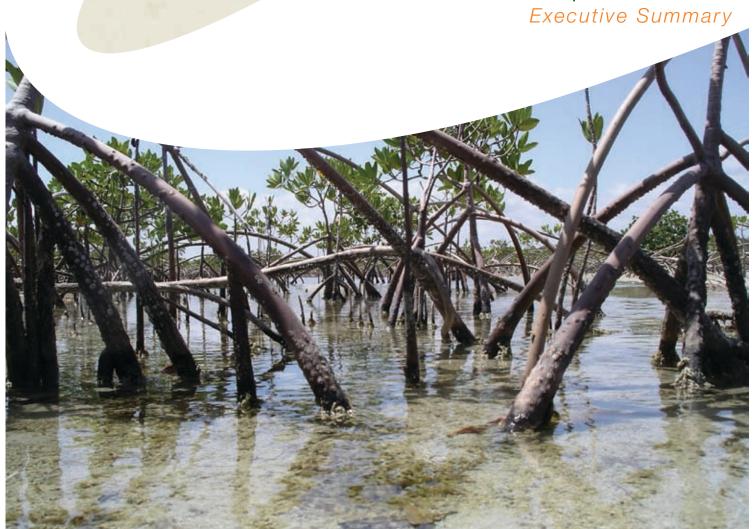
SAVING SOUTHWEST FLORIDA'S WATER

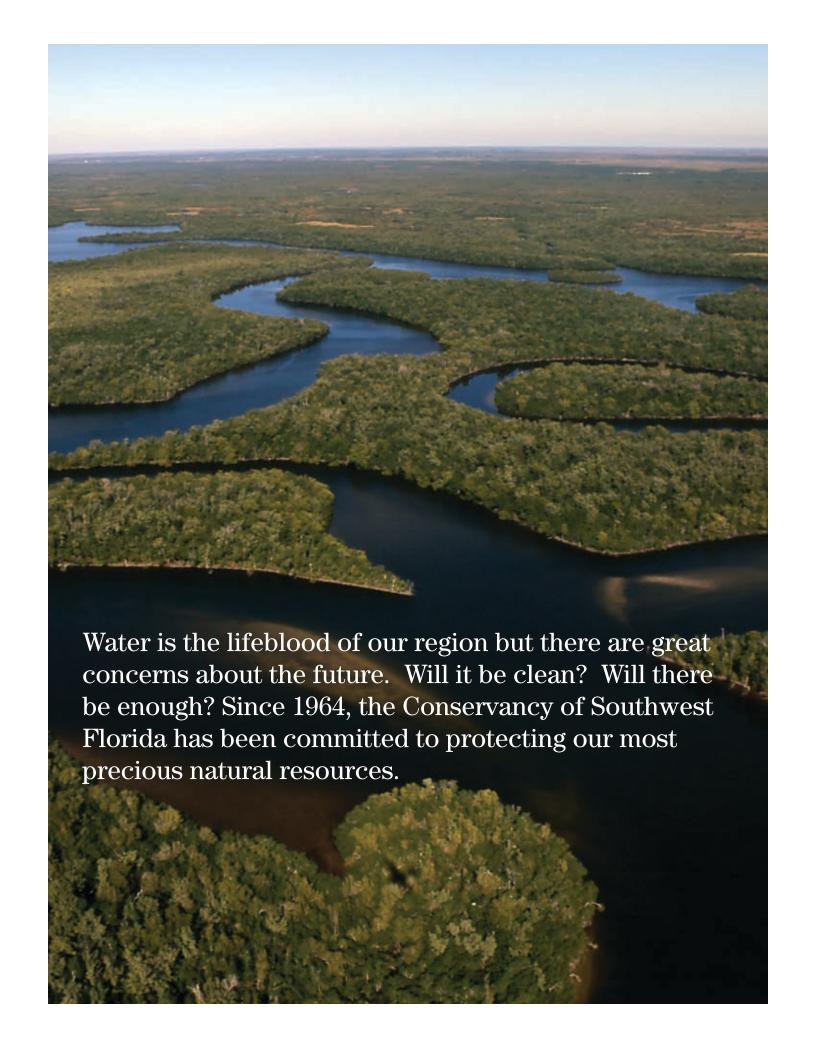


Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

www.conservancy.org

Estuaries Report Card





Letter from the President



Andrew McElwaine President & CEO

"Water is the driving force of all nature."

-Leonardo da Vinci

Dear Friend:

Clean and abundant water is our most precious resource. Some even predict it is the "oil" of the future.

While a few think that Florida is a leader in protecting water quality, the fact is that Florida has some of the nation's poorest water quality. Over 97 percent of bays and estuaries and over 42 percent of streams in Florida are in poor shape, identified as being impaired and not safe for swimming and/or fishing. Florida also has 22 major beaches that are unsafe to swim in for at least two weeks out of every year. Overall, the state is 4th worst for drinking water quality and 10th in violations of Clean Water Act permits.

Water is the foundation of Florida's tourism-based economy, with Florida's recreational saltwater fishery contributing over 50,000 jobs and over \$5 billion to the state alone. Beach tourism creates over 275,000 jobs and contributes over \$24 billion to the state's economy. Both are at risk from dirty water, to say nothing of the risk to our health and safety. Harmful algal blooms and fish kills have cost jobs as tourists canceled their trips and anglers sought better fishing elsewhere.

Yet, as new quantitative standards are being put in place to protect our estuaries, some believe that the standards will be economically detrimental to our region.

It is past time to place our emphasis on conserving, protecting and restoring our estuaries for future generations. The "2011 Estuaries Report Card" is just one of many initiatives undertaken by the Conservancy of Southwest Florida to protect our precious water resources. This report gives you a snapshot of the 2011 water quality in our regional estuaries and contains recommendations on how to improve these interconnected waterways.

We will continue to update the Estuaries Report Card every five years and continue to monitor the health of our bays and estuaries, so we can enjoy our quality of life and preserve it for future generations.

Andrew McElwaine

2011

Estuaries Report Card

Water quality throughout the southwest Florida region, particularly with regard to nutrients and dissolved oxygen, continues to be degraded. The Conservancy of Southwest Florida has documented the expanding range of water quality impairments in our waterbodies. This report utilized scientific information from many sources and applied consistent indicators for which data exists throughout the region and converts this information into grades that represent southwest Florida's estuarine health.

Estuarine Health Indicators Utilized

Wildlife Habitat	Water Quality	
Extent of Wetlands Remaining	Extent of Spatial Impairment	
Extent of Conservation Lands	Severity of Impairment	
Extent of Mangroves Remaining	Degree of Hydrological Alteration	

2011 Estuaries Report Card Results

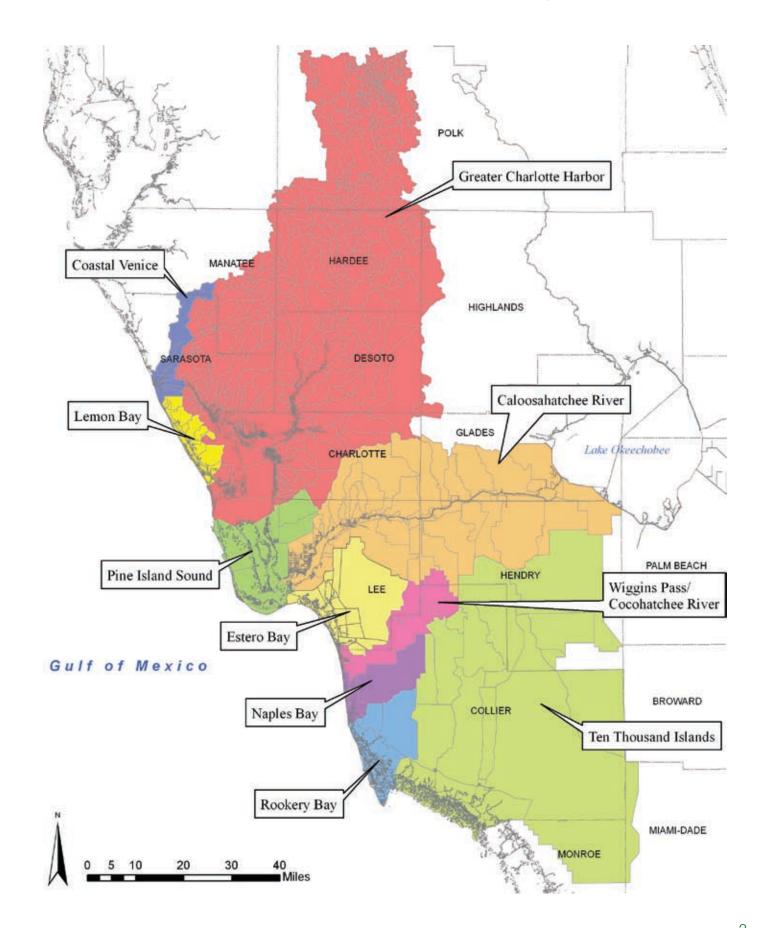
The estuaries of southwest Florida all display impact from human activity even in the relatively remote Ten Thousand Islands estuary. Each estuary, including those that are significantly protected by conservation lands, has portions, if not all of its watershed, that do not meet state water quality standards. The "2011 Estuaries Report Card" grades reflect an increasing spatial area not meeting state water quality standards and more waterbodies containing multiple impairments than in 2005.

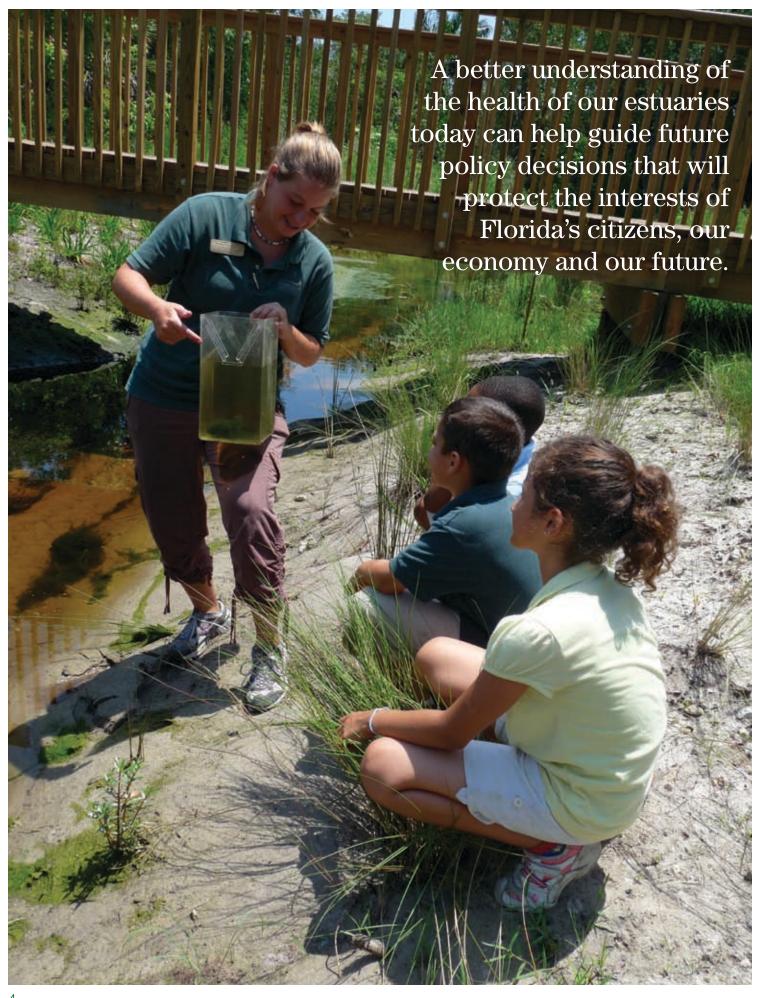
Watersheds	Wildlife Habitat	Water Quality
Coastal Venice	C-	C-
Lemon Bay	В	D-
Charlotte Harbor	B-	С
Pine Island Sound	A+	D
Caloosahatchee River	D-	D-
Estero Bay	B-	D
Wiggins Pass/Cocohatchee	В	C-
Naples Bay	D-	D-
Rookery Bay	B+	D
Ten Thousand Islands	A+	D



Developing long term solutions to wetland restoration and water quality improvement in critical watersheds will help protect our wildlife and our quality of life.

Watersheds Included in 2011 Estuaries Report Card





Ten Steps to Saving Southwest Florida's Waters

Each and every citizen has the power to make a difference! Encourage our leaders to follow these ten steps and make the right decisions to protect our water, our quality of life and a sustainable future.

1. Eliminate Over-Drainage

Once a mosaic of wetlands and flowways, man-made 7. Enhance Wastewater Treatment drainage of Southwest Florida over the decades has depleted our water supply, degraded our water quality and diminished wildlife habitat. Encourage our decision-makers to create policies to ensure future development does not further drain or divert the flow of water.

2. Restore Hydrology

Recreating natural water flows will increase the retention and filtration of our waters, enhancing future water supplies and our water quality. Done properly, we can improve hydrology while still maintaining the existing flood protection in our neighborhoods.

3. Restore Swimmable/Fishable Water Quality

Citizens and decision-makers need to work together to uphold water quality standards, create fertilizer and stormwater management systems and implement numeric pollution standards for our waterways. Waterways should be safe for people and wildlife to swim and fish in.

4. Re-establish Natural Salinity Levels

Unnatural hydrology and over-drainage have altered the ratio of saltwater to freshwater that is so important to sustain the delicate balance of plant and animal life. We need to correct these issues, restore drained wetlands, purchase lands to create more freshwater storage areas and support policies that ensure our rivers and estuaries receive the proper amount of fresh water to sustain the salinity balance during the dry season and the wet season.

5. Adopt Sustainable Agriculture Practices

Agriculture is an important Florida industry, but also one of the largest consumers of water and a source of many types of water pollution. Best management practices for fertilizer use, pesticides, adoption of Florida-friendly crops, and alternative non-water frost shields are all measures needed to keep both the industry --- and our waters --- healthy.

6. Create On-Site Stormwater **Management Systems**

Stormwater carries many of the common pollutants that impair our waters. Constructed wetlands are an effective means of filtering out those pollutants. We need to create policies that credit development practices which reduce runoff and protect natural wetlands from stormwater pollution. Citizens can help by reducing use of fertilizers, using native and Florida-friendly plants, reducing the amount of water used for irrigation, and using crushed shell or stone for walkways and driveways.

and Sewage Sludge Disposal

A major source of nutrient pollution comes from human and animal waste, causing human health problems and economic losses. Municipal water treatment plants should have backup systems in place to decrease releases of partially treated sewage during the rainy season. Biosolids ("sewage sludge") must be adequately treated, strictly requlated, and disposed of properly. Replacing leaky septic tank systems and cleaning up after your pets are also effective ways to reduce nutrient pollution into our waterways.

8. Protect Lands Critical for Water and Wildlife

While some areas of wetlands and wildlife habitat are protected, others that provide important ecological functions such as water storage, water filtration and wildlife habitat for endangered species are not. Land use planning and continued public land acquisition programs are vitally important to preserve our environment, tourism-based economy and quality of

9. Plan for Sea Level Rise

Sea levels change over time and currently sea level rise is being documented in south Florida. Planning for the impacts of sea level rise through better coastal growth management, freshwater and wetlands protection, and wildlife corridors and inland habitat protection will ensure a sustainable future.

10. Insist On Comprehensive **Scientific Monitoring**

Currently, consistent and comprehensive water quality data is not available. Additionally, any person who collects water samples is currently not required to go through training or certification processes. Insisting on adequate funding and certification for consistent and comprehensive monitoring of Florida's waterways is vital to the correct assessment of water quality. The only way we can improve the health of our waters is to first accurately identify the problems.



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



Acknowledgements

The Conservancy of Southwest Florida would like to thank S. Gregory Tolley, Ph.D. (Professor of Marine Science at Florida Gulf Coast University (FGCU) and Director of FGCU's Coastal Watershed Institute) and Lisa Beever, Ph.D. (Director of the Charlotte Harbor National Estuary Program) for their review and editing assistance of the *2011 Estuaries Report Card*.

Financial support for the 2011 Estuaries Report Card was provided by John Ben Snow Foundation, The Curtis and Edith Munson Foundation, The Banbury Fund and The Agua Fund. The recommendations listed therein are those of the Conservancy of Southwest Florida and do not necessarily reflect the view of the report's funders.

Conservancy of Southwest Florida Environmental Policy staff and interns compiled, drafted and edited the *2011 Estuaries Report Card*. The Report Card's primary authors, Jessica Stubbs and Jennifer Hecker, worked with Environmental Policy interns Eliza Davis, John Aquilino and Dan DiNicola, all of whom provided vital research and support in producing this report.

For more information go to: "2011 Estuaries Report Card Full Technical Version" www.conservancy.org and click on "Publications"

