Courtney Campbell Causeway Dam Removal & Florida’s 303(d) Assessment

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Florida Department of Environmental Protection
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Presentation Outline

- Where is the Courtney Campbell Causeway?
- What was the purpose of the project?
- Why did DEP have an interest in the project?
- What are the environmental benefits?
- Is the project complete?
- What are the next steps?
Purpose of Project

• Ensure Old Tampa Bay maintains designated uses of aquatic life support and recreation as an “Outstanding Florida Water”

• Restoration of conditions favorable for seagrass regrowth in approximately 81-100 acres

• Measurable improvement in water quality for an estimated 320 acres

• Improve tidal flushing of bay water by decreasing residence time
Existing Water Quality Problem

- Tampa Bay Nitrogen Management Consortium Developed the Tampa Bay Reasonable Assurance Plan for Tampa Bay in 2002
  - Seagrass restoration targets have been achieved; however, chlorophyll-a is still a challenge in Old Tampa Bay
- Northern portion of Old Tampa Bay still has dissolved oxygen and nutrient impairments
Biological Response

Figure 5: Historic seagrass coverage estimates for Tampa Bay. Data source: TBEP & SWFWMD.
2019 Mean Chlorophyll-a

- Data Collected by Hillsborough Environmental Protection Commission
- Includes:
  - Monthly Samples
  - Multiple Analytes
- Monitoring Results are shared with DEP and stakeholders

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Why did DEP have an interest in the project?
Florida’s 303(d) List

Primary Reason:
Impaired Segments for Dissolved Oxygen or Chlorophyll-a:
• Woods Creek
• Pepper Mound Creek
• Sweetwater Creek
• Tampa Bay Channel

Secondary Reason:
• Highlight Restoration Projects

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Assessment Category 4e

- A waterbody can be placed in category 4e (Ongoing Restoration Activities) if it’s impaired but recently completed or ongoing restoration activities are underway to restore the designated uses of the waterbody.
  - For 4e plans, the waterbody is still included on the 303(d) list
  - Placement on the Verified List is postponed for one five-year assessment cycle
  - Allow for implementation of the 4e plan and evaluation of progress toward restoration

- For more information on Florida’s Alternative Plans: https://floridadep.gov/dear/alternative-restoration-plans

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Hydrologic Benefits

- New 220’ opening to improve tidal flushing
- Decrease residence time by 50%-82% between Old Tampa Bay and Tampa Bay
Anticipated Water Quality Benefits

• Improved DO and Chl-a water quality in Old Tampa Bay
• Restoration of conditions favorable for seagrass re-growth
• 10,568 lbs. of nitrogen removal (Florida Department of Transportation 2015)
Additional Benefits of the Project

- Implementation of a before and after monitoring and assessment program
- DEP coordinated with Hillsborough County to include monitoring corrected chlorophyll-a
Is the Project Completed?

- Design phase of the project began in October 2017
- Construction started in January 2018
  - Northern portion of new bridge was completed in September 2018
  - Traffic patterns were shifted to the northern portion while construction on the southern portion was completed
- The North and South dams were removed on November 15, 2018 – Allowing full tidal flow through the new channel
- Construction continued on the southern portion
- The project was completed in July 2019
Next Steps

• Evaluate water quality data collected after project completion through DEP’s 303(d) listing process

• Coordinate with stakeholders on annual updates to the category 4e plan

• Collaborate on future projects
  • The City of Clearwater and Florida Department of Transportation are pursuing a similar project on the west end of the Courtney Campbell Causeway
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For more information on the Florida Department of Transportation’s Project, please see: http://www.fdottampabay.com/project/363/439206-1-52-01

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Questions?