



**CONSERVANCY**  
of Southwest Florida  
OUR WATER, LAND, WILDLIFE, FUTURE.

**Protecting Southwest Florida's unique natural environment  
and quality of life ... now and forever.**

**[www.conservancy.org](http://www.conservancy.org)**

# The Significance of the Estero River for the Village of Estero

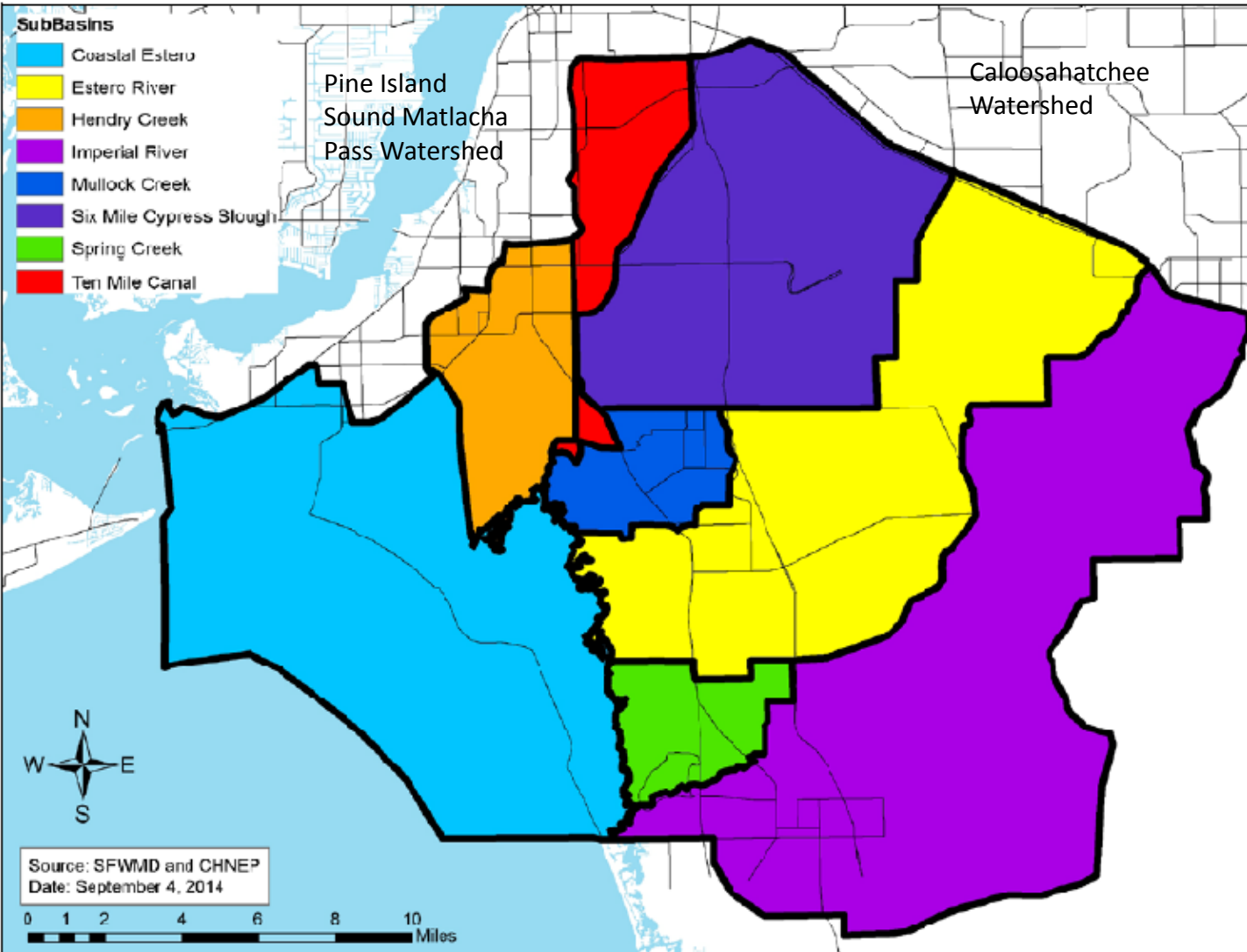


Photo: Florida Department of Environmental Protection

Estuary = “*Estero*”



# Estero Bay Watershed



**Estero Bay Watershed:**  
360 square miles

**Estero River Basin:** 66 square miles (45,000 acres)

**Estero River:**  
Approximately 8 miles long

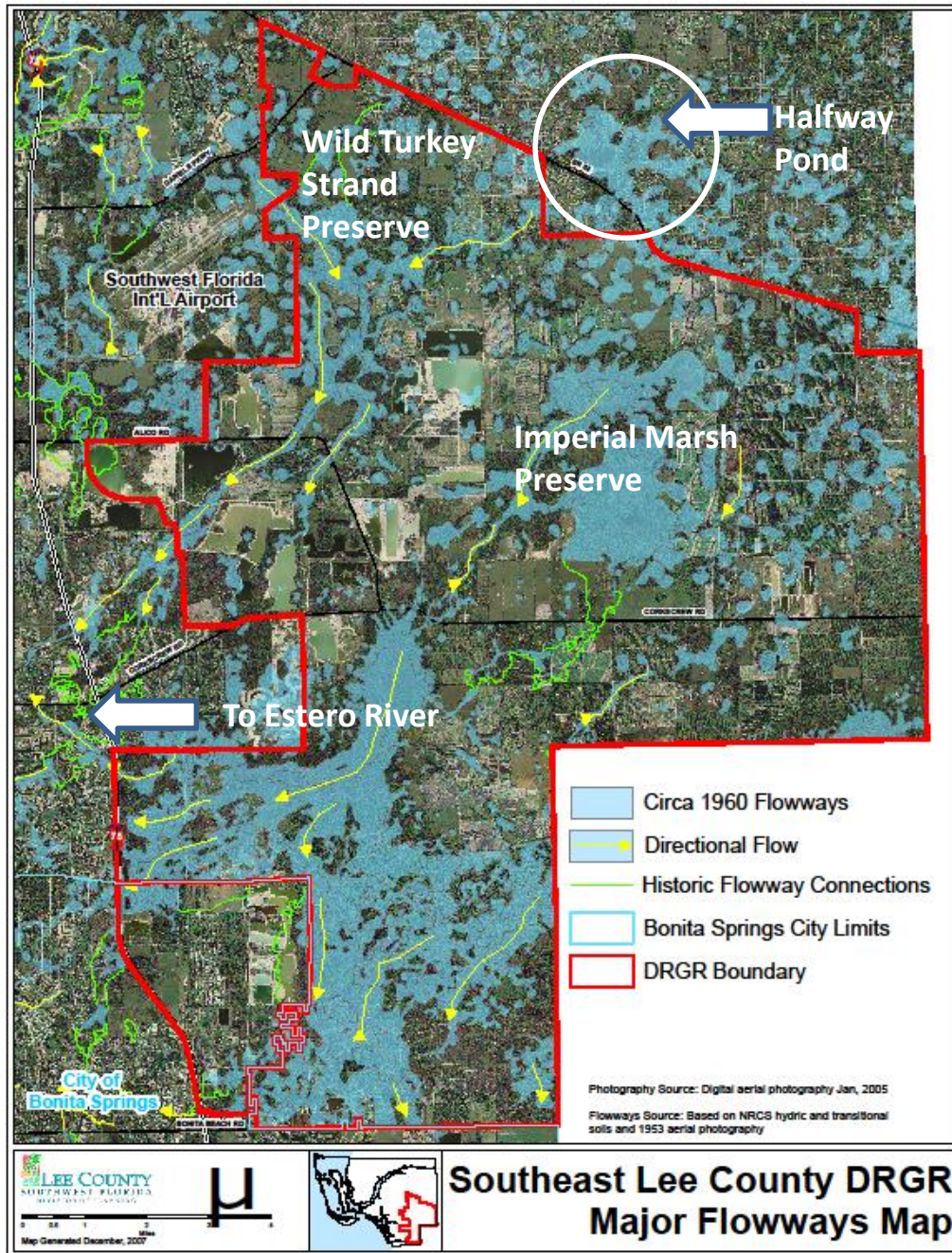
Mean depth of 3.99 feet and a max depth of 12.06 feet (USF, 2013)

**Estero Bay Aquatic Preserve:**  
18,829 acres

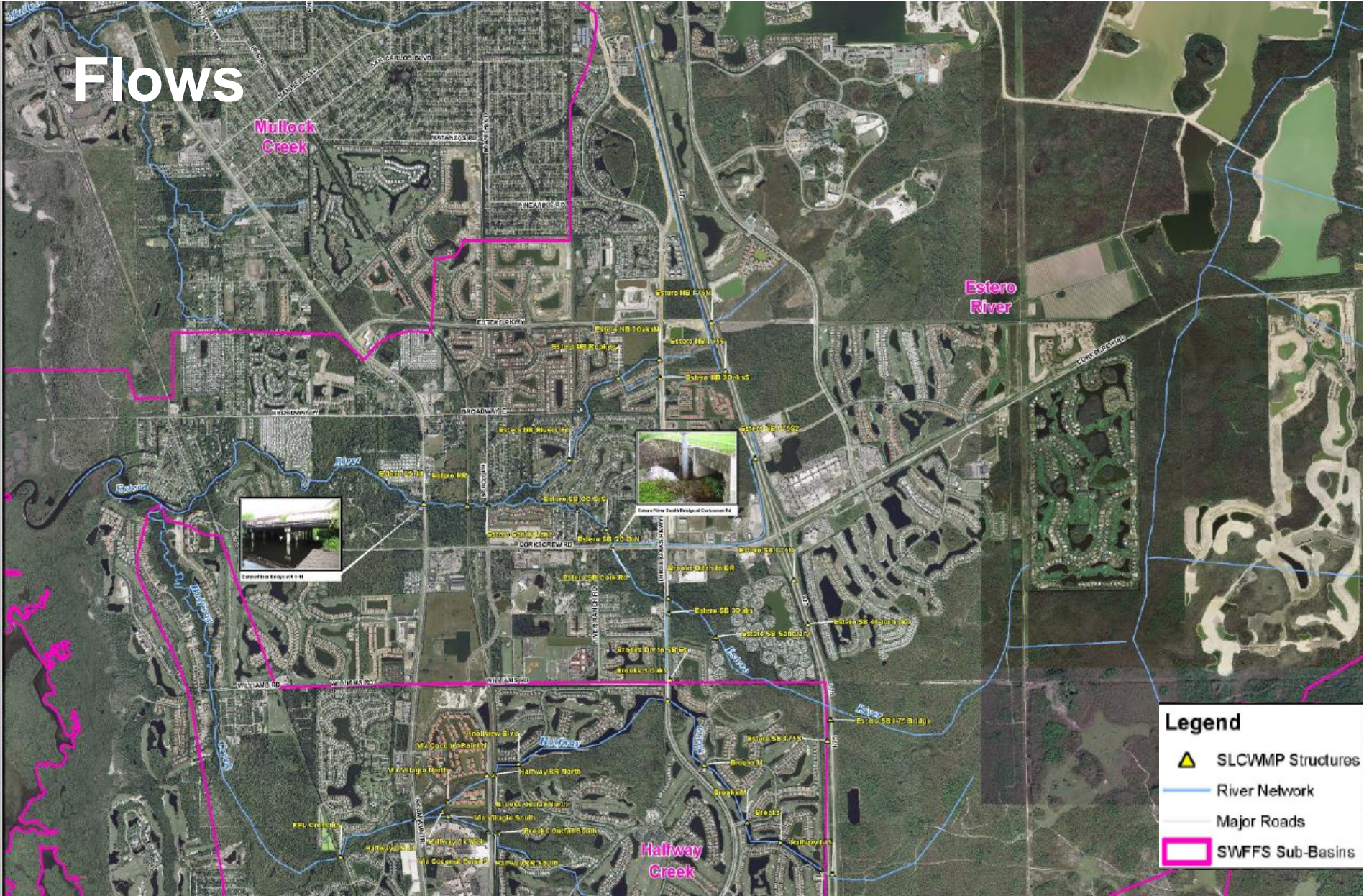
Source: Estero Bay Agency on Bay Management, State of the Bay Update 2014



# Headwaters



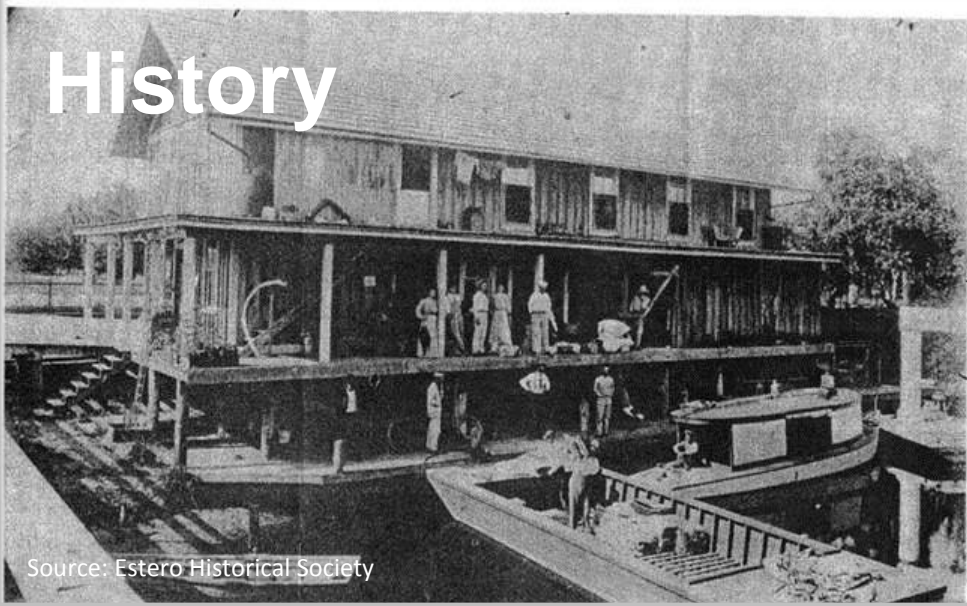
# Flows



(Source, South Lee County Watershed Plan Update, Estero, May 14, 2009)



# History



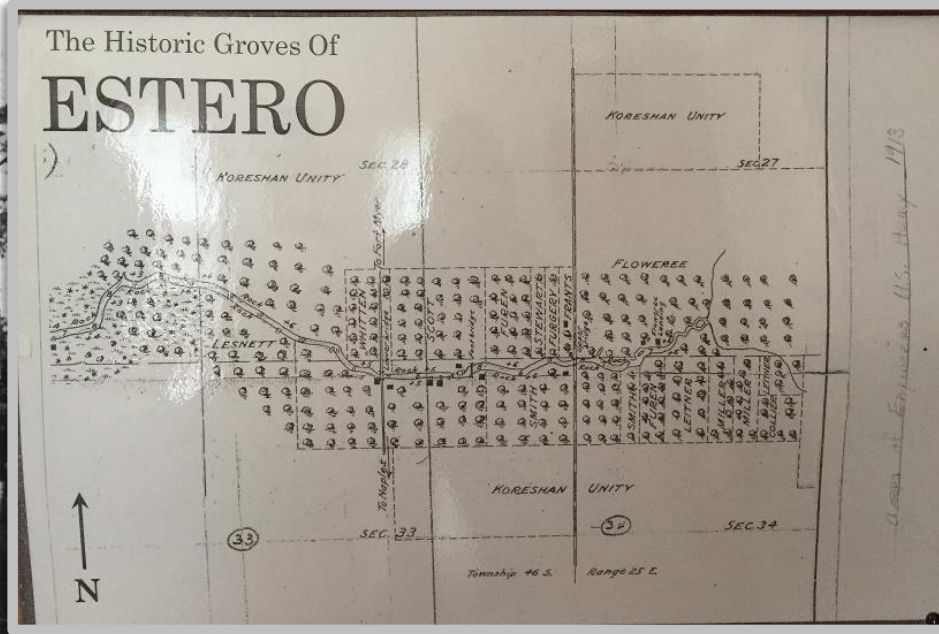
Source: Estero Historical Society



Estero River 1957, State Archives of Florida



Estero River, Circa 1900  
"A Historical Geography of Southwest Florida Waterways , Vol. II

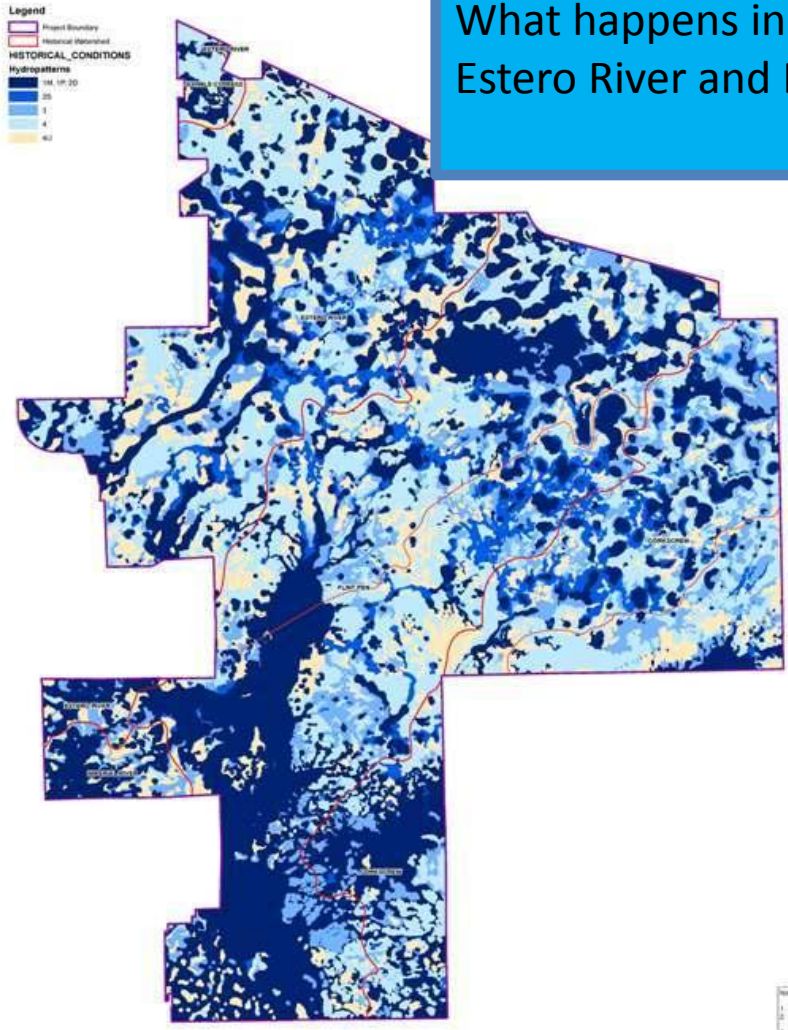


# Pre-Development Conditions



“South Lee County Regional Flowway outfalls will never be equal to the historic combination of channel and sheetflow that occurred prior to the construction of the series of manmade, north-south elevated berms and structures”. “These structures tend to impound waters from the East”. – South Lee County Watershed Plan, 1999

# What happens in the DRGR affects Estero River and Estero Bay

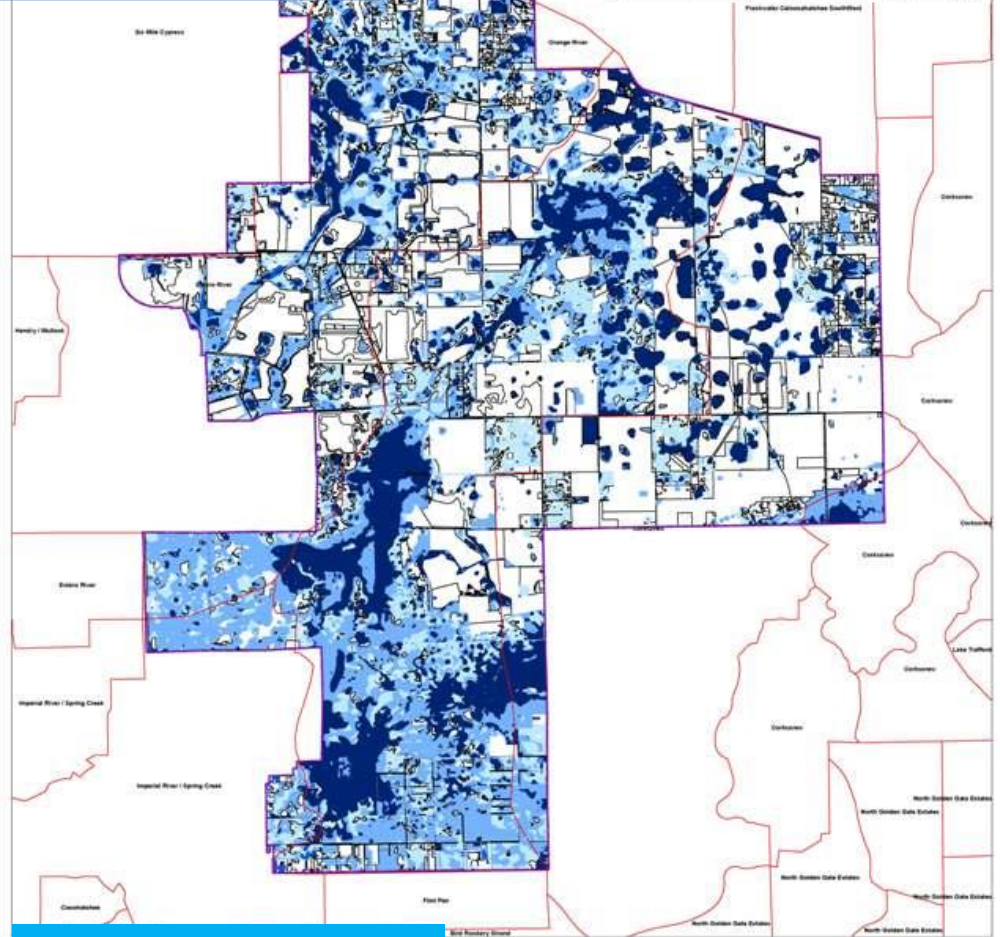


1953 Hydropatterns



0 2,600 Feet

2017 Bayview Parkway, Ft. Myers, FL	
Date: 7-2-08	Scale: Historical Hydropatterns
Author: Kevin Erwin	
Reviewer:	
Comments:	



2007 Hydropatterns

0 2,600 Feet

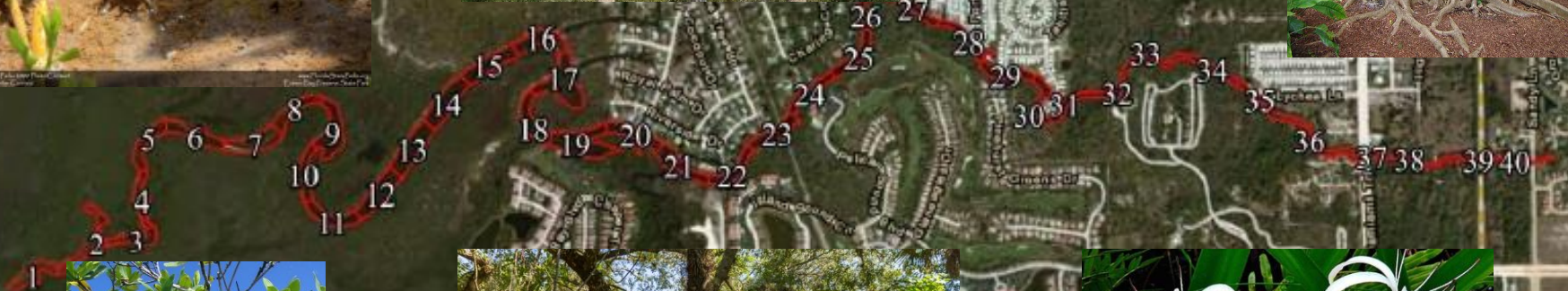
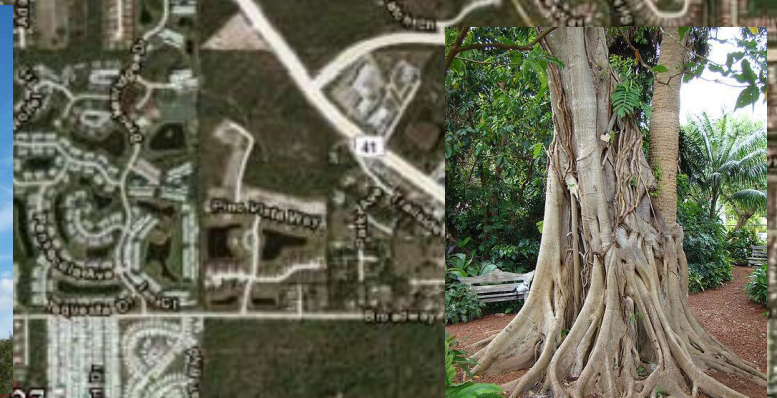


EXISTING CONDITIONS DROW STUDY AREA WETLAND ASSESSMENT BY WATERSHED					
FLUCFS	821, 817, and 841		824, 826, 828, 829		Total Average
	821, and 841	819	821, and 843	828	
Depth	1.0 - 2.0	0.75 - 1.0	1.25 - 2.75	2.0 - 2.75	
Submerged	2 - 3.00	4 - 7.00	1 - 3.00	1 - 2.00	
<b>ACREAGE BY WATERSHED</b>					
Watershed	821, 817, and 841	819	821, and 843	828	Total Average
Corley Creek	102.4	28	100.7	178.9	650.7
Estero River	272.4	22	4,427	2,311	10,763.8
Foot Run	85.1	12	1,133	78.3	2,242.2
Imperial River	89.1	12	1,133	78.3	1,883.8
San Mateo Cypress	120	12	1,133	78.3	1,883.8
<b>Total</b>	<b>1,400.4</b>	<b>107.2</b>	<b>10,000</b>	<b>11,500.4</b>	<b>22,471.3</b>




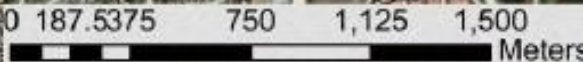



# Vegetation



**Legend**

 Vegetation Assessment Regions



(Source: USF, West-Central Florida Tidal Stream Assessment Study for Sarasota Bay Estuary Program)



# Wildlife

## Listed Animal Species

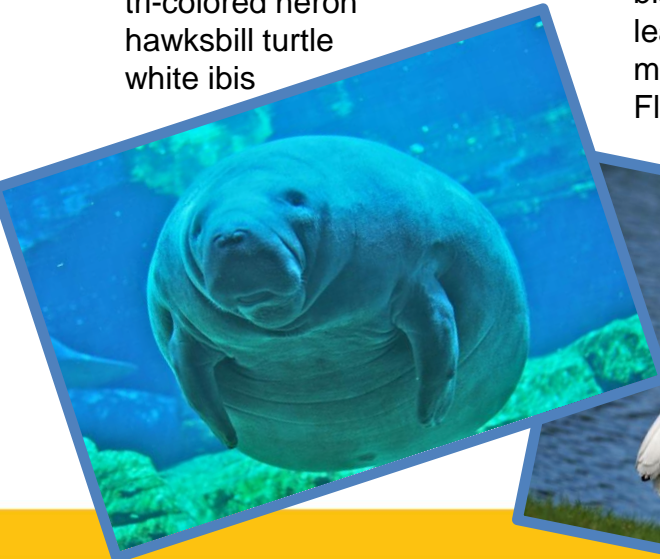
Gulf sturgeon  
roseate spoonbill  
American alligator  
loggerhead turtle  
common snook  
Atlantic green turtle  
leatherback  
eastern indigo snake  
little blue heron  
reddish egret  
snowy egret  
tri-colored heron  
hawksbill turtle  
white ibis

peregrine falcon  
southeastern American kestrel  
gopher tortoise  
American oystercatcher  
bald eagle  
Kemp's Ridley turtle  
wood stork  
brown pelican  
snail kite  
black skimmer  
least tern  
manatee  
Florida black bear

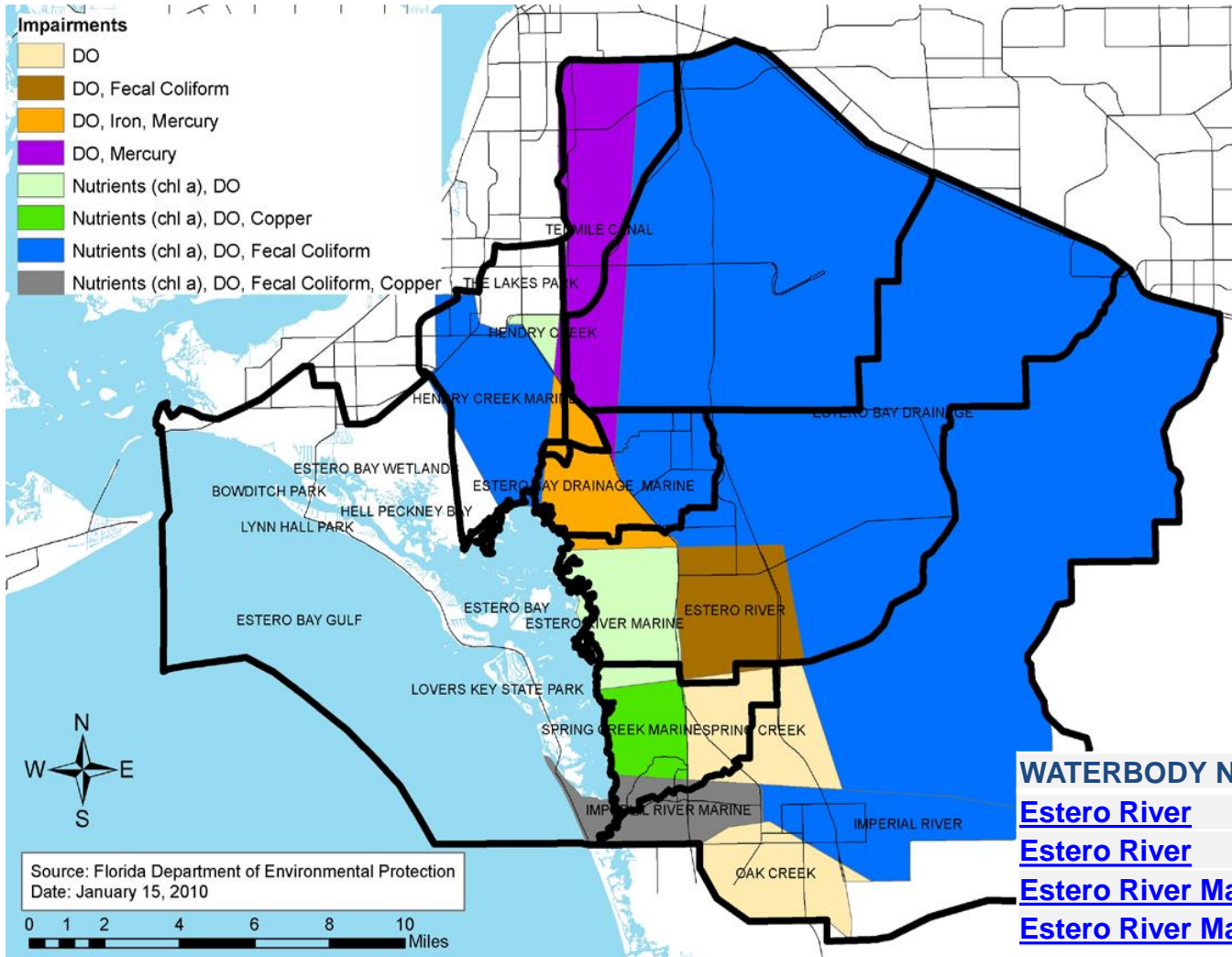


## Number of Known Native Species

Mammals:	37
Birds:	135
Amphibians:	21
Reptiles:	56
Fish:	137



# Water Quality



WATERBODY NAME:	IMPAIRMENT:
<a href="#">Estero River</a>	Dissolved Oxygen
<a href="#">Estero River</a>	Fecal Coliform
<a href="#">Estero River Marine</a>	Dissolved Oxygen
<a href="#">Estero River Marine</a>	Mercury in Fish Tissue

Source: Lee County Division of Natural Resources

Source: Estero Bay Agency on Bay Management, State of the Bay Update 2014



# Watershed Problems

## Causes:

Conversion of natural habitats



Filling, dredging and draining of wetlands



Construction of roads, ditches, berms, canals, & coastal hardening



## Problems:

1. Altered flows
2. Impaired water quality
3. Lowered water tables
4. Altered hydroperiods
5. Loss of wetland, upland, and aquatic habitats
6. Downstream Flooding



Lee County Community Development



Source: Kevin Erwin



Naples Daily News

(Sources: SFWMD, 1999 and Lee County Natural Resources)



# Economic Significance

## TOURISM:

- ❖ 5 million tourists to Lee County (2014);  
-contributed \$2.87 billion
- ❖ Top reasons why tourists travel to Lee County:
  - *Warm weather (87%)*
  - *Peaceful/relaxing (83%)*
  - *White sandy beaches (78%)*
  - *A safe destination (72%)*
  - *Clean, unspoiled environment (69%)*
- ❖ Wildlife viewing – 2nd most popular outdoor activity in Florida.
- ❖ Tourism in the Estero Bay Watershed generates 18,974 jobs.

## REAL ESTATE VALUES:

- ❖ Consistent poor water quality in Lee County has suppressed property values by \$541 million.

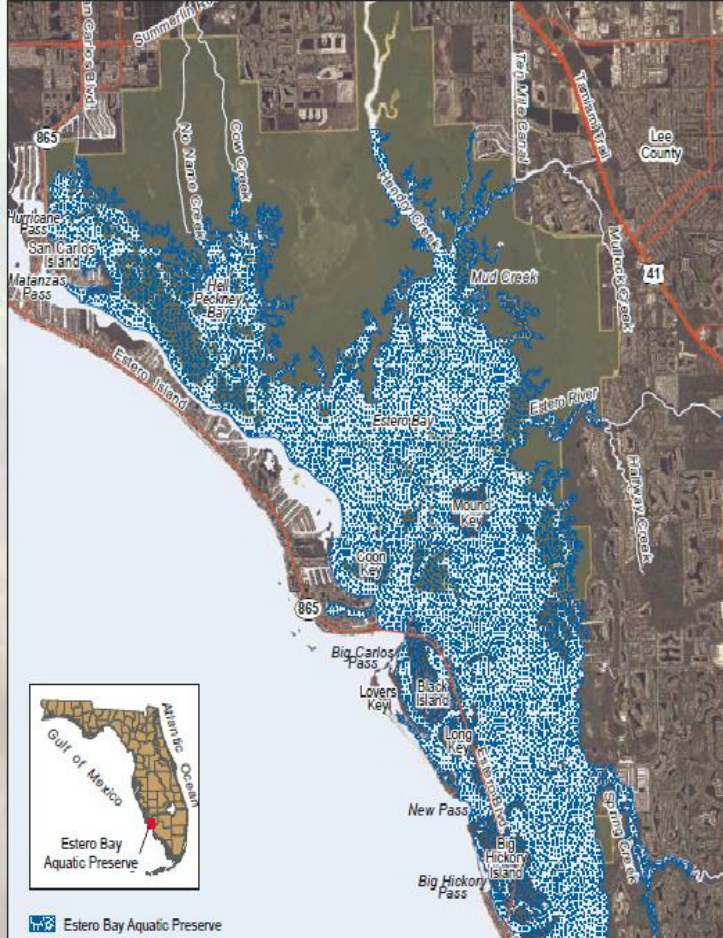


(References: 2014 Annual Visitor Profile and Occupancy Analysis; FWC Economic Benefits of Wildlife viewing in Florida, 2011; National Park Service, Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, 1999; Florida Realtors ( 2015) The Impact on Water Quality on Florida's Home Values; Weisskoff; (2011) An Economic Look at Lee County and Estero Bay Basin Conservation Lands: Acreage, Jobs, Value.)



# Trails and Parks

## Estero Bay Aquatic Preserve



Estero Bay Preserve State Park

(Source: Florida Department of Environmental Protection)



A scenic sunset over a body of water with a silhouette of a bird in the foreground. The sun is low on the horizon, casting a golden glow across the sky and water. The water reflects the sun, and there are some reeds or grasses in the foreground. The overall mood is peaceful and natural.

# *The Village of* **ESTERO**

**IT IS ESSENTIAL THAT LOCAL GOVERNMENTS TAKE A MORE ACTIVE ROLE. WITH THE WEAKENING OF STATE LAND PLANNING LAWS, MORE AUTHORITY, AND MORE RESPONSIBILITY, IS PLACED ON LOCAL GOVERNMENTS TO ENSURE THEIR REGULATIONS AND DECISIONS PROTECT THEIR RESIDENTS AND NATURAL RESOURCES.**

# Recommendations

1. **Advocate** for restoration & protection of lands in the DRGR.
2. **Adopt** Ordinances and Land Development Codes that protect the Estero River and the Estero River Watershed.  
<http://www.lowimpactdevelopment.org/>
3. **Assemble** Estero River task force
4. **Consider** land acquisition and conservation easements.
5. **Coordination:** Interagency, Intergovernmental, & NGOs







# Tourism / Economy



# Environment



# Culture /History



# Thank you!!



Florida Department of Environmental Protection

# Quality of Life



# References

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