



# CHARTING *the* COURSE

THE COMPREHENSIVE CONSERVATION  
AND MANAGEMENT PLAN FOR TAMPA BAY  
MAY 2006

# CCMP Update

## Bay Habitats Action Plan

### October 2015

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# Action Plans

## **\*\*Bay Habitats (underway)**

### Approved:

\* Fish & Wildlife (Final Drafts Approved August 2015)

\* Invasive Species (Final Drafts Approved August 2015)

### On Deck:

Remainder Bay Habitats

Water & Sediment Quality

Climate Change

Dredging & Dredge  
Material Management

Spill Prevention &  
Response

Public Education &  
Involvement

Public Access

# Bay Habitats Actions

BH-1 Implement Tampa Bay Habitat Master Plan

BH-2 Establish and implement mitigation criteria

\*BH-3 Reduce prop scarring and pursue seagrass transplanting at select sites

\*BH-4 Identify hard-bottom communities and restrict impacts

~~BH-5 Improve management of parking and vehicle access along causeways and coastal areas (retired 2006; incorporate into Public Access Action Plan)~~

# Bay Habitats Actions

\*BH-6 Encourage habitat enhancement along altered, waterfront properties

~~BH-7 Improve compliance with and enforcement of wetland permits (retired 2006; incorporated in BH-2)~~

\*BH-8 Expand mapping and monitoring programs

BH-9 Enhance ecosystem values of tidal tributaries

\*BH-10 Implement the Freshwater Wetland Habitat Master Plan (New Action)

# Bay Habitats Actions

BH-11 Evaluate and address barriers to fish and wildlife passage in tidal tribs (New Action)

FI-1 Establish and maintain seasonal freshwater flows

BH-3 Reduce propeller scarring of seagrass and pursue seagrass transplanting opportunities at select sites

*Recommended Strategy:*

Implement a long-term monitoring program for seagrass transplanting and mitigation to identify the most suitable and cost-effective methods and locations.

*– Incorporate in the annual seagrass transect monitoring program.*

## BH-3

Evaluate effectiveness of slow-speed and no-motor zones in reducing prop scars.

*– Identify, prioritize and manage scarring “hot spots” around the bay to reduce repeated impact.*

Continue boater education about safe shallow-water navigation.

Additional ABM/TAC Comments:

# BH-3 – Additional ABM/TAC Comment

- ▶ Nov. 4<sup>th</sup> Deadline
- ▶ Sediment dynamics/species composition important in identifying potential seagrass restoration areas
- ▶ Some new information may be available for transplanting success (COT Haldolue mitigation project, 5yr monitoring / MacDill Project)
- ▶ Investigate proper boat operation slow vs. planing speeds
- ▶ Reassess areas where signage has been persistent (e.g. Shell Key, Fort Desoto) --
- ▶ Improve boater education for rental boat operators and customers
- ▶ WQ/SQ AP to address SW impacts
- ▶ Construction activities (Port, “frack-out”, pipeline, causeway impacts) in the Bay impacting seagrass, lessons-learned from projects (PC – Bellair Cwy sediment tubes) → incorporate into BH- mitigation Action Plan

# BH-4 Identify hard-bottom communities and avoid impacts

## *Recommended Strategy:*

Monitor results and support comprehensive identification, characterization and mapping of hard bottom and oyster reef habitats and their communities in Tampa Bay.

*–Support mapping of historic distributions of hard bottom habitat in Tampa Bay.*

*–Support expanding mapping activities into unmapped Bay segments.*

# BH-4

Develop bay-wide goals for protection and restoration of hard bottom and oyster reef habitats.

*– Incorporate in the Bay Habitat Master Plan.*

Monitor community structure and population dynamics of species associated with natural and artificial hard bottom and oyster reef habitats.

Monitor populations of the invasive Asian green mussel or other potential invasive species that may emerge.

# BH-4

Support community-based oyster reef restoration activities and artificial reef creation.

*– Streamline permitting of restoration activities involving oyster reef and/or live bottom habitats.*

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*– Support research on artificial reef design (e.g., high vs low relief structure; reef ball vs WADs vs oyster bags) and evaluate the ecological effects of artificial hard-bottom habitats.*

*– Promote education about hard bottom and oyster reef habitats.*

# BH-4

**Evaluate the effectiveness of current permitting and mitigation rules for hard-bottom substrate impacts in Tampa Bay.**

**Assist in recommending ways to protect hard bottom and oyster reef habitats and minimize or mitigate impacts to them (e.g, anchor damage, dredging, channel modification).**

# BH-4 – Additional ABM/TAC

- ▶ EPC study will start next year
- ▶ Enlisting support from commercial/charter fishing community on this action – EPC Bay Minigrant (reported observations)
- ▶ Walt Jaap/Stan Locker – Gulfstream Pipeline mapping data & final report (completed in 2014) – Recruitment dynamics on mitigation rubble/boulders sufficient to offset impacts (incorporate established sites in future monitoring programs)
- ▶ Randy Runnels – PC may harbor hard bottom habitats, referenced study
- ▶ Standardizing nomenclature of hard bottom habitats (NOAA contacts)
- ▶ Triennial Review – TB Class 2 waters

## BH-6

# Encourage habitat enhancement along altered, waterfront properties

### *Recommended Strategy:*

Support demonstration projects to provide examples of the ecological and aesthetic values of living shorelines.

*– Provide incentives to implement living shorelines by giving priority to habitat restoration grants that incorporate living shorelines.*

# BH-6

Include living shorelines as a tool for mitigating habitat loss caused by sea level rise in the Habitat Master Plan.

Explore regulatory rule revisions to address the current disincentive for replacing existing seawalls, and expedite regulatory permitting for living shoreline projects.

Educate waterfront homeowners about the benefits of living shorelines and design options, materials and costs.

*– Promote partial or “hybrid” living shorelines.*

# BH 6 – Additional ABM/TAC

- ▶ Habitat Res. Grants – Providing incentives for private owners to acquire funding (place areas into conservation easements)
  - Funneling grant funding through local governments
- ▶ SLR/CC Adaptation strategies – Increase education versus future hardening/armoring activities in the bay
  - Incorporate new tools into future design strategies
- ▶ Preventing public vacating on public ROWs (PC ordinance example)
- ▶ Mitigation credits may be available to alternative designs
- ▶ L.S. terminology should be clearly defined
  - ▶ Identify regulatory constraints that may be impacted by terminology
- ▶ Support additional efforts to improve regulatory acceptance of future restoration projects (dependent on modeling/research support from existing projects → more data)

# BH-8

## Expand habitat and monitoring

### *Recommended Strategy:*

Adopt new technologies to track habitat quantity and quality in the Tampa Bay watershed.

*– Include coastal marshes and mangroves, tidal creeks, oligohaline habitats, freshwater wetlands, oyster reef communities and associated uplands, including natural, restored or created habitats.*

*– Support mapping of invasive plants using mobile devices.*

# BH-8

Continue seagrass aerial mapping and transect monitoring to assess habitat quality.

*– Integrate these programs to provide information on species distribution and composition throughout Tampa Bay.*

Continue to identify areas where coastal habitat recovery is lagging, highly variable, or threatened.

# BH-8

Continue benthic monitoring program to analyze sediments for contaminants and assess the health of benthic communities.

- Initiate monitoring for emerging contaminants (such as, microplastics, pharmaceuticals, personal care products).*
- Expand monitoring in rivers and tidal tributaries.*

Periodically summarize mapping and monitoring efforts in a synthesis document.

# BH 8 – Additional ABM/TAC Comments

- ▶ Funding → Garnering future support from ABM (coordination w/ local officials)
  - ▶ Opportunities to collaborate/report on w/ private sector that may be utilizing newer technologies (including their data into syntheses)
  - ▶ Incorporating community-based monitoring programs → especially where funding may be lacking
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# BH-10

## Implement the Tampa Bay Freshwater Wetland Habitat Masterplan

### *Recommended Strategy:*

Implement the Freshwater Wetlands Master Plan.

- Encourage SWFWMD to adopt restoration targets and recommendations as part of the SWIM Plan (FDOT).*
- Encourage regulators and planners to incorporate recommendations from the master plan into permitting reviews, land use plans and land acquisition programs.*

# BH-10

Track freshwater wetland gains and losses during regular updates of the Tampa Bay Habitat Master Plan.

*– Determine progress towards targets*

Increase involvement from wetland mitigation bankers in achieving freshwater wetland goals.

*-- Provide technical GIS tools to identify appropriate locations and types of freshwater wetland creation and mitigation.*

*-- Highlight economic incentives of performing non-forested wetland mitigation when ecologically beneficial .*

# BH-10

Examine success of freshwater wetland mitigation at various time scales and recommend improvements to mitigation practices.

Incorporate creation of freshwater wetlands as an option for stormwater treatment.

*– Encourage other local governments to adopt a BMP guide similar to the Pinellas County Stormwater Manual, to expand wetland protection and creation in urbanized areas.*

# BH 10 – Additional ABM/TAC

- ▶ Nexus with new WOTUS Rule → May increase definition of wetland areas w/in watershed
  - ▶ EPC Mitigation/Test Projects → Future monitoring sites/examples (Also EPCHC/EPA Wetlands Grant project )
  - ▶ Incorporating large-scale/interconnected greenspace projects into development master plans for ERPs → Support updates to local BMP manuals that encourage this practice
  - ▶ Forested wetlands (cypress losses) shouldn't be neglected
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BH-11

Evaluate and address barriers to fish and wildlife passage in tidal tributaries

*Recommended Strategy:*

Further refine priority list of tidal tributaries with hydrological alterations to assess those with greatest potential for restoration, considering location, cost, surrounding land ownership and ecological benefits.

# BH-11

Implement projects to remove priority salinity barriers where those would benefit fisheries and wildlife.

Improve coordination between agencies and organizations involved in flood control, habitat protection and water quality improvements to facilitate restoration that supports comprehensive management goals.

# BH 11 – Additional ABM/TAC Comments

- ▶ Further supporting connectivity of tidal habitats
- ▶ Step 3 → All stakeholders need to be considered (e.g. FDOT easements/Port submerged lands)
  - Improving agency coordination (e.g. Channels A/G and MAC discussions)
  - Communications w/ private residents → considerations for future SLR/CC impacts
- ▶ Refinement of priority lists should consider downstream/upstream stakeholders

# Additional Comments or Editorial Suggestions?

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Deadline November 4

