

U.S. ARMY CORPS OF ENGINEERS: COMMON PERMITTING SCENARIOS

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DISCUSSION TOPICS

- Program Overview
- Jurisdiction
- OHWM
- Types of Permits
- Common Scenarios



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CORPS REGULATORY JURISDICTION

Section 10 of the RHA of 1899 (33 USC 403):

Prohibits the unauthorized obstruction or alteration of any “navigable water of the United States.”

Section 404 of the Clean Water Act (33 USC 1344):

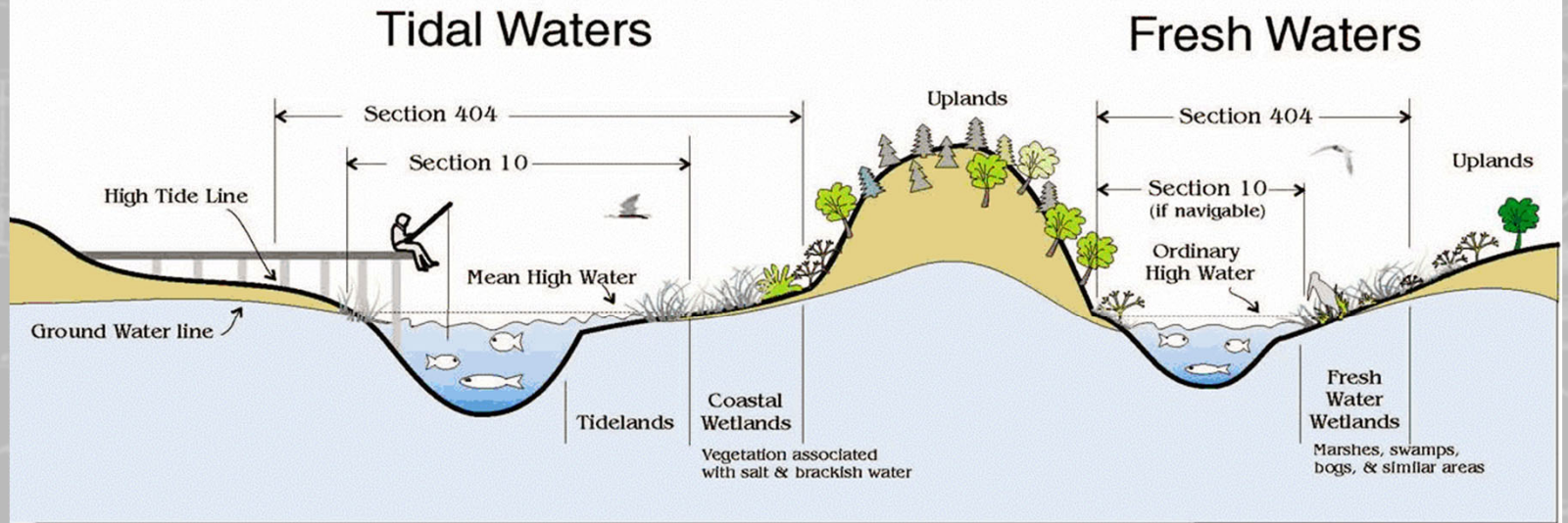
Prohibits the discharge of dredged or fill material into all “waters of the United States, including wetlands” without obtaining a permit from the Corps of Engineers.



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WATERS OF THE UNITED STATES

CORPS OF ENGINEERS REGULATORY JURISDICTION



- | | | | |
|---|--|---|---|
| <p>Typical examples of regulated activities</p> | <p>Section 103
Ocean Disposal of Dredged Material</p> <p>Ocean discharges of dredged material</p> | <p>Section 404
Discharge of Dredged or Fill Material (all waters of the U.S.)</p> <p>All filling activities, utility lines, outfall structures, road crossings, beach nourishment, riprap, jetties, some excavation activities, etc.</p> | <p>Section 10
All Structures and Work (navigable waters)</p> <p>Dredging, marinas, piers, wharves, floats, intake / outtake pipes, pilings, bulkheads, ramps, fills, overhead transmission lines, etc.</p> |
|---|--|---|---|



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RHA Navigable Waters Above the Georgia Fall-line

- Chattahoochee River below Gainesville
- Tallapoosa River
- Coosawattee River below Ellijay
- Conasauga River
- Toccoa River
- South & West Chickamauga Creeks
- Coosa River & Oostanaula River (but NOT Etowah)
- Corps Lakes - Lanier, Hartwell and Carters Lake (but NOT Allatoona)
- TVA Lake Blue Ridge (but NOT Nottely or Chatuge)



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SECTION 404 OF THE CLEAN WATER ACT

To restore and maintain the chemical, physical and biological integrity of the waters of the U.S. Requires that you obtain a permit from the Regulatory Branch for the **discharge of dredged or fill material** in any **water of the U.S., including wetlands.**



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SECTION 404 OF THE CLEAN WATER ACT

Definitions:

High Tide Line: shoreward limit of Corps jurisdiction for all **tidal** waters (Section 404 regulated activities); intersection of land and water at the **maximum** height reached by a rising tide.

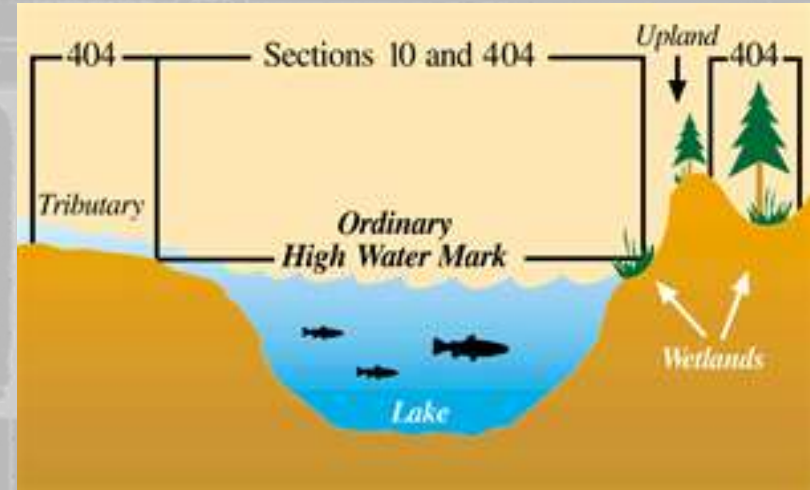


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SECTION 404 OF THE CLEAN WATER ACT

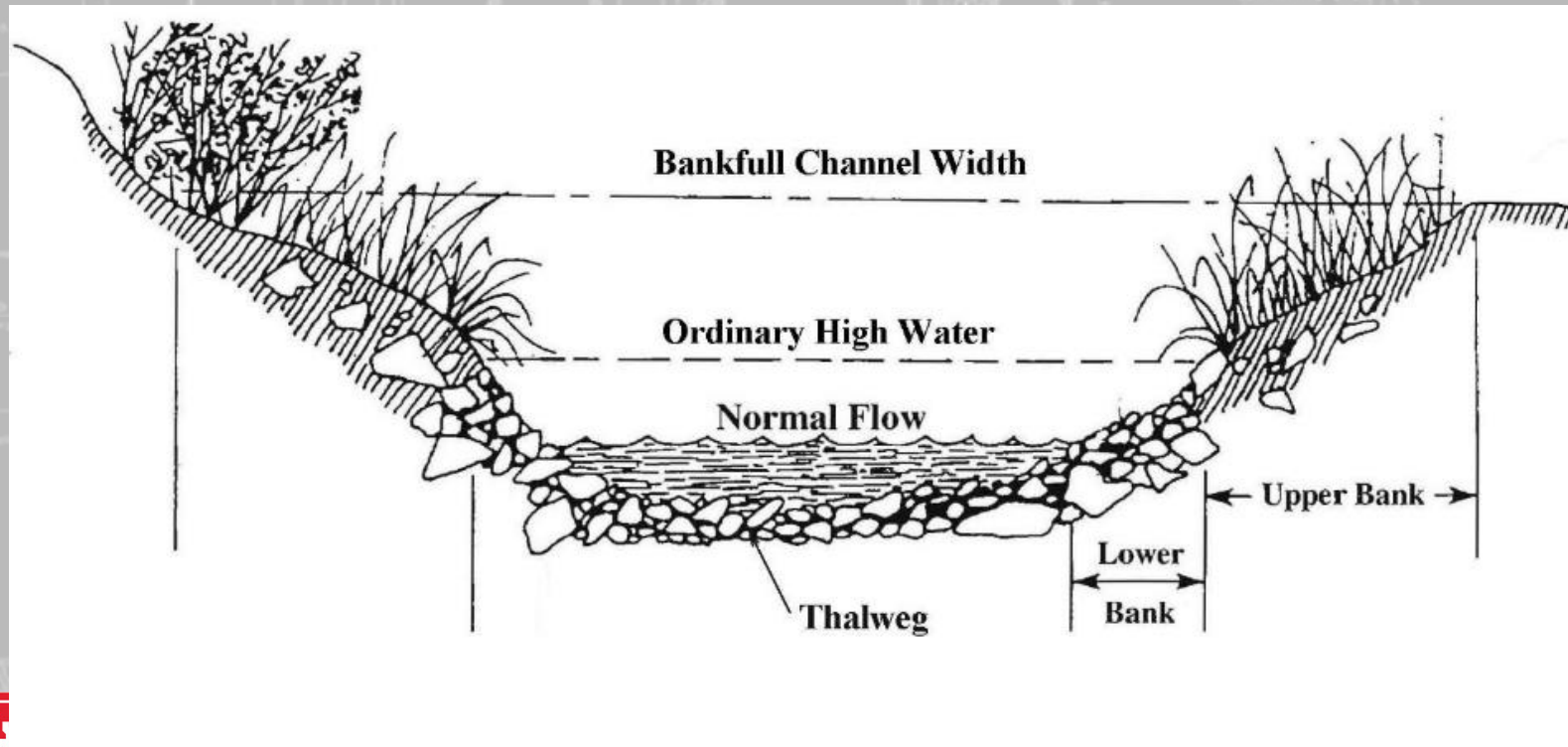
Definitions:

Ordinary High Water: shoreward limit of Corps jurisdiction for all **non-tidal** waters; line on the shore of streams and lakes established by the normal fluctuations in the water level.



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TYPICAL STREAM CROSS-SECTION



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STREAM BED AND BANK

- The bed is the physical confine of the normal water flow.
- The stream banks are the lateral channel margins during all but flood stage.



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CHARACTERISTICS OF AN OHWM

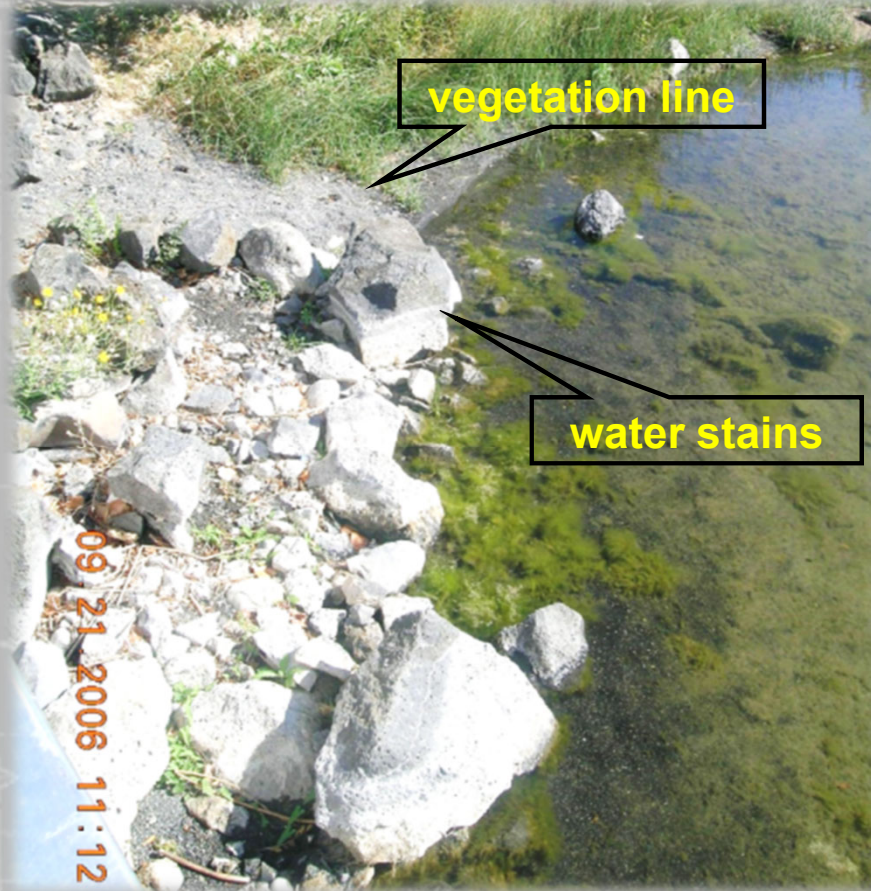
REGULATORY GUIDANCE LETTER (RGL) 05-05

- Clear, natural line impressed on the bank
- Changes in the character of soil
- Shelving
- Vegetation matted down, bent, or absent
- Leaf litter disturbed or washed away
- Sediment deposition
- Water staining
- The presence of litter and debris
- Destruction of terrestrial vegetation
- The presence of wrack line
- Sediment sorting
- Scour
- Multiple observed or predicted flow events
- Abrupt change in plant community



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ORDINARY HIGH WATER MARK LINE OF JURISDICTION IN FRESHWATER



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ORDINARY HIGH WATER MARK (OHWM)



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WHAT REQUIRES A SECTION 404 PERMIT?*

- Placement of fill material
- Slab-on-grade foundations
- Most road construction
- Dam construction and Impoundment
- Levee and dike construction
- Some mechanized land clearing
- Grading and landscaping
- Some pile-supported structures

*In other words, most projects involving the placement of fill, or dredged material into waters.



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ACTIVITIES REGULATED AS A “DISCHARGE OF **FILL** MATERIAL”

Material that has the effect of:

- Replacing any portion of a water of the U.S. with dry land; or
- Changing the bottom elevation of any portion of a water of the U.S.



- Fill material includes: Rock, Sand, Soil, Clay, Plastics, Construction debris, Wood chips, Overburden from excavation, or Materials used to create any Structure in waters of the US.



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ACTIVITIES REGULATED AS A “DISCHARGE OF **DREDGED** MATERIAL”

mechanized land clearing (side-casting dredged material)
grading
excavation (with associated discharge)



Trenching in wetlands



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ACTIVITIES REGULATED UNDER SECTION 404



Discharge of "dredged" material into wetlands



riprap



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PERMITTING

- There is no minimum threshold for impacts – **ASSUME ALL FILLS REQUIRE A PERMIT**
- Some regulated activities do not require notification to the Corps prior to construction
- We encourage communication with our office on **ALL** potentially regulated activities



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TYPES OF STANDARD PERMITS

Letters of Permission (LOP): Abbreviated process. Used to authorize minor projects, with no significant environmental impacts and should encounter no appreciable opposition. (Docks, etc.)

Individual Permits (IP): Issued for projects that have more than a minimal impact on the environment. Pre-application meetings are held in our Piedmont and Savannah offices.



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TYPES OF GENERAL PERMITS

▪ **General Permits (GP):** Issued for projects similar in nature and cause only minimal environmental impacts. For example:

1. Nationwide Permits (NWP)

- Wetland fills of less than ½ acre and/or stream impacts of less than 300'
- Minor road crossings
- Buried utility lines
- Sand bed for septic systems
- Private residences
- Bank stabilization

2. Regional Permits (RP)

- Private boat docks
- Public boat ramps
- Artificial offshore reefs
- County road improvements



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WHAT IS A NATIONWIDE PERMIT (NWP)?

Type of General Permit
Issued by Headquarters every 5 years
Streamlined review process for projects with minimal aquatic impacts

- Utility Lines
- Transportation
- Bank Stabilization
- Residential, Commercial and Institutional Developments
- Repair and Maintenance of Existing Structures



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2021 NWPS

- 1) Aids to Navigation
- 2) Structures in Artificial Canals
- 3) Maintenance
- 4) Fish & Wildlife Harvesting, Enhancement & Attraction Devices and Activities
- 5) Scientific Measurement Devices
- 6) Survey Activities
- 7) Outfall Structures and Associated Intake Structures
- 8) Oil and Gas Structures on the Outer Continental Shelf
- 9) Structures in Fleeting and Anchorage Areas
- 10) Mooring Buoys
- 11) Temporary Recreational Structures
- 12) Oil and Natural Gas Pipeline Activities
- 13) Bank Stabilization
- 14) Linear Transportation Projects
- 15) U.S. Coast Guard Approved Bridges
- 16) Return Water from Upland Contained Disposal Areas
- 17) Hydropower Projects
- 18) Minor Discharges
- 19) Minor Dredging
- 20) Response Operations for Oil or Hazardous Substances
- 21) Surface Coal Mining Activities
- 22) Removal of Vessels
- 23) Approved Categorical Exclusions
- 24) Indian Tribe or State Administered Section 404 Programs
- 25) Structural Discharges
- 26) [Reserved]
- 27) Aquatic Habitat Restoration, Establishment, and Enhancement Activities
- 28) Modifications of Existing Marinas
- 29) Residential Developments
- 30) Moist Soil Management for Wildlife
- 31) Maintenance of Existing Flood Control Facilities
- 32) Completed Enforcement Actions
- 33) Temporary Construction, Access and Dewatering
- 34) Cranberry Production Activities
- 35) Maintenance Dredging of Existing Basins
- 36) Boat Ramps
- 37) Emergency Watershed Protection and Rehabilitation
- 38) Cleanup of Hazardous and Toxic Waste
- 39) Commercial and Institutional Developments
- 40) Agricultural Activities
- 41) Reshaping Existing Drainage Ditches
- 42) Recreational Facilities
- 43) Storm water Management Facilities
- 44) Mining Activities
- 45) Repair of Uplands Damaged by Discrete Events
- 46) Discharges in Ditches
- 47) Reserved
- 48) Commercial Shellfish Mariculture Activities
- 49) Coal Remining Activities
- 50) Underground Coal Mining Activities
- 51) Land-Based Renewable Energy Generation Facilities
- 52) Water-Based Renewable Energy Generation Pilot Projects
- 53) Removal of Low Head Dams
- 54) Living Shorelines
- 55.) Seaweed Maricultural Activities
- 56.) Finfish Mariculture Activities
- 57.) Electric Utility Line and Telecommunications Activities
- 58.) Utility Line Activities for Water and Other Substances
- 59.) Water Reclamation and Reuse Facilities



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NAVIGATING THE NWP PROGRAM

- Does the proposed activity qualify (i.e. does it meet the “terms” of a NWP)?
- Does the proposed activity comply with the NWP General Conditions? The District Regional Conditions?
- Will the proposed activity result in minimal individual or cumulative adverse environmental effects?



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PIPELINE PROJECTS

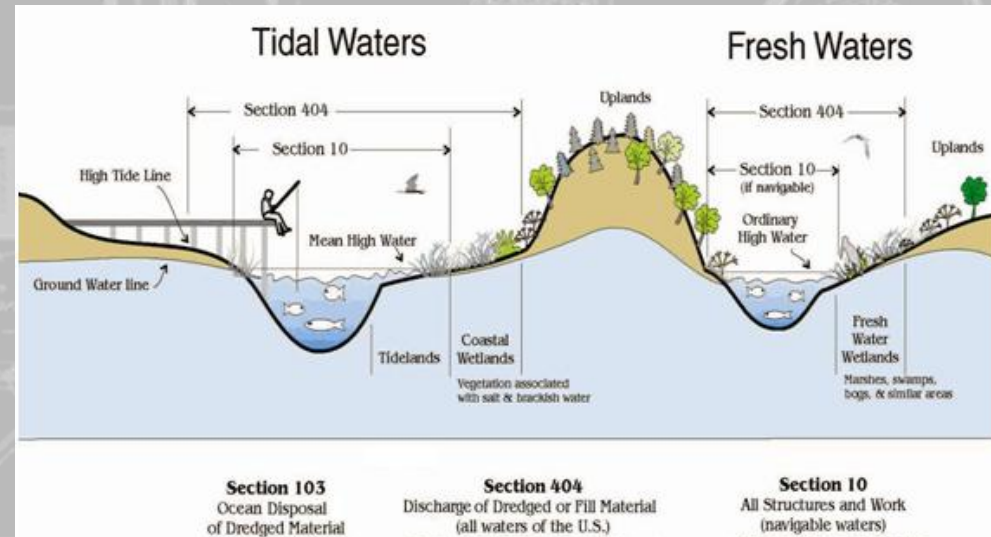
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Piedmont Branch
March 29, 2023



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CORPS JURISDICTION

The area of pipeline projects which must maintain erosion control in connection with Department of the Army permits are all crossings of waters of the United States and the slopes which drain directly to the waterway.



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METHODS FOR CROSSING

- **Open-cut trenching:** Material is excavated and side casted to accommodate pipe installation. Pre-construction contours are restored upon completion of work.
- **Directional boring:** Minimal impact trenchless method of installing underground utilities along a prescribed underground path using a surface-launched drilling. Utilized to avoid impacts to waters entirely.
- Aerial crossings or pipes installed within roadways are other options to avoid discharges.

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



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IMPACT MINIMIZATION METHODS IN STREAMS

Plan #1 (lower velocity streams):

- Install straw bales/silt screening downstream of construction area.
- For swifter streams, install water dams (small coffer dams) up stream to divert flows

Plan #2 (higher velocity streams that prevent the implementation of silt screens across the entire width of the stream.):

- Install turbidity curtains alone or around coffer dams; has a flotation boom and a weighted bottom load line which allows sediment to settle to the stream bed from the bank thus minimizing the impact of equipment in the stream



CUI



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IMPACT MINIMIZATION METHODS IN WETLANDS

- Construction across wetlands should be performed so that the **disturbance of wetland vegetation is minimized**.
- Construction methods should **minimize the extent of construction equipment usage in wetland areas**. Trenching equipment and backfilling equipment working in wetlands shall be placed on mats or mud boards.
- The **top 6 to 12 inches of the trench is required to be backfilled with topsoil from the trench**. Excess backfill shall be disposed of on dry land rather than in wetlands.
- After construction, the wetland crossing must be **restored to preconstruction bottom contours** and maintained in wetland vegetation.
- If proper construction procedures are followed and the hydrology of the site is not adversely affected, the wetland should naturally revegetate.



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OTHER TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES

2021 Nationwide Permit General Condition 12:

Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

- Sediment barriers
- Interceptor dikes
- Trench plugs (breakers)
- Trench dewatering
- Diversion ditches
- Sediment ditches
- Sediment basins
- Flexible downdrains
- Nonvegetative soil stabilizations
- Temporary seeding and revegetation



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PERMANENT RESTORATION MEASURES

1. Construct or leave previously constructed interceptor dikes (as needed).
2. Fertilize and lime slopes (as needed).
3. Seed the area with two to five native species.
4. Employ the addition of nonvegetative stabilization (mulching, matting, etc.), if vegetative stabilization is insufficient.
5. Put sediment barriers (hay bales, fabric fence, etc.) where drains and ditches allow sediment to enter the waterway or wetland.
6. Implement stream bank stabilization (as needed).
7. Remove temporary structures which are not necessary and are not biodegradable.
8. If warranted, monitor and maintain erosion control measures until stabilization of the area has been accomplished satisfactorily.



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EROSION AND SEDIMENT CONTROL-COASTAL GA

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OUTLINE

Erosion and sedimentation happens in the Coastal Plain in many ways and the Corps has a hand in helping to fix and or prevent such issues.

Typical E&S projects:

- Beach Renourishment
- Silt Suspension
- Dredging Maintenance



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TYBEE BEACH RENOURISHMENT PROJECT



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SAINT SIMONS REVETMENT PROJECT



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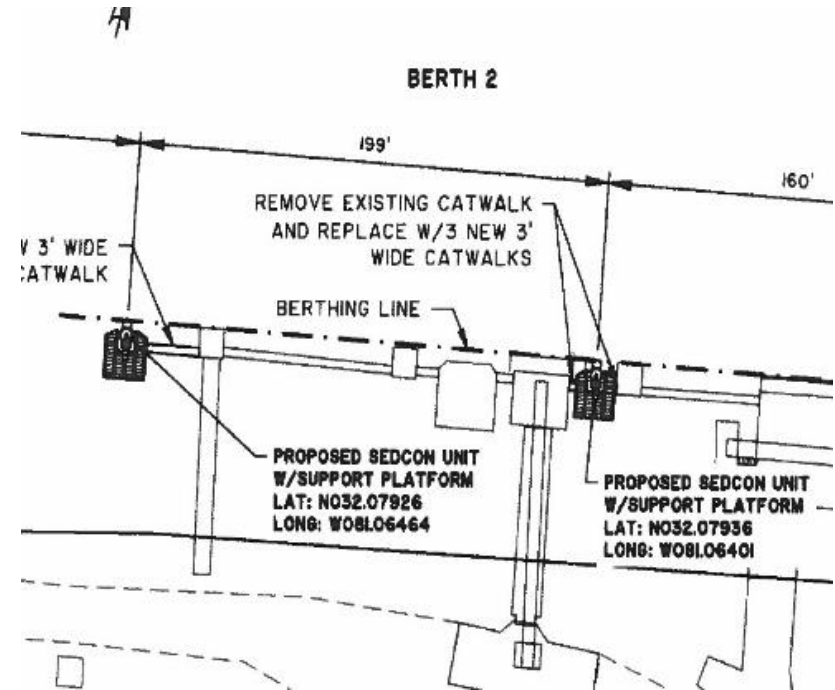
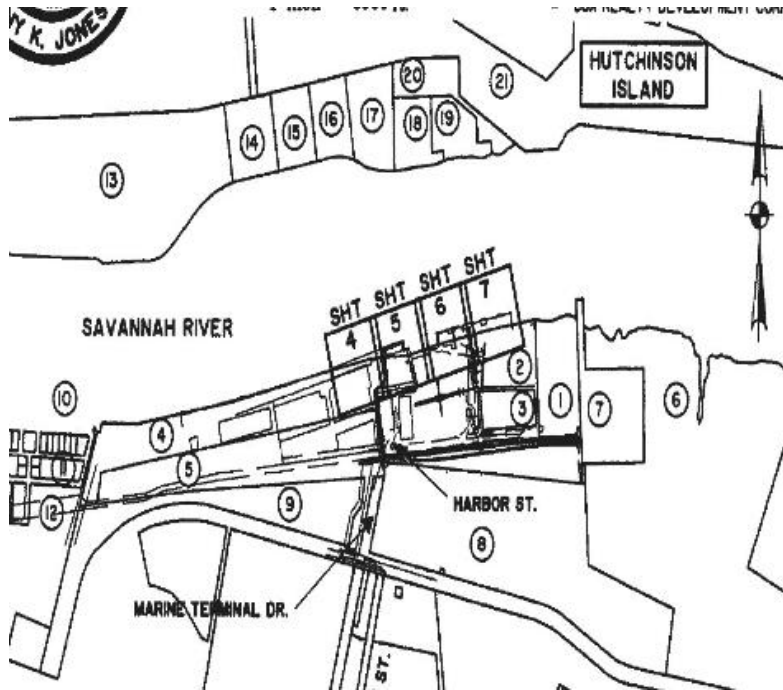
SAVANNAH RIVER MAINTENANCE DREDGING



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SILT SUSPENSION UNIT PROJECT



BANK STABILIZATION NWP 13

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March 29, 2023



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NATIONWIDE PERMIT 13

Stream Bank Stabilization Criteria

1. No material in excess of min. necessary for erosion protection
2. No more than 500 linear feet in length (each bank counts separately)
3. Will NOT exceed average of one cubic yd./ running ft.
4. No discharges into special aquatic sites (i.e. wetlands, etc.)
5. No material will impair surface water flow into/ out WOTUS



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NATIONWIDE PERMIT 13

Stream Bank Stabilization Criteria

6. No material placed that would be eroded by normal or high flows
7. Native plants, used for bioengineering or vegetative bank stabilization
8. NOT a stream channelization activity
9. Must be maintained after severe storm events

Note: Authorizes temporary structures, fills, work, (temporary mats) to construct the bank stabilization activity.



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NATIONWIDE PERMIT 13

Stream Bank Stabilization Notification

Permittee must submit Pre-construction Notification (PCN) if the activity involves:

- Discharges into special aquatic sites
- Excess of 500 linear feet (each bank counts separately)
- Greater than one cubic yd. / running ft.



General Conditions Apply to all NWP's

<https://www.sas.usace.army.mil/Missions/Regulatory/Permitting/General-Permits/Nationwide-Permits/>



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NATIONWIDE PERMIT 13

Stream Bank Stabilization

Regional Conditions:

- PCN required for all NWP 13 – perennial streams
- PCN required if over 0.10-acre wetland or 100 linear feet stream impacts



<https://www.sas.usace.army.mil/Portals/61/docs/regulatory/2017%20Regional%20Conditions.pdf?ver=2017-07-20-103845-383>



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EXAMPLES: UNSTABLE BANKS



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EXAMPLES: HARD ARMORING Gabion Baskets



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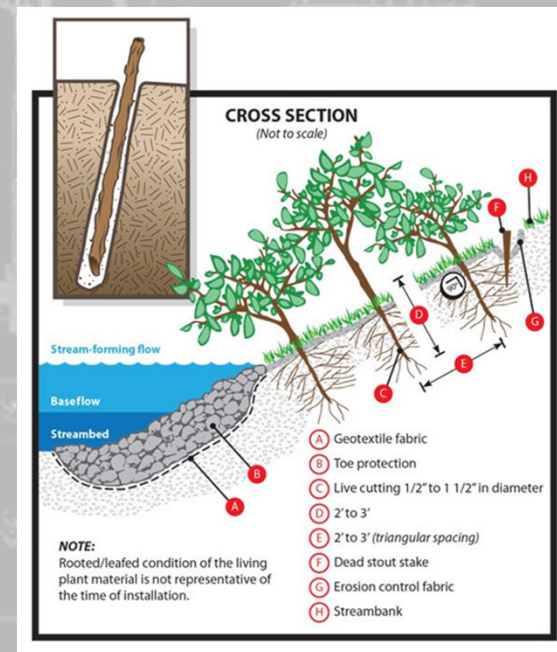
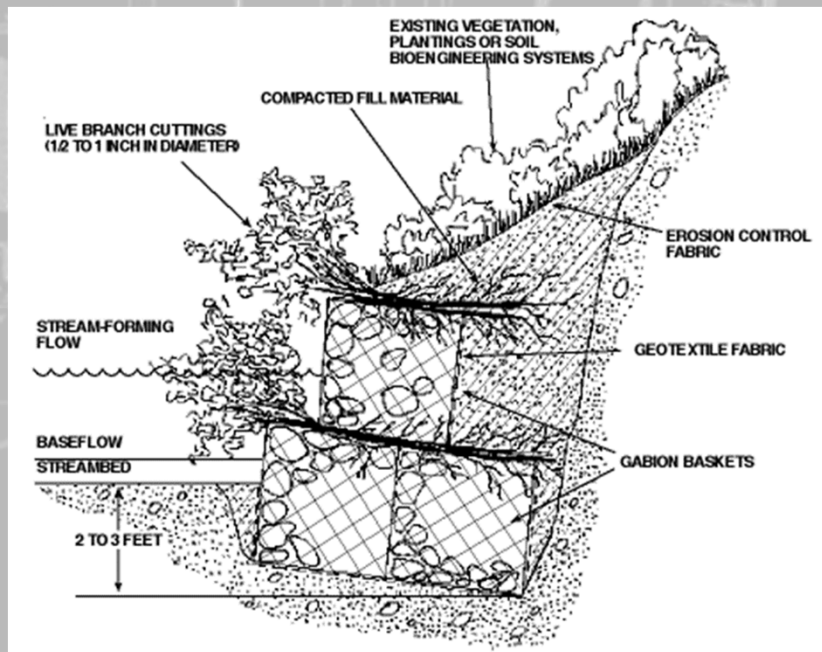
EXAMPLES: SOFT ARMORING

Vegetation/ Bioengineering



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EXAMPLES: HARD AND SOFT ARMORING COMBO



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EXAMPLES: BEFORE (ALASKA)



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EXAMPLES: AFTER (ALASKA)



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QUESTIONS?



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<http://www.sas.usace.army.mil/Missions/Regulatory.aspx>