

Environment Summary

2009 Progress Report for the Central Florida Region

Indicator	Central Florida			Florida			United States			Time Period
	Past	Current	Trend	Past	Current	Trend	Past	Current	Trend	
Stewardship										
a Percent of land area in conservation management	*	25%	*	*	29%	*	*	*	*	2008
Water Resources										
b Daily water consumption, per user	187	148	-21%	174	158	-9%	148	152	2%	2000-2005
c Reclaimed water use, per capita	71	57	-19%	38	36	-7%	*	*	*	2000-2007
d Percent of public drinking water systems in violation of federal standards	15	52	247%	83	163	96%	4,221	5,418	28%	2000-2008
Air Resources										
e Number of days annually in violation of current ozone standards	25	5	-25	*	*	*	*	*	*	2000-2008
Ecosystems										
f Percent of regional rare species listed endangered or threatened	*	*	15%	*	*	*	*	*	*	2008
g Number of surface water bodies listed as impaired	206	322	116	738	1264	526	*	*	*	1998-2007
h Number of miles of beaches in critical erosion areas	27	59	33	299	405	106	*	*	*	2003-2008
Resource Consumption										
i Disposal of municipal waste, per capita	9.6	9.4	-2%	8.8	10.5	19%	4.6	4.6	1%	2000-2006
j Recycling rate	25%	25%	0.3%	27%	24%	-3%	22%	25%	3%	2000-2006
k Electrical consumption, per capita	*	*	14,000	*	*	15,862	*	*	11,480	2005
l Gasoline consumption, per vehicle	835	699	-16%	804	644	-20%	720	697	-3%	2000-2008

a Notes: Source is Florida Natural Areas Inventory

b Notes: Source is United States Geological Survey

c Notes: Source is Florida Department of Environmental Protection

d Notes: Source is US Environmental Protection Agency

e Notes: Source is Florida Department of Environmental Protection

f Notes: Source is Florida Natural Areas Inventory

g Notes: Source is Florida Department of Environmental Protection

h Notes: Source is Florida Department of Environmental Protection

i Notes: Source is Florida Department of Environmental Protection

j Notes: Source is Florida Department of Environmental Protection

k Notes: Source is Progress Energy and US Department of Energy


l Notes: Source is Florida Department of Revenue and Florida Department of Highway Safety and Motor Vehicles



Conservation Lands

Acres of conservation areas, 2008	Local	State	Federal	Private	Total	Percent of total land area
Central Florida Average	93,680	820,180	265,000	19,710	1,198,570	25%
Brevard	15,410	146,220	92,140	0	253,770	39%
Lake	8,590	103,900	85,260	360	198,110	32%
Orange	8,700	83,090	0	350	92,140	16%
Osceola	4,680	159,310	0	5,110	169,100	20%
Polk	12,130	180,960	53,830	13,080	260,000	22%
Seminole	6,850	27,680	490	660	35,680	18%
Volusia	37,320	119,020	33,280	150	189,770	27%
Florida	410,860	5,198,700	4,076,240	264,520	9,950,320	29%
United States						

Notes: Source is Florida Natural Areas Inventory, published estimates of conservation areas by county October 2008.



Water Consumption

Water withdrawals for the publicly supplied population (gallons per day, per user)	1995	2000	2005	2000-2005	
				Absolute Change	Percent Change
Central Florida Average	167	187	148	-39	-21%
Brevard	127	61	64	4	6%
Lake	165	233	193	-40	-17%
Orange	203	260	189	-71	-27%
Osceola	190	233	169	-64	-27%
Polk	160	190	144	-47	-24%
Seminole	183	197	147	-50	-25%
Volusia	138	132	127	-5	-4%
Florida	170	174	158	-16	-9%
United States	*	148	152	4	2%

Notes: Source is United States Geological Survey, "Estimated Use of Water in the United States County-Level Data" for 1995 and 2000 and USGS Fact Sheet 2008-3080, "Water Use in Florida, 2005 and Trends 1950-2005." Values are reported water withdrawals for the publicly supplied population, reported in gallons per day.

Water re-use flow per capita (gallons per day)	2000	2007	2000-2007	
			Absolute Change	Percent Change
Central Florida Average	71	57	-14	-19%
Brevard	35	45	9	27%
Lake	47	40	-7	-15%
Orange	112	81	-31	-28%
Osceola	105	97	-7	-7%
Polk	53	35	-18	-34%
Seminole	107	58	-49	-46%
Volusia	39	47	7	18%
Florida	38	36	-3	-7%
United States	*	*	*	*

Notes: Source is Florida Department of Environmental Protection, Water Re-use Program, "Reuse Inventory Report 2007" and email correspondence for 2000 data. Data is summarized by county for the total domestic wastewater treatment plant and reuse flows for all facilities with permitted capacities. The per capita usage is based on 2007 population estimates from the State of Florida's Demographic Estimating Conference, February 2008 and the Florida Demographic Database, August 2008 (Florida Legislature, 2008).

Water Quality

Health-based violations of Safe Water Drinking Act by Community Water Systems	2000 Water systems in violation	2008 Water systems in violation	2008 Percent of supplied population with safe drinking water
---	------------------------------------	------------------------------------	---

Central Florida Total	15	52	95%
------------------------------	-----------	-----------	------------

Brevard	1	7	99.7%
Lake	3	10	89%
Orange	2	4	96%
Osceola	1	6	85%
Polk	5	2	99.5%
Seminole	3	5	87%
Volusia	0	7	99%

Florida	83	163	94%
United States	4,221	5,418	93%


Notes: Source is US Environmental Protection Agency, Safe Drinking Water Information System (SWIDS - State version). Under the Safe Drinking Water Act of 1974, states monitor drinking water systems within their jurisdictions to ensure that each public water system meets state and EPA standards for safe drinking water. Community water systems serve a population greater than 25 persons, year round. In Florida, these systems supply 97 percent of drinking water. Health-based violations are reported exceedances of federal standards. Note that reporting and standards were amended in 2001-2002, so violations are not directly comparable.



Air Quality

Number of days exceeding federal ozone standards			2000-2008 Absolute Change
	2000	2008	
Central Florida Total	25	5	-25
Brevard	7	1	-7
Lake	1	0	-1
Orange	12	1	-12
Osceola	4	1	-4
Polk	12	3	-12
Seminole	4	1	-4
Volusia	6	0	-6
Florida	*	*	*
United States	*	*	*


Notes: Source is Florida Department of Environmental Protection, Air Resource Management. Reported days are occurrences where the highest reading of an eight hour average for at least one of each of the monitoring stations within the seven county area, exceeded 2008 federal standards. For the year 2000, days are reported in excess of the 2008 standard of greater than 75 ppm. The previous standard in effect in 2000 was 85 ppm or greater. For the Central Florida total only unique days are reported, for example if two or monitoring stations reported excess readings on the same day that exceedance is counted once in the total.



Rare Species

Number of rare species state listed as threatened or endangered	2008		
	Number of rare elements	Number listed	Percent threatened
Central Florida	278	43	15%
Florida			*
United States			*


Notes: Source is Florida Natural Areas Inventory, Natural Communities Tracking List. This is a database of all elements (rare species and natural communities) tracked by FNAI. This is not a comprehensive list of all species and natural communities occurring in each county. Only element occurrences documented in the FNAI database are included. The total reported for Central Florida are single occurrences and only counted once, though they may occur in several counties.



Surface Water Quality

Surface water bodies listed by FDEP as impaired	1998	2007	1998-2007 Absolute Change
Central Florida Average	206	322	116
Brevard	36	63	27
Lake	26	25	-1
Orange	21	42	21
Osceola	27	20	-7
Polk	59	65	6
Seminole	15	39	24
Volusia	22	68	46
Florida	738	1264	526
United States	*	*	*

Notes: Source is Florida Department of Environmental Protection, Watershed Assessment. Section 303(d) of the Clean Water Act (CWA) requires states to develop a list of waters not meeting water quality standards or not supporting their designated uses. Water bodies for 2007 were identified from GIS spatial analysis of a dataset of "Verified Impaired Waters, Groups 1-5" published by the FDEP in May 2007. Water bodies by county for 1998 were summarized from maps of 1998 303(d) waters by county, available online from FDEP. Water quality monitoring abilities and assessment criteria have changed within this time period and trends should be interpreted with caution.



Coastal Erosion Areas

Total miles of critical beach and inlet erosion areas	2003	2008	Percent of shoreline critically eroded	2003-2008 Absolute Change
Central Florida Average	27	59	49%	33
Brevard	25	37	51%	12
Volusia	17	23	47%	5
Florida	299	405	49%	106
United States	*		*	*


Notes: Source is Florida Department of Environmental Protection, Bureau of Beaches and Coastal Systems. "Critically Eroded Beaches in Florida" June 2008 and 2003 "Critical Beach Erosion Areas in Florida." Critical areas include both inlets and beach areas. Percent of shoreline is calculated using values within "Florida Shoreline Length Information According to Beaches and Shores Technical and Design Memorandum 89 – 1, 5th Edition, December 1993." Use of this dated shoreline mileage data may not accurately represent actual percent of shoreline in critical erosion areas.



Municipal Waste

Pounds per day, per capita of municipal waste	2000	2006	2000-2006	
			Absolute Change	Percent Change
Central Florida Average	9.6	9.4	-0.2	-2%
Brevard	11.9	14.2	2	19%
Lake	7.0	4.7	-2	-33%
Orange	10.6	11.7	1	10%
Osceola	11.2	10.6	-1	-5%
Polk	8.0	9.1	1	15%
Seminole	8.2	7.5	-1	-9%
Volusia	10.6	7.9	-3	-25%
Florida	8.8	10.5	2	19%
United States	4.6	4.6	0.4	1%


Notes: Source is Florida Department of Environmental Protection, Waste Management. County Solid Waste Management Annual Reports 2000 and 2006. Municipal Solid Waster (MSW) in Florida includes collections from residential and commercial sources, such as construction materials or yard waste or hurricane debris. US data is from the Environmental Protection Agency, "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2006". Data for the US includes both residential and commercial sources. MSW fluctuates in Florida for a variety of reasons, not necessarily correlated with household consumption patterns.



Recycling Rates

Pounds per day, per capita of municipal waste	2000	2006	2000-2006 Absolute Change
Central Florida Average	25%	25%	0.3%
Brevard	29%	27%	-2%
Lake	26%	24%	-2%
Orange	30%	32%	2%
Osceola	7%	5%	-2%
Polk	30%	30%	0%
Seminole	24%	26%	3%
Volusia	27%	30%	3%
Florida	27%	24%	-3%
United States	22%	25%	3%

Notes: Source is Florida Department of Environmental Protection, Waste Management. County Solid Waste Management Annual Reports 2000 and 2006. Recycling rates shown are adjusted for population and include total diversion of municipal solid waste. US data is from the Environmental Protection Agency, "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2006" and 2000.



Electricity Use

Estimated use of electricity per household (kilowatt hours per year)	2005
--	------

Central Florida Average	14,000
-------------------------	--------

Florida	15,862
United States	11,480

Notes: Source for Central Florida is Progress Energy's reported household average use, Florida data is from the US Department of Energy, Office of Energy Markets and End Use, 2005 Residential Energy Consumption Survey. Florida has the greatest electrical use among the four most populated states.



Gasoline consumption

Pounds per day, per capita of municipal waste	2000			2008			2000-2008	
	Registered vehicles	Gallons of gasoline sold	Average gasoline consumption per vehicle	Registered vehicles	Gallons of gasoline sold	Average gasoline consumption per vehicle	Absolute Change	Percent Change
Central Florida Average	1,863,052	1,556,224,970	835	2,540,204	1,774,712,001	699	-137	-16%
Brevard	304,167	228,222,135	750	387,424	247,296,412	638	-112	-15%
Lake	120,483	101,596,151	843	201,404	127,055,288	631	-212	-25%
Orange	565,248	518,369,846	917	756,602	589,719,332	779	-138	-15%
Osceola	102,896	105,825,990	1028	172,345	156,528,720	908	-120	-12%
Polk	259,512	226,821,154	874	350,325	240,531,378	687	-187	-21%
Seminole	241,248	164,553,126	682	311,056	199,043,686	640	-42	-6%
Volusia	269,498	210,836,567	782	361,048	214,537,186	594	-188	-24%
Florida	9,470,183	7,614,933,422	804	13,104,129	8,440,146,629	644	-160	-20%
United States	*	*	720	*	*	697	-23	-3%

Notes: Source is Florida Department of Revenue, certificate of taxable gallons of gasoline sold 2007-2008 and 2000-2001, and Florida Department of Highway Safety and Motor Vehicles, Annual Revenue Report 2007-2008 and 2000-2001. US data is from the US Department of Energy. Table 2.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates, 1949-2006

