Florida Department of Environmental Protection
Submerged Lands & Environmental Resources Coordination

Seagrasses & Mangroves

29th Annual Environmental Permitting Summer School – Orlando 2015
Tim Rach
• “Protection of wetlands and other surface waters is preferred to destruction and mitigation”

• “Mitigation …is only required to offset the adverse impacts to the functions …caused by the regulated activities”

• “In general, mitigation is best accomplished through creation, restoration, enhancement or preservation of ecological communities similar to those being impacted.”
Avoidance, Minimization ... then Mitigation

Mitigation Bank
On-site Mitigation
Off-site Mitigation

* Includes Joint Coastal Permits
Mitigation can be conducted on-site, off-site, or through the purchase of credits from a mitigation bank, or through a combination of approaches, as long as it offsets anticipated adverse impacts to wetlands and other surface waters and meets all other criteria for permit issuance. Off-site mitigation is preferred when:

(a) On-site mitigation opportunities are not expected to have comparable long-term viability due to such factors as unsuitable hydrologic conditions or ecologically incompatible existing adjacent land uses or future land uses identified in a local comprehensive plan adopted according to Chapter 163, F.S.;

or

(b) Off-site mitigation will provide greater improvement in ecological value than on-site mitigation.
• Preference Hierarchy:
  • Mitigation Banks
  • In Lieu fee
  • Permittee Responsible
    • On site
    • Off site
    • Additional documentation for the administrative record must include justification for this option
Where to Mitigate

• Mangrove Mitigation Banks?
  • A few are available with others being permitted now

• Seagrass Mitigation Banks?
  • A Draft proposal is under discussion
What are your options?

• In Lieu Fee / ROMAs

• On-site or Off-site Mitigation
  • Mangrove Planting
    • scrape down
    • seed source
    • nursery stock or don’t plant
  • Seagrass Restoration
    • scrape down
    • soil amendments?
    • donor material (or don’t plant)
DEPs emphasis

- **Pre-application meetings**
- **UMAM rule development**
  - Specific worksheet for benthic habitats
Rulemaking

Current Rulemaking:

SWERP Phase II
UMAM
We continue to be in active rule development and have incorporated feedback and comments from the seven workgroups to help develop revised field worksheets.

Specific workgroups are focusing on seagrasses and hardbottom.
Recent or on-going Projects

• Village of Key Biscayne seagrass restoration/mitigation
  • Seagrass transplants, bird stakes, sediment fill
  • Mitigation for a beach nourishment project

• Residential community dredge channel project
  • Dredging of access channels to an existing residential canal community
  • Scrape down and nearshore planting along with exclusion devices

• Seagrass Mitigation Bank
  • Preservation and enhancement
  • Signage
  • Motorized vessel exclusion
Village of Key Biscayne

Key Biscayne project

5 yrs. Monitoring

1.33 acres

Informational signage
Data Collection – Permit Types

- State Environmental Resource Permits (ERP) issued by FDEP and the Water Management Districts
- State Joint Coastal Permits (JCP) issued by FDEP
- Federal Dredge and Fill Permits issued by the Army Corps
- Federal Permits issued by the Florida Keys National Marine Sanctuary (FKNMS)
- County Permits
• Time Frame: 1990 to Present.

• Continue to Pursue Data on Seagrass Mitigation and Restoration projects from the 1970’s, 1980’s and early 1990’s.
<table>
<thead>
<tr>
<th>PERMIT FOLDER &amp; GOOGLE EARTH IMAGE</th>
<th>PERMITTEE</th>
<th>PROJECT NAME</th>
<th>PROJECT DESCRIPTION</th>
<th>LOCATION COUNTY</th>
<th>LOCATION WATERBODY</th>
<th>PERMITTING AGENCY</th>
<th>PERM</th>
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<td>City of Lake Worth/Palm Beach County</td>
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Database Information

- Permit Information
  - Permit Number
  - Permitting Agency
  - Date Issued
- Permittee
- Project Type/Description
- Location
  - County
  - Waterbody
  - GIS Coordinates
  - Impact Site
  - Mitigation Site
- Seagrass
  - Amount Impacted
  - Species
- Mitigation
  - Brief description
  - Amount Required
  - In/Out of Kind
  - On/Off Site
- Monitoring
  - Length Required
  - Dates
- Success Criteria
- Contractor/Consultant
GIS MAP OF RESTORATION (GREEN CIRCLES) AND MITIGATION (RED CIRCLES) PROJECTS LOCATED IN FLORIDA
Permit Tracking By County

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Database will track # of mitigation permits and restoration permits issued within each county.

In-kind vs. out-of-kind mitigation.

Types of mitigation strategies.
Various Mitigation Strategies

- Water Quality Improvements
- Seagrass Transplantation
- Derelict Vessel Removal
- Out-of-Kind Planting (mangroves, saltmarsh)
- Spoil Island scrape down/habitat creation
- Filling in dredge holes
- Prop scar repairs
- Exotic removal
- Seagrass protection zones
- Artificial Reefs
- In-Lieu Fees/Mitigation Banks
- Mosquito Impoundment reconnections
- Transfer of private submerged lands
- Wave attenuation
What’s Next

- Work in progress, gathering copies of all permits
- Starting to look at mitigation and restoration success
- Can be a useful tool to regulators and restoration/mitigation consultants

Robin Jung (FWCC-FWRI) is the project lead
DEP District Offices
http://www.dep.state.fl.us/secretary/dist

Helpful Websites
http://www.dep.state.fl.us/water/wetlands
http://www.dep.state.fl.us/water/wetlands/erphelp
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