

BEACH NOURISHMENT AND HARD BOTTOMS

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Permitting Summer School,
Orlando, Florida

Tori White

Deputy, Regulatory Division

Jacksonville District

U.S. Army Corps of Engineers

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Today and Tomorrow*





Outline



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- Regulatory Goals
- Regulatory Authorities
- Regulated Waters
- Permit Evaluation Process
 - ▶ 404(b)(1) Guidelines
 - ▶ National Environmental Policy Act
 - ▶ Endangered Species Act
 - ▶ Magnuson Stevens Fishery Conservation Management Act
 - ▶ Impact Assessment
- Mitigation, Modeling, and Monitoring
- Permit Decision Challenges





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Regulatory Program Goals



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- Protect navigation and prevent obstructions in the nation's waters
- Provide strong protection of the nation's aquatic environment, including wetlands
- Enhance the efficiency of regulatory program administration
- Provide fair and reasonable decisions






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Regulatory Authorities



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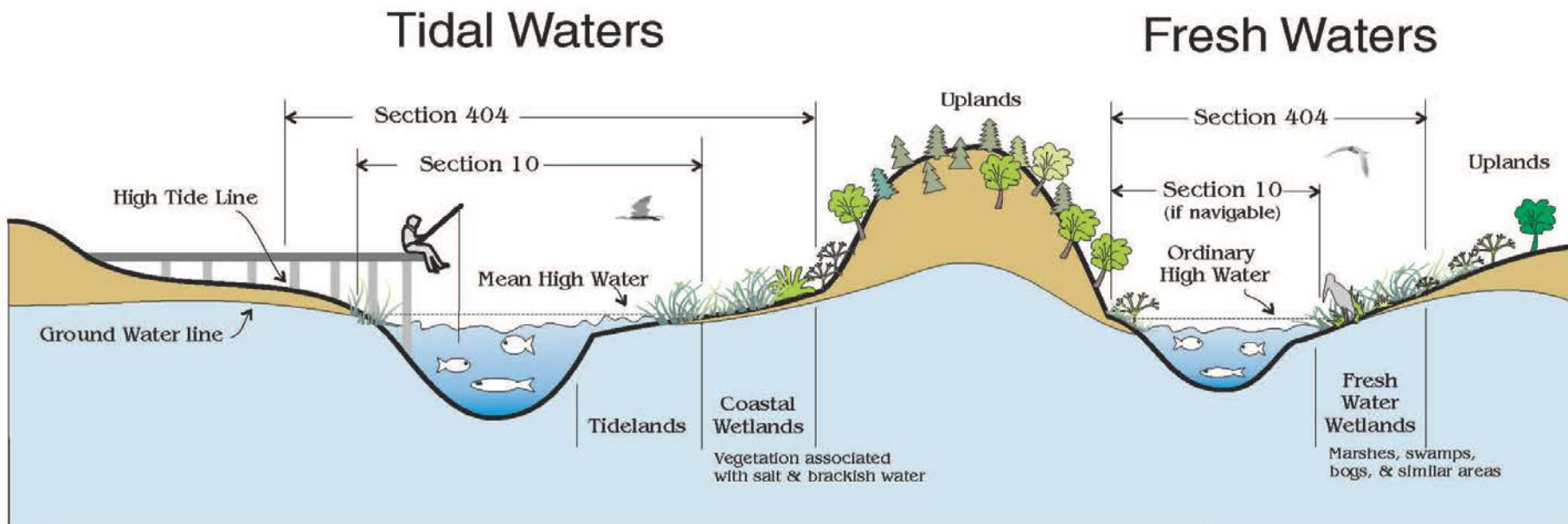
| Authority | Geographic | Activity | |
|---|---|--|---|
| <p>Section 10 Rivers and Harbors Act of 1899</p> | <p>Navigable Waters of the United States</p> | <p>All work over, through and under navigable waters (e.g. dredging, docks, and beach renourishment)</p> |  <p><i>Residential Docks, Destin, Florida</i></p> |
| <p>Section 404 Clean Water Act of 1977</p> | <p>Waters of the United States including wetlands</p> | <p>Discharge of dredged or fill material</p> |  <p><i>Rio Guayanilla, Puerto Rico</i></p> |
| <p>Section 103 Marine Protection, Research and Sanctuaries Act</p> | <p>Ocean</p> | <p>Transportation of dredged material for the purpose of disposal in the ocean</p> |  <p><i>Gulf of Mexico, near Pensacola, Florida</i></p> |



Regulated Waters



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Section 103 Ocean Discharge of Dredged Material

Ocean discharges of dredged material

Typical examples of regulated activities

Section 404 Disposal of Dredged or Fill Material (all waters of the U.S.)

All filling activities, utility lines, outfall structures, road crossings, beach nourishment, riprap, jetties, some excavation activities, etc.

Section 10 All Structures and Work (navigable waters)

Dredging, marinas, piers, wharves, floats, intake / outtake pipes, pilings, bulkheads, ramps, fills, overhead transmission lines, etc.



Section 10 RHA



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Mean High Water (MHW) is the shoreward limit for tidal waters; line on the shore reached by the plane of the average high water.

- Where precise determination becomes necessary, it must be established by survey with reference to available tide datum, preferably averaged over a period of 18.6 years.
- Where an estimate is needed, observation of the “apparent shoreline” which is determined by reference to physical markings, lines of vegetations or changes in type of vegetation may be used.



Section 404 CWA



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High Tide Line (annual) is the shoreward limit of jurisdiction for tidal waters; intersection of land and water at the maximum height reached by a rising tide. (Spring Tide).

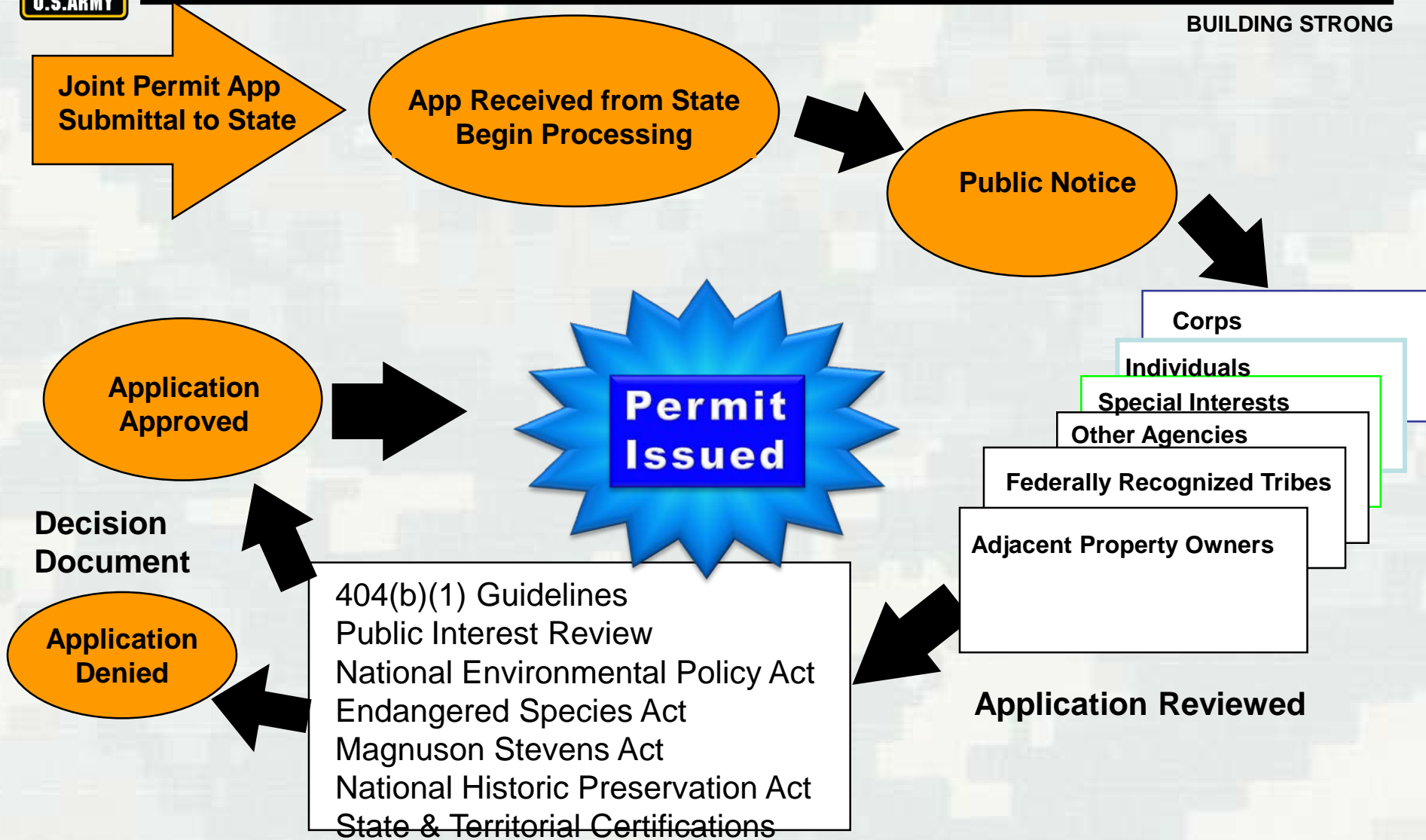
- Where precise determination becomes necessary, it must be established by survey with reference to available tide datum, preferably averaged over a period of 18.6 years
- Where an estimate is needed, observation of the “apparent shoreline” which is determined by reference to physical markings, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, lines of vegetation or changes in type of vegetation.



Permit Evaluation Process



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Section 404(b)(1) Guidelines



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- *“No discharge of dredged or fill material shall be permitted if there is a **practicable** alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a)*

- **Practicable** means:
 - available
 - capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose



National Environmental Policy Act



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- Federal agencies required to consider environmental consequences and reasonable alternatives before making final decisions
- Federal agencies are required to prepare an Environmental Impact Statement (EIS) for a proposed major action that may significantly affect the quality of the human environment.
- Less impactful projects are evaluated in an Environmental Assessment (EA)
- New beach nourishment projects are generally evaluated in an EIS

When to do an EIS



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Test for Significance (40 CFR 1508.27)

1. Beneficial and Adverse effects*
2. Public Health and Safety
3. Uniqueness of Area
4. Controversy* Case law/scientific controversy
5. Uncertain, Unique, or Unknown Risks
6. Precedent for Future Actions
7. Cumulative Impact*
8. Scientific, Cultural, or Historic Resources
9. Endangered or Threatened Species*
10. Threaten Violation of Federal Environmental Law

* - Most common issues in USACE projects





Endangered Species Act



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- Section 7 requires federal agencies consult with the Services to ensure their actions are not likely to jeopardize the continued existence of listed species or their critical habitat
- Programmatic Biological Opinions (BOs)
 - 1997 NMFS South Atlantic Regional Biological Opinion (SARBO) (being updated)
 - 2003 NMFS Gulf Regional Biological Opinion (GRBO)
 - 2011/2015 FWS Sand Placement BO
 - 2013 FWS Piping Plover BO
 - 2016 FWS SAJ-93 BO



Magnuson Stevens Fishery

Conservation Management Act



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- Federal agencies consult with NMFS when their actions have an adverse effect on Essential Fish Habitat (EFH).
- EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.”
- Hardbottom is identified as Habitat Area of Particular Concern (HAPC), an EFH that is important ecologically and/or vulnerable to degradation.
- NMFS provides Conservation Recommendations (CRs) to avoid, minimize, mitigate adverse effects



Compensatory Mitigation



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Mitigation is a sequential process:

- Avoid
- Minimize
- Provide for compensatory mitigation for unavoidable impacts to aquatic resources

Mitigation Rule:

- “Levels the playing field” by requiring 12 mitigation plan components for **all** types of compensatory mitigation (mitigation banks, in-lieu fee, and permittee-responsible)
- Establishes a watershed-based preference hierarchy for compensatory mitigation
- Requires financial assurances for **both** mitigation project implementation **and** long-term management



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Impact Assessment & Mitigation



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- Unified Functional Assessment Methodology
- Habitat Equivalency Analysis
- FL Keys National Marine Sanctuary Protocol (\$10K per m²)
- Ratio
- Best Professional Judgement





Modeling Analysis



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- Narrative describing natural geographical setting of project site.
- Project purpose and need.
- Narrative of engineering objectives, methods employed and results, including:
 - ▶ Model/tool selection
 - ▶ Input data
 - ▶ Field data used for calibration/verification purposes
 - ▶ Model calibration/verification
 - ▶ Engineering alternative formulation and evaluation
 - ▶ Discussion of selected alternative, including any impacts to adjacent areas.
- Detailed description of proposed project including design drawings.



Monitoring



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- ▶ Surveys to understand shoreline response and volume changes
- ▶ Surveys to understand shoaling and dredging requirements
- ▶ Physical and biological monitoring with appropriate control sites
- ▶ Adaptive Management & corrective measures

Regional Sediment Management



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- Recognizes sediment as valuable resource.
- Regional implementation strategies across multiple projects and business lines.
- Enhances relationships with stakeholders and partners to better manage sediments across a region.
- Share lessons learned, data, tools, and technology.



Permit Decision Challenges



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- Insufficient information from the applicant
- Complexity of decision making
- Documentation required
- Delays with other agencies
 - Endangered Species (no timelines for completion)
 - Essential Fish Habitat
- Other parties attempting to use USACE outside of our authority
- Influence from outside interest(s)





Questions?



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