LOS for all roadways within the Concurrency Roadway Network as required to implement the policies of this Plan.

TC 2.1.5 The City shall require roads within subdivisions to meet the adopted paving standards and requirements established in the Land Development Code.

TC 2.1.6 The City will formulate and adopt a bikeway and pedestrian way plan by December 2012 to be included in its Mobility Improvement Plan.

TC 2.1.7 The City shall pursue federal, state and local funding sources which could supplement the City budget for road construction and maintenance.

TC 2.1.8 Accident records shall be reviewed on a biennial basis to determine if improvements to the roadway network are warranted to relieve high crash conditions and to enhance the safety of motorists, bicyclists and pedestrians.

OBJECTIVE

TC 2.2 The City shall coordinate the transportation system planning with future land use planning to ensure that existing and proposed population densities, housing, employment patterns, and land uses are consistent with the transportation modes and services proposed to serve these areas.

Policies

TC 2.2.1 The City shall coordinate land use and transportation plans to maintain adopted levels of service consistent with the Traffic Circulation and Capital Improvements Elements.

TC 2.2.2 A traffic impact analysis will be required for all proposed developments not vested for concurrency in order to determine the net impact of the development on the Concurrency Roadway Network's level of service.

TC 2.2.3 Development orders will be conditioned on the provision of improvements to the transportation system to mitigate impacts that will reduce the system's level of service below the standards adopted, including mitigation consistent with the Mobility Improvement Plan developed pursuant to Policy TC 2.3.3.

TC 2.2.4 The City shall monitor the capital and service plans of the regional transit agencies and participate in the development of transit service that would benefit the residents and businesses within the City.

TC 2.2.5 To promote redevelopment within the City's Community Redevelopment Area (CRA), non-residential development and redevelopment may be permitted to provide fewer than the otherwise required parking for motorized and non-motorized vehicles based on use. On street parking shall be applied toward required parking at a rate of 1.5 per space; on street parking may not be assigned to more than one establishment for the purposes of meeting parking requirements. Additional relief may be granted by the City to promote redevelopment and economic development that benefits the City.

TC 2.2.6 The City shall review all proposed non-residential development for its accommodation of future transit service and transit vehicles by requiring pedestrian access from the street to the door providing public access to the building(s).

OBJECTIVE

TC 2.3 In conjunction with the Capital Improvements Element of this Plan, the City will continue to implement a concurrency management system to review proposed development orders and identify and prioritize transportation related capital improvements projects.

Policies

TC 2.3.1 The City will apply the minimum level of service standards identified below in its concurrency management system. State Road 100 is an Emerging SIS Facility, subject to the minimum level of service standards established by the Florida Department of Transportation.

Segment	Adopted PM Peak LOS	Maximum Service Volume
SR 100 from SR 21 to NW City Limits	C	1,370 [1]
SR 100 from SR 21 to SE City Limits	C	1,370 [1]
SR 21 from N City Limits to SR 100	D	1,480 [1]
SR 21 from SR 100 to S City Limits	D	1,480 [1]
Orchid Avenue	D	670 [2]
Nightingale Street	D	670 [2]
Pecan Street	D	670 [2]
Commercial Circle	D	670 [2]

[1] FDOT Generalized Tables, Table 5

[2] Level of Service (LOS)/Capacity Lookup Tables from the 2002 Highway Capacity Software (HCS+) Version 5.21, Highplan Module with PM Peak Factor of 0.10.

TC 2.3.2 The City will perform traffic counts on Orchid Ave, Nightingale Street, Pecan Street and Commercial Circle in 2011 in order to establish baseline traffic counts. The traffic volume for 2011 shall be the adjusted counts and shall serve as the basis for future projected volumes on these local roads within the Concurrency Roadway Network. The City shall recount these local roads at a minimum every 5 years and shall count annually starting the year following the year in which any count exceeds 80% of the adopted maximum service volume.

TC 2.3.3 The City shall not permit or require the widening of local roads within the City to greater than 2 lanes. The City shall adopt a Mobility Improvement Plan (MIP) by December 2012 to address this policy constraint and guide the City in its application of funds collected from development under its Fair Share Program toward improvements that increase mobility within the City. Mitigation of impacts to the Concurrency Road Network (including State Road 100 with the concurrence of FDOT) shall be directed to mobility improvements such as sidewalks and bike lanes that are identified in the Mobility Improvements Plan.

TC 2.3.4 Prior to the issuance of a final development order, the City will review development proposals through its concurrency management system in order to insure that adequate transportation capacity is available to serve the planned development.

TC 2.3.5 The City will adopt a Fair Share Ordinance in 2011 that will allow development on a particular parcel despite the fact the development could not satisfy transportation concurrency where such approval is consistent with Section 163.3180 (11) and (16), Florida Statutes. Mitigation shall represent a cooperative effort between the City and the private landowner; proportionate fair share mitigation shall be calculated consistent with statutory requirements.

TC 2.3.6 The City shall permit de minimis impacts on the Concurrency Road Network provided that the sum of existing roadway volumes and the projected volumes from approved projects on a transportation facility does not would exceed 110 percent of the maximum volume at the adopted level of service. The impact of a single family home on an existing lot will constitute a de minimis impact on all roadways regardless of the level of the deficiency of the roadway.

The City shall maintain sufficient records to ensure that the 110-percent criterion is not exceeded.

TC 2.3.7 Redevelopment shall be granted up to 110 percent of the actual transportation impact caused by the previously existing development. Redevelopment requiring les than 110 percent of the previously existing capacity shall not be prohibited based on the reduction of transportation levels of service below the adopted standards.

TC 2.3.8. The City shall review all proposed transportation plans and improvements to determine the impact of such projects or proposals will have on the traffic circulation system and for consistency with the Traffic Circulation Element. The Institute of Transportation Engineers (I.T.E.) Trip Generation Manual, latest edition, shall be used by the City to determine the number of trips to be produced or attracted to a particular land use when assessing a manually calculated trip generation and distribution analysis of traffic. Florida or Northeast Florida trip generation rates may be used if valid and approved by the State and/or City.

TC 2.3.9 The City shall coordinate the approval of all driveway /access permits to State Road 21 and State Road 100 with the Florida Department of Transportation.

TC 2.3.10 The City shall maintain its Land Development Regulations to include provisions for safe and adequate on-site traffic flow and parking standards.

OBJECTIVE

TC 2. 4 The City shall transportation improvement projects within the City to be coordinated with applicable local, state (FDOT, DCA), regional (MPO) and federal agencies in order to provide integrated, cost effective transportation.

Policies

TC 2.4.1 The City shall coordinate roadway improvements with the FDOT to ensure effective application of available revenue by review and comment on the FDOT Five Year Work Plan for their consistency with the Traffic Circulation Element.

TC 2.4.2 The City shall review for compatibility with this element the traffic circulation plan of Clay County as it is amended in the future, and submit written comments to those governmental entities when necessary to ensure coordination between the City and the County.

TC 2.4.3 The City will coordinate with the Florida Department of Transportation to include the re-alignment of the SR 21 intersection with SR 100 to a 90 degree alignment at such time as capital improvements to SR 100 or SR 21 are programmed by the FDOT or when accident reports indicate a need.

OBJECTIVE

TC 2.5 The City shall update its inventory of existing and future rights of way needs in 2011 and, as required to meet identified needs, establish a priority schedule for acquisition by December 2012.

Policies

TC 2.5.1 The City shall maintain its roadways map and show future reserved sites and road rights of way for future expansion or deletion consistent with the Streets Inventory and Mobility Improvement Plan .

TC 2.5.2 The City shall utilize its street inventory rights of way necessary to accommodate all bike and pedestrian ways identified in the bicycle and pedestrian way plan to be developed in 2011 pursuant to Policy 2.1.6. and will preserve existing rights of way identified as necessary.

OBJECTIVE

TC 2.6 The City shall establish a combination of primarily physical measures for local streets that affect vehicle driver behavior to reduce the negative effects of motor vehicle use. These measures are intended to increase safety, improve conditions for pedestrian and bicycle use, provide additional street greenery and landscaping and reduce greenhouse gas emissions.

Policies

TC 2.6.1 The City shall encourage and develop traffic calming guidelines for application on streets within the City.

TC 2.6.2 The City will perform a streets inventory by December 2011 to identify the attributes of the existing roads within the City. The data collected will form the basis of a Mobility Plan which will establish standards for pedestrian and bicycle access and on street parking within the City, The Mobility Plan will be completed in 2012 and will identify deficiencies in connectivity and establish priorities to implement the MIP, improving access and connectivity by pedestrian and bicycle mode.

TC 2.6.3 The City will maintain appropriate design requirements in the land development regulations for residential development to insure the provision of non-vehicular connections within the development and to adjacent parcels.

TC 2.6.4 The City shall review all proposed development for the accommodation of non-motorized vehicles and pedestrians and as appropriate to the proposed uses, shall require access for non-motorized vehicles and pedestrians.

TC 2.6.5 The City will require street trees to be planted within new development and along existing roads that abut new development to improve conditions for non-vehicular modes of travel.

OBJECTIVE

TC 2.7 Driveways and areas for the internal circulation of vehicles shall be located, designed, and controlled so as to provide for safe and convenient circulation within the site and safe and convenient access from adjoining streets.

Policy

TC 2.7.1 Parking areas for non-residential development in which paved parking is required shall be designed to provide for safe on-site traffic flow. Traffic control signs shall be provided at all unsignalized entrances and exits where appropriate. All landscape islands located in paved or unpaved parking areas shall be protected by appropriate curbing material.

OBJECTIVE

TC 2.8 Citizen participation in decisions which impact the transportation system shall be fostered by appropriate agencies and local officials.

Policy

2.8.1: The City shall encourage active participation of citizens, neighborhood groups, and economic interest groups in determining the transportation needs of the City through the established Citizen Advisory Committee, the Business Association, Chamber of Commerce and directly with the public.

GOAL TC 3 The City shall incorporate transportation strategies to address reduction in greenhouse gas emissions from the transportation sector.

OBJECTIVE

TC 3.1 The City shall improve access for non-motorized vehicles and pedestrians between land uses by implementing its Mobility Improvement Plan strategies in 2013.

Policies

TC 3.1.1 All proposed development and roadway improvements within the City shall incorporate measures for access for non-motorized vehicles and pedestrians,

thereby implementing the City's transportation strategy to reduce green house gas emissions by increasing non-motorized access between residential and non-residential uses.

TC 3.1.2 The City shall review all proposed non-residential development for its accommodation of future transit service and transit vehicles by requiring pedestrian access from the street to the door providing public access to the building(s).

The City hereby adopts by reference the future conditions maps of the Traffic Circulation Element:

2025 Road Network
2025 Roadway Level of Service

2025 Road Network

City of Keystone Heights

Urban Minor Arterial
FDOT Maintenance
2 land undivided

Local Road
City Maintenance
2 land undivided

Significant Pedestrian & Bicycle Facilities
OGT Maintenance
FDOT Maintenance

N

500 0 500 1,000 Feet

Clay County

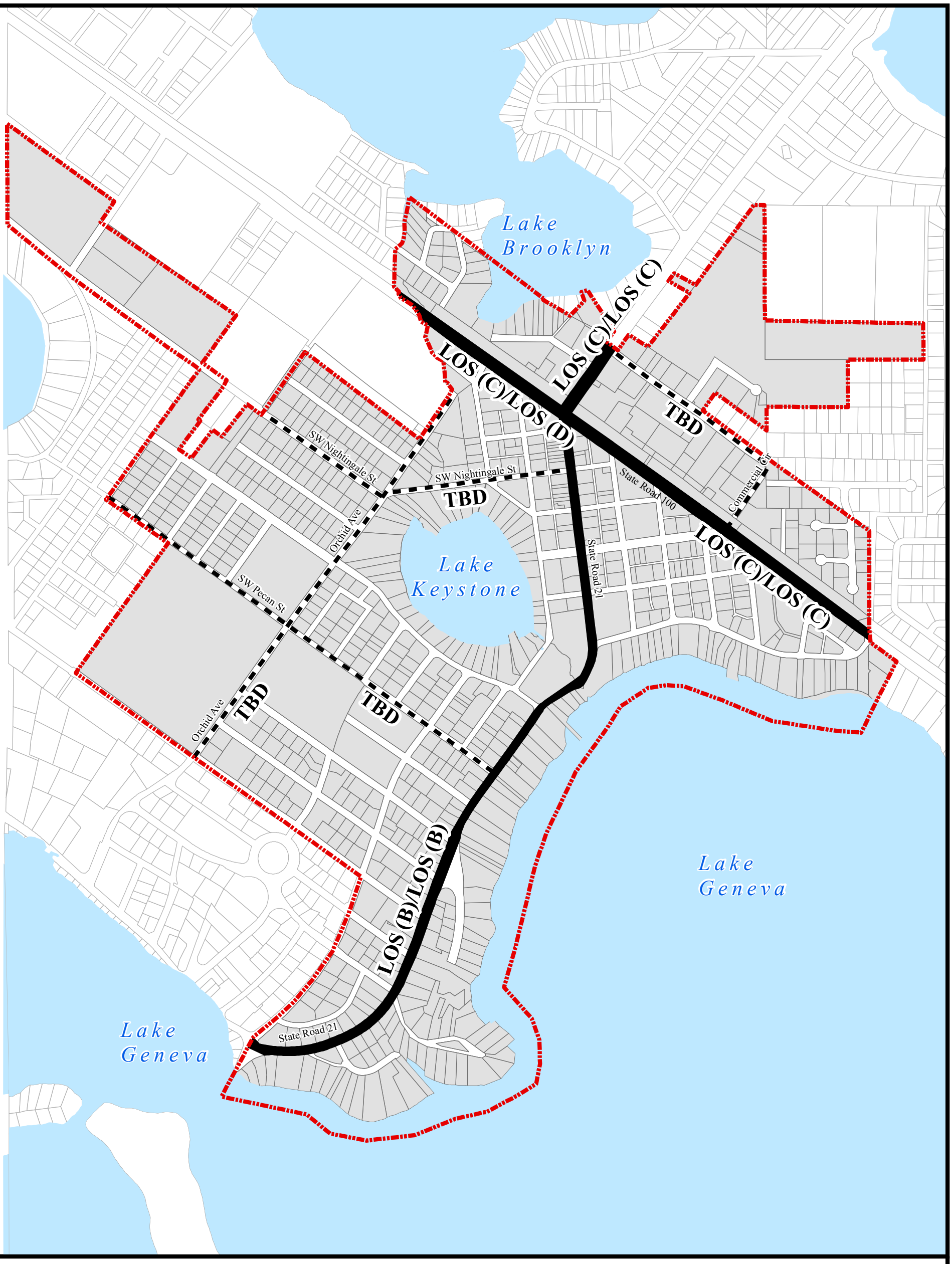
Source:
FDOT and City of Keystone Heights

CY Mapping

Map Date: March 13, 2011

2025 Roadway Level of Service

City of Keystone Heights



Jurisdiction

Local

State

Level of Service

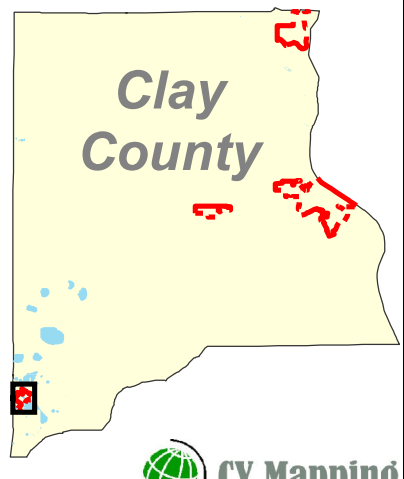
To Be Determined

2016 LOS / 2025 LOS

N

500 0 500 1,000 Feet

Source:
FDOT and City of Keystone Heights



CY Mapping

Map Date: March 13, 2011