



Technical Advisory Committee

Choctawhatchee River and Bay Watershed

April 14, 2016



ecology and
& environment, inc.
Global Environmental Specialists



Goals for Today

- ✓ Introduce the SWIM program and plan development process
- ✓ Summarize the technical review process
- ✓ Request your participation and assistance



Surface Water Improvement and Management (SWIM) Program

Created through passage of the Surface Water Improvement and Management Act in 1987; Sections 373.451-459, Florida Statutes

Purpose: Developed to address major watershed (coastal/ surface water) issues throughout State

Plans provide:

- Watershed description;
- Assessment of watershed and water resource conditions;
- Evaluation of accomplishments and improvements since previous SWIM Plan;
- Project plan to address identified watershed needs and challenges; and
- Estimate funding needs and funding alternatives.



SWIM in Northwest Florida

The District developed SWIM plans for all major watersheds/waterbodies; two (Perdido and Ochlockonee) remain in a draft status.

Waterbody	Most Recent Plan/ Update Date
Apalachicola	1996
Pensacola	1997
Choctawhatchee	2002
St. Marks	2009
St. Andrew Bay	2000
Lake Jackson	1997
Perdido	Draft 2011
Ochlockonee	Draft 2012



SWIM Implementation to Date

- Local partnerships and cooperative funding:
 - Stormwater retrofit projects;
 - Sediment assessment;
 - Biological resource evaluations; and
 - Water quality monitoring.
- Multiple State, Local, and Federal funding sources
- Need your help in documenting implementation.



Other Related Initiatives

It is important that SWIM Plan updates fit within and help guide the larger set of related Deep Water Horizon and State restoration initiatives:



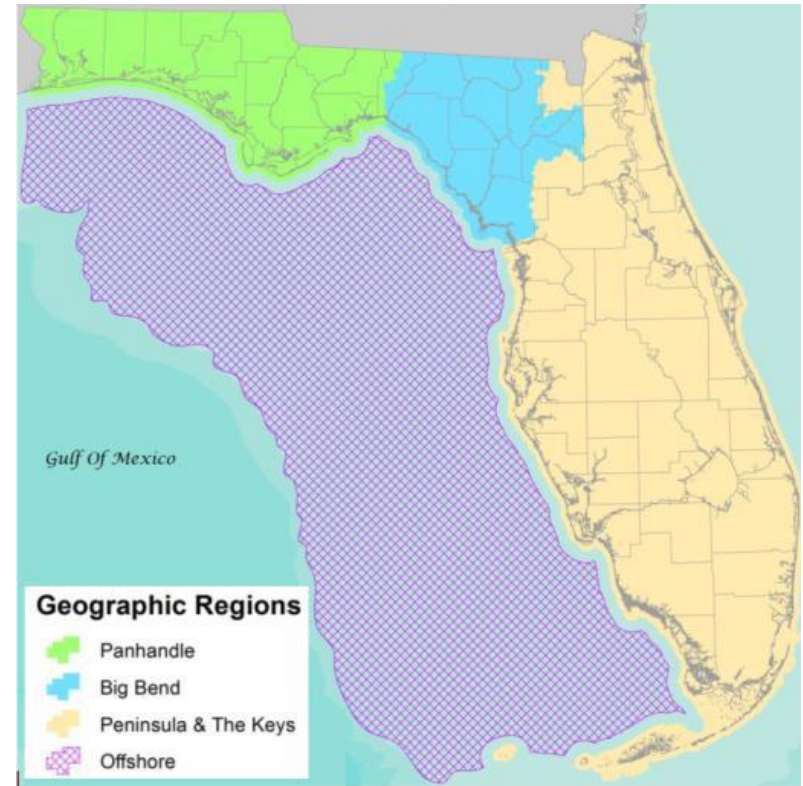


Gulf Environmental Benefit Fund (GEBF)

GEBF Restoration Strategy:

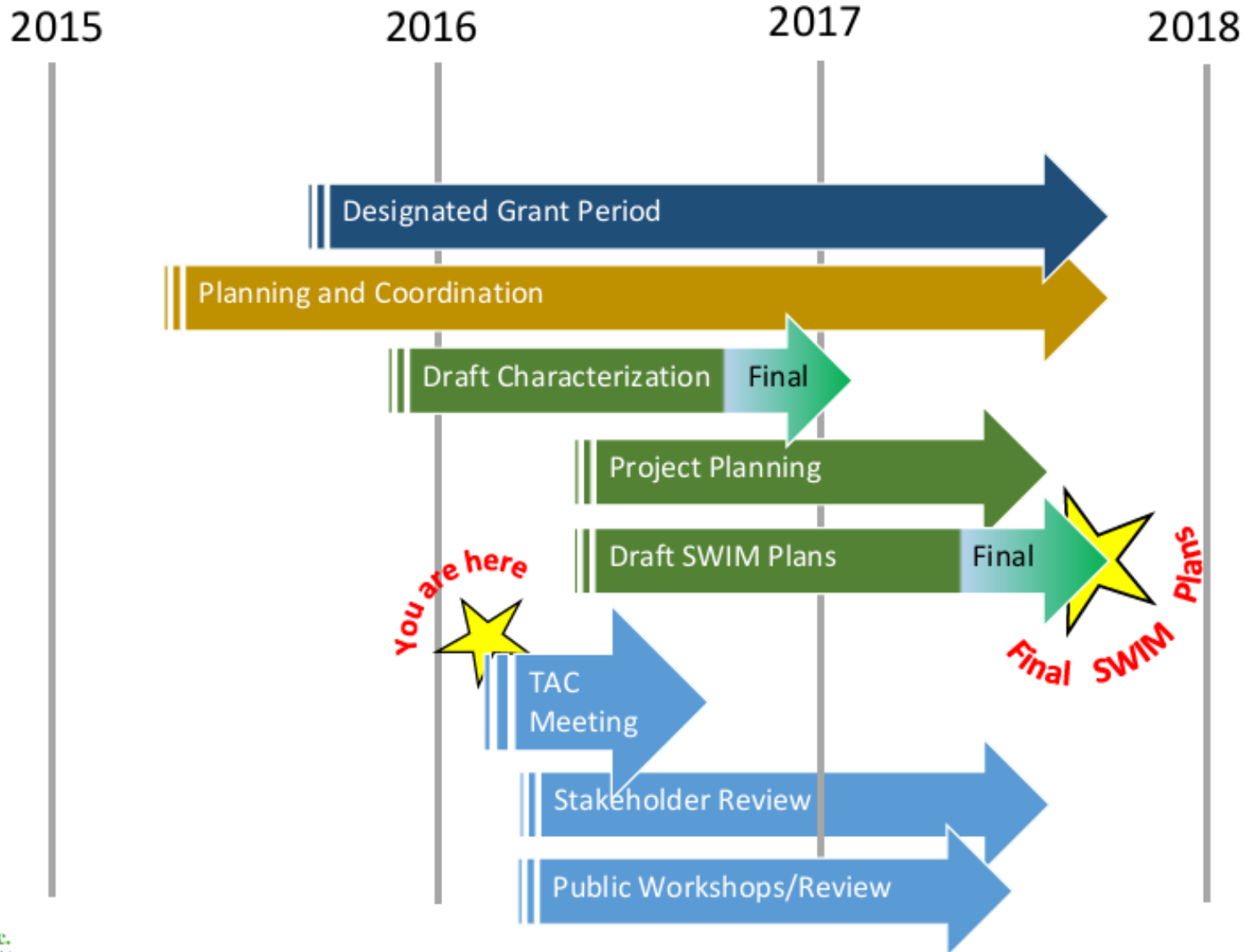
- SWIM Plan Updates (NWF & Suwannee River WMD)
- Seagrass Assessment (Fish and Wildlife Research Institute)

Goal: Prioritized Project List



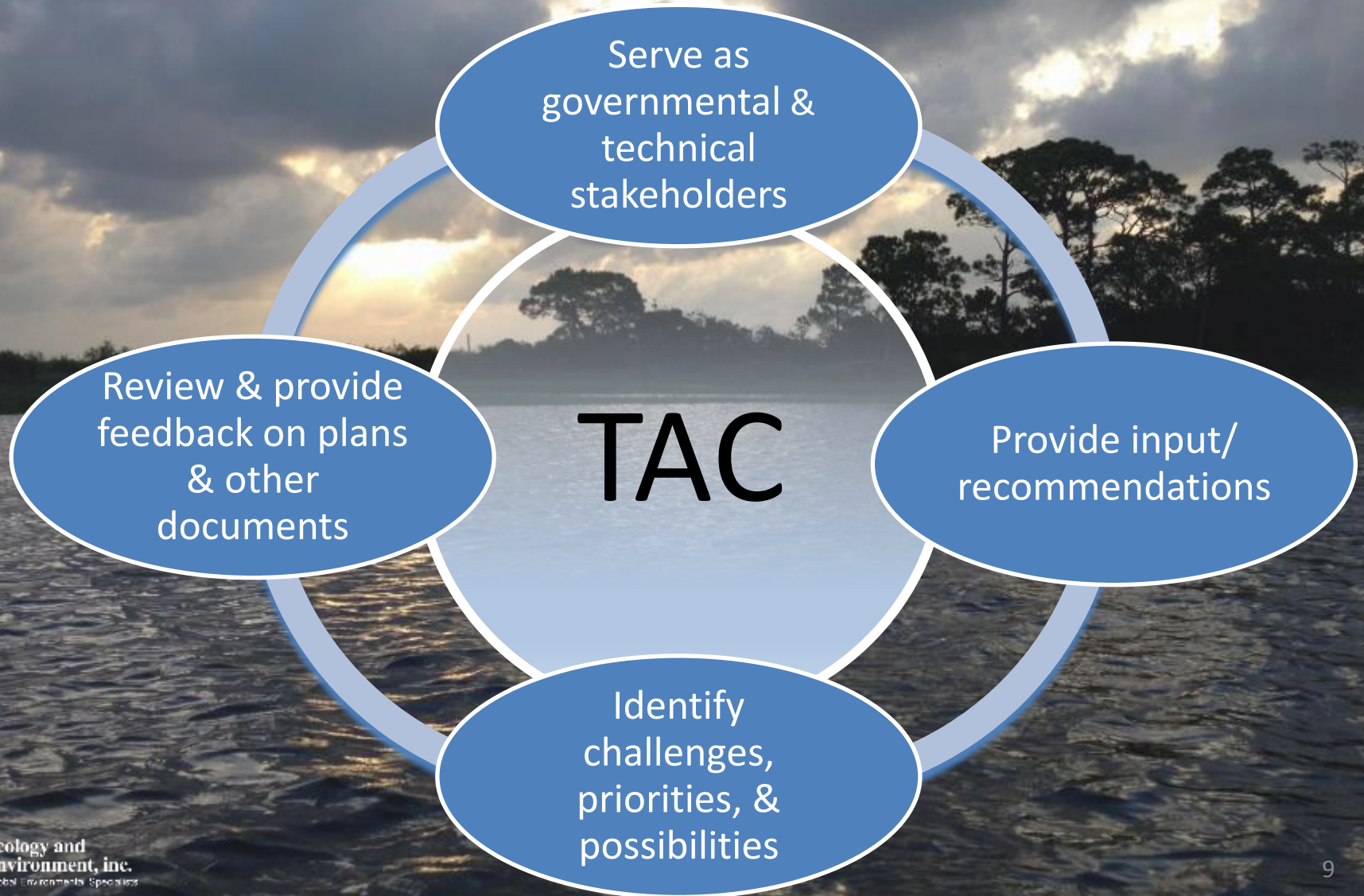


Plan Development Schedule





Requested Functions of the TAC





Choctawhatchee Watershed (Florida portion)



- Perdido River and Bay
- Pensacola Bay System
- Choctawhatchee River and Bay
- St. Andrew Bay
- Apalachicola River and Bay
- Ochlockonee River and Bay
- St. Marks River and Apalachee Bay



Choctawhatchee River and Bay

Physical Characteristics

- 3.4 million acres
- 42% within the central Florida Panhandle, 58% in Alabama
- 313 waterbody segments in the watershed
- Major Tributaries: Choctawhatchee River, Pea River, Holmes Creek, Little Choctawhatchee River, Wrights Creek, Alaqua Creek, Turkey Creek, Rocky Creek
- Spans 6 Florida counties and 8 Alabama counties
- All counties within watershed have projected population increases



Choctawhatchee River and Bay





Choctawhatchee River and Bay

Major Attributes

- Choctawhatchee River is the fourth largest river in Florida in terms of flow and drainage area size
- 61 marinas on the bay (as of 2001)
- USAF Hurlburt Field and Eglin AFB
- Coastal dune lakes in Walton County are rare and unique habitats
- Home to the Okaloosa darter (one of two federally threatened fish species in Florida)
- Threatened Gulf sturgeon migrates up the Choctawhatchee River and Pea River to spawn



Major Challenges

“Global” Issues

- Urban stormwater runoff and nonpoint source pollution
- Extensive seagrass and oyster habitat loss since the 1960s
- Sedimentation
- Shoreline armoring; loss of littoral habitat
- Elevated mercury levels in fish tissue
- Sea level rise

Watershed Specific Issues

- 61 impaired segments in the watershed (FDEP)
- Intense development and land use change / Non-point source pollution
- History of red tide events (blooms as recent as fall 2015)
- Over 1,500 shoreline residences and businesses serviced by septic systems



Water Quality Impairments

- 61 of 313 (20%) waterbody segments in the Choctawhatchee River and Bay watershed, are verified impaired (data through June 2010)
 - 35 for **mercury**
 - 23 for **bacteria** – fecal coliforms, beach advisories, or shellfish harvesting classification
 - 3 for **nutrients** – Minnow Creek (WBID 130), Sikes Creek (WBID 142), and Open Creeks (WBID 286)
- 3 waterbody segments verified impaired for **bacteria** based on **shell fish classifications** issued by DACS:
 - Choctawhatchee Bay (WBID 778A, 778B, and 778C)
- ❖ Note: Water quality results reported only for waterbody segments with sufficient data



Water Quality Consequences

- 11 beach segments verified impaired for **bacteria** based on **beach advisories** issued by county health departments:
 - Lincoln Park (WBID 692A);
 - Rocky Bayou State Park (WBID 722B);
 - Poquito Park (WBID 754A);
 - Choctawhatchee Beach County Park (WBID 778CA);
 - Camp Timpoochee (WBID 778CD);
 - Choctawhatchee Bay (WBID 778D);
 - Garniers Park (WBID 843B);
 - James Lee Park (WBID 8008C);
 - Wayside East Park (WBID 8008E);
 - East Pass (WBID 778AB); and
 - Gulf Island National Seashore (WBID 778AC).

Source: DEP 2014



Seagrass Trends

Seagrasses in Choctawhatchee Bay in 2010		
Stressors	Status	Observed Trend
Seagrass cover	Red	Declining
Water clarity	Yellow	Declining
Natural events (storms, etc.)	Orange	Increasing impacts
Propeller scarring	Green	Negligible

Notes:

Additional research may be needed to distinguish long-term trends from event-driven impacts

Source: Seagrass Integrated Mapping and Monitoring (SIMM) program, FWC 2015



It's Your Turn

- Each of you will have time to share your thoughts regarding:
 - Watershed conditions and challenges; and/or
 - What are today's major issues and opportunities?
- *Please share more details with us in writing following the meeting*



Restoration/Management

NFWF Awarded Projects: Multiple Benefits and Partners

- **Boggy Bayou Watershed Water Quality Improvement** (City of Niceville, \$4,223,000) – sediment collection, stormwater treatment, and restoration of headwaters.
- **Water Quality Improvements to Enhance Fisheries Habitat in the Lower Choctawhatchee River Basin: Phase I** (DEP, FWS, FWC, NFWFMD, CBA, and Walton, Washington, and Holmes Counties, \$931,600) – sediment in stormwater runoff from un-paved road stream crossings.
- **Destin Harbor, Joe's Bayou, and Indian Bayou Water Quality Improvement** (City of Destin, Florida, \$3,593,600) – roadside swales and exfiltration trenches for treatment and aquifer recharge.
- **Restoration of Florida's Coastal Dune Lakes** (DEP, \$3,045,400) – restore wetland habitat and increase freshwater flows.



Restoration/Management

TNC Community-Based WMP

- 23 projects to address 7 major goals:
 - Protect, restore, create and/or manage natural habitat and resources and increase buffer areas;
 - Increase cooperation and coordination for management, monitoring, funding, implementation, outreach, enforcement;
 - Reduce impacts to groundwater and ensure adequate fresh water availability;
 - Reduce and treat stormwater;
 - Reduce nutrient loading;
 - Reduce sedimentation; and
 - Increase economic diversification.



It's Your Turn

- Each of you will have time to share your thoughts regarding:
 - Restoration and resource management needs;
 - What is missing? What is highest priority?
- *Please share more details with us in writing following the meeting*



Open Discussion





The Path Ahead

- Next Steps
- Public workshop
- NWFWMMD - SWIM Plan Website for TAC/ Public input communication
- Let us know about new data, publications, or studies that your organization has done!



Additional Resources:



FDEP – Deep Water Horizon Oil Spill

<http://www.dep.state.fl.us/deepwaterhorizon/>



NOAA – Gulf Spill Restoration

<http://www.gulfspillrestoration.noaa.gov/>



NFWF

NFWF – Gulf Environmental Benefit Fund

<http://www.nfwf.org/gulf/Pages/home.aspx>



Gulf Coast Ecosystem Restoration Council

<https://www.restorethegulf.gov/>



Thank You

For more information and to submit questions, comments, and recommendations:

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