

Essential Skills for Living Shorelines

Navigating the Permitting Process for General Permits Type 1 or 2 at the Federal, State, and Local Level

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Living Shoreline Regulations and Permits

LEARNING OBJECTIVES:

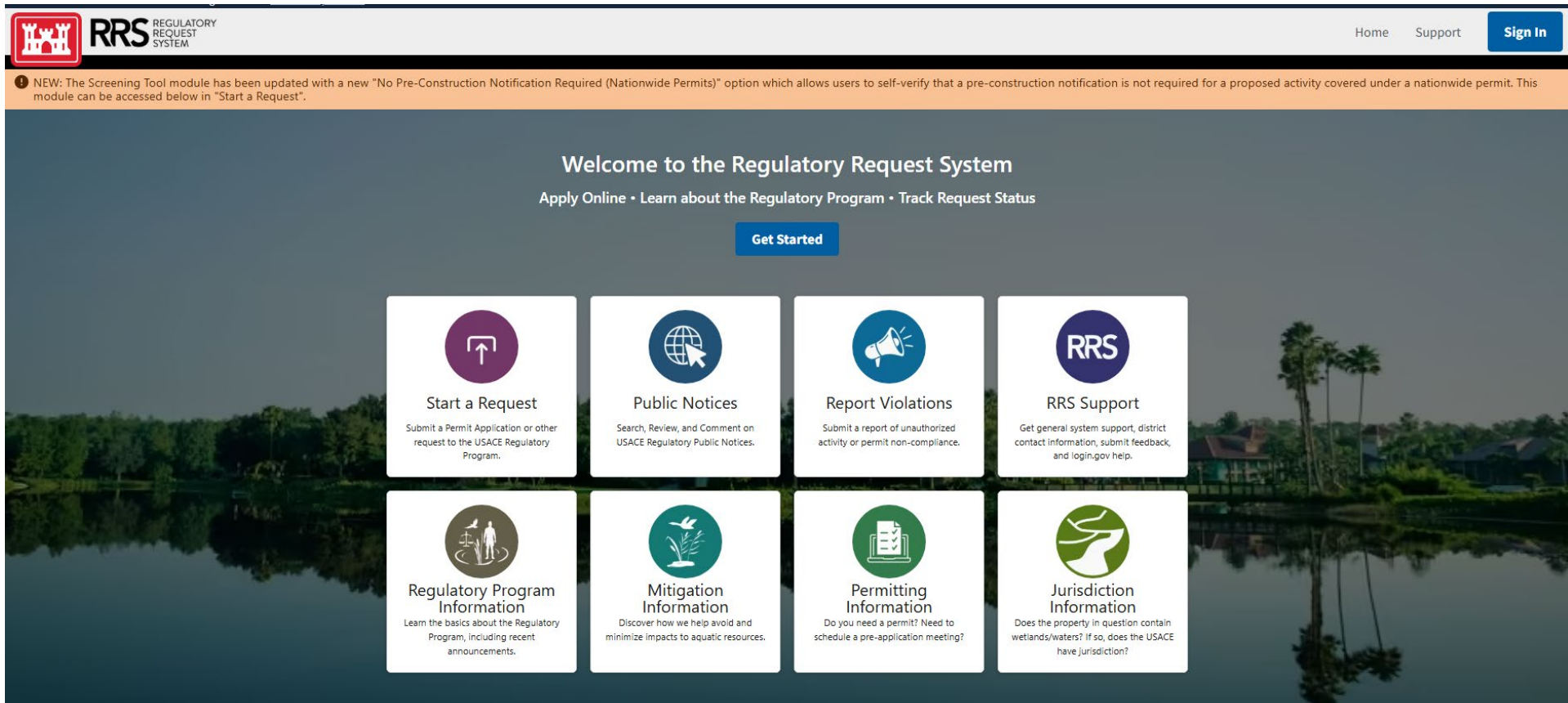
- Become familiar with the regulatory agencies and jurisdictions related to General Permits 1 & 2
- Learn requirements of the JPA and how to complete
- Understand factors that trigger additional review or delays in permit processing
- Understand that there are other federal, state and local permit or project approvals that may be relevant to the LS project.
- Professional Best Practice: Each locality and the people on staff and on boards are unique. You need to be familiar with locality requirements prior to starting work
- Form relationships with these regulators and technical advisors and call on them when in doubt and early in the project before you design or implement.

Essential Skills for Living Shorelines

Navigating Permitting at the Federal Level

The permitting process

- Virginia Joint Permit Applications can be found: <https://www.nao.usace.army.mil/Missions/Regulatory/JPA>
- Fill out application and submit to US Army Corps of Engineers (<https://rrs.usace.army.mil/rrs>) which will be distributed to VMRC, VA DEQ, and the locality



The permitting process

Quick Answers

Browse by category to find answers to frequently asked questions.



Account & Login

Login.gov setup, authentication, profile management

How do I create an RRS account...

How do I reset my password...

I keep getting signed into the wrong...



Getting Started

First steps, navigation, and RRS basics

What types of requests can I submit...

How do I start a new request...

Where is my dashboard...



GIS & Geodatabase

Spatial data uploads, format requirements, and error fixes

What coordinate system should I use...

How do I fix "Data is Not Dissolved..."

What geometry types does RRS support...



Managing Requests

Tracking status, editing, withdrawing, and sharing requests

How do I check my application status...

Can I edit my request after submitting...

How do I withdraw a request...



Forms & Data Entry

Form validation, required fields, and data entry tips

The dropdown shows no options. It's...

The green checkmark (section complete)...

What should I enter for "Project Area..."



Documents & Uploads

File requirements, size limits, and upload troubleshooting

What are the file upload limits...

My upload is stuck on the spinning wheel...

I uploaded a document but it doesn't...



Troubleshooting

Common errors, issues, and how to fix them

I see a white/blank screen when opening...

I keep getting signed out unexpectedly...

The dropdown menu disappears when I click...



Guides & Tutorials

Step-by-step guides and video tutorials

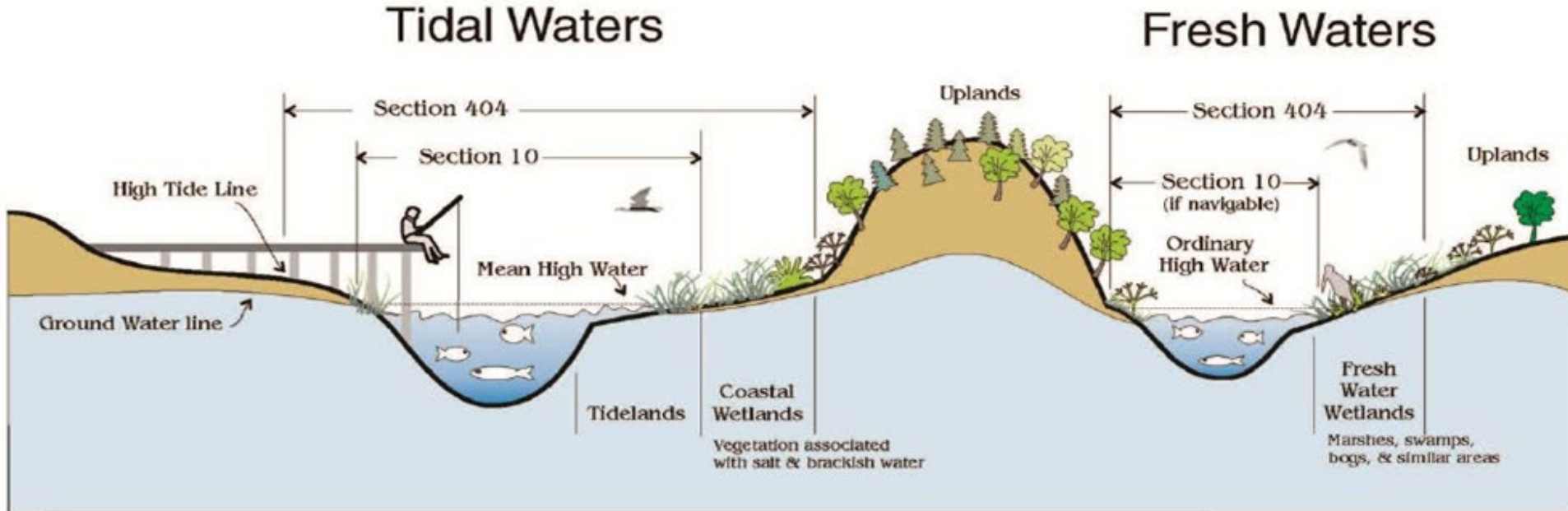
Login.gov Setup

First Request Guide

GDB Preparation

Jurisdiction

CORPS OF ENGINEERS REGULATORY JURISDICTION



Section 103
Ocean Discharge
of Dredged Material

Typical examples
of regulated activities

Ocean discharges of
dredged material

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)

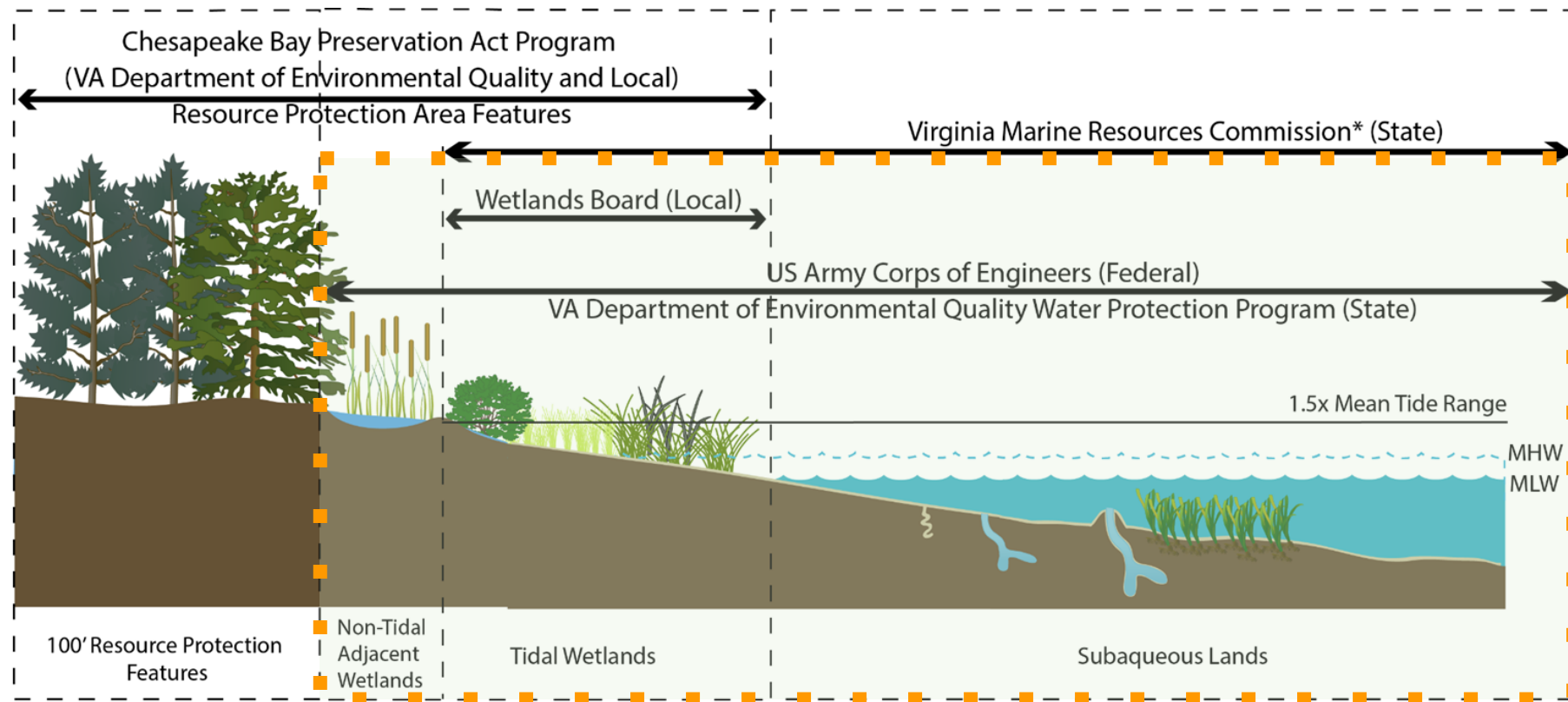
Dredging, marinas, piers, wharves,
floats, intake / outtake pipes,
pillings, bulkheads, ramps, fills,
overhead transmission lines, etc.

Roles & Responsibilities

Authorities

- Section 10 of the Rivers and Harbors Act of 1899 prohibits the unauthorized obstruction, alteration, work or fill of any navigable water of the U.S. unless a permit from the Corps is granted.
 - Breakwaters, riprap, coir logs, sills, oyster castles, reefs, excavating, sand fill, plantings and/or other structures/fill
- Section 404 of the Clean Water Act's purpose is to restore and maintain the chemical, physical and biological integrity of the waters of the U.S and authorizes the Secretary of the Army to issue permits for the discharge of dredged or fill material into the waters of the U.S. at specified disposal sites.
 - Discharge of fill material that would replace or change the bottom elevation of a water of the U.S.

Virginia Tidal Waters JPA: US COE (Federal) + DEQ



* VMRC has oversight authority for the Tidal Wetlands Act and administers the Act in localities without a wetlands zoning ordinance and local wetlands board.

Virginia Shorezone Jurisdictions: legally defined shoreline resources and the relevant local, state and federal authorities. Note that some authorities cross resource boundaries and most resources have at least two responsible regulatory authorities. Symbols courtesy of the Integration and Application Network (ian.umces.edu/symbols/), University of Maryland Center for Environmental Science.

Jurisdiction – Where's the fill?

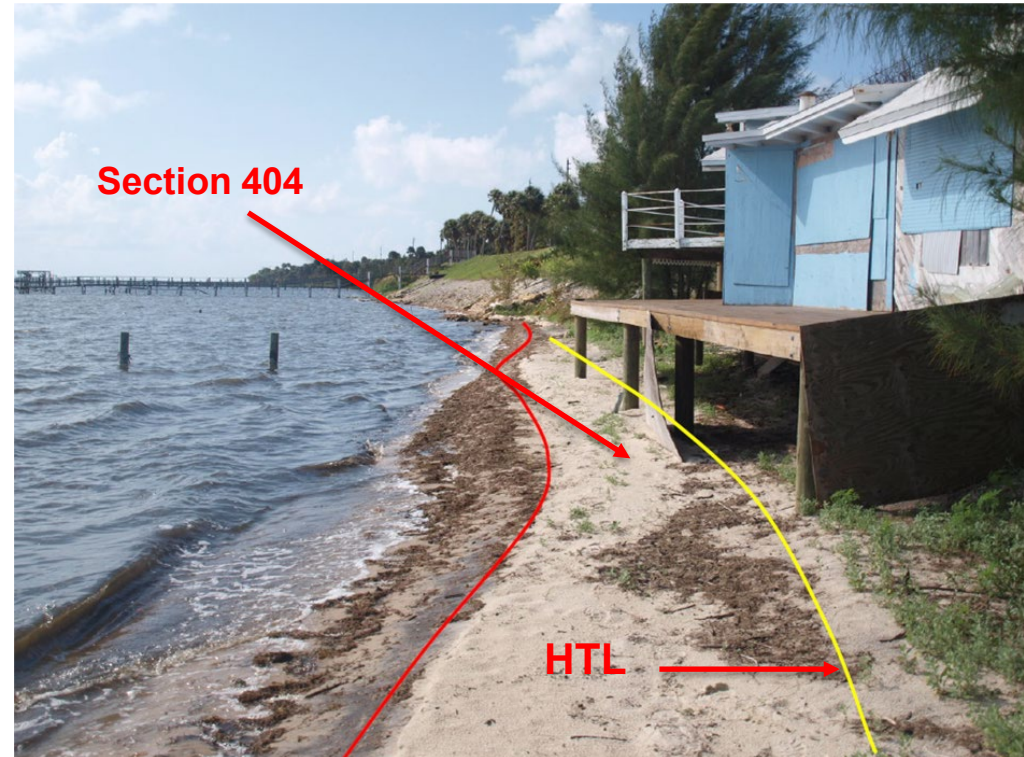
Section 10 – All work in, on, over or under navigable waters

MHW - Shoreward limit for all tidal waters, line on the shore reached by the plane of the mean high water. Precise determination is made by a survey with reference to available tidal datum averaged over a period of approximately 18 years.



Section 404 – Disposal of dredged/fill material within waters of the US

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



Permits and Review

Corps Shoreline Permits

Currently there are 5 general permits that could potentially be used for shoreline work:

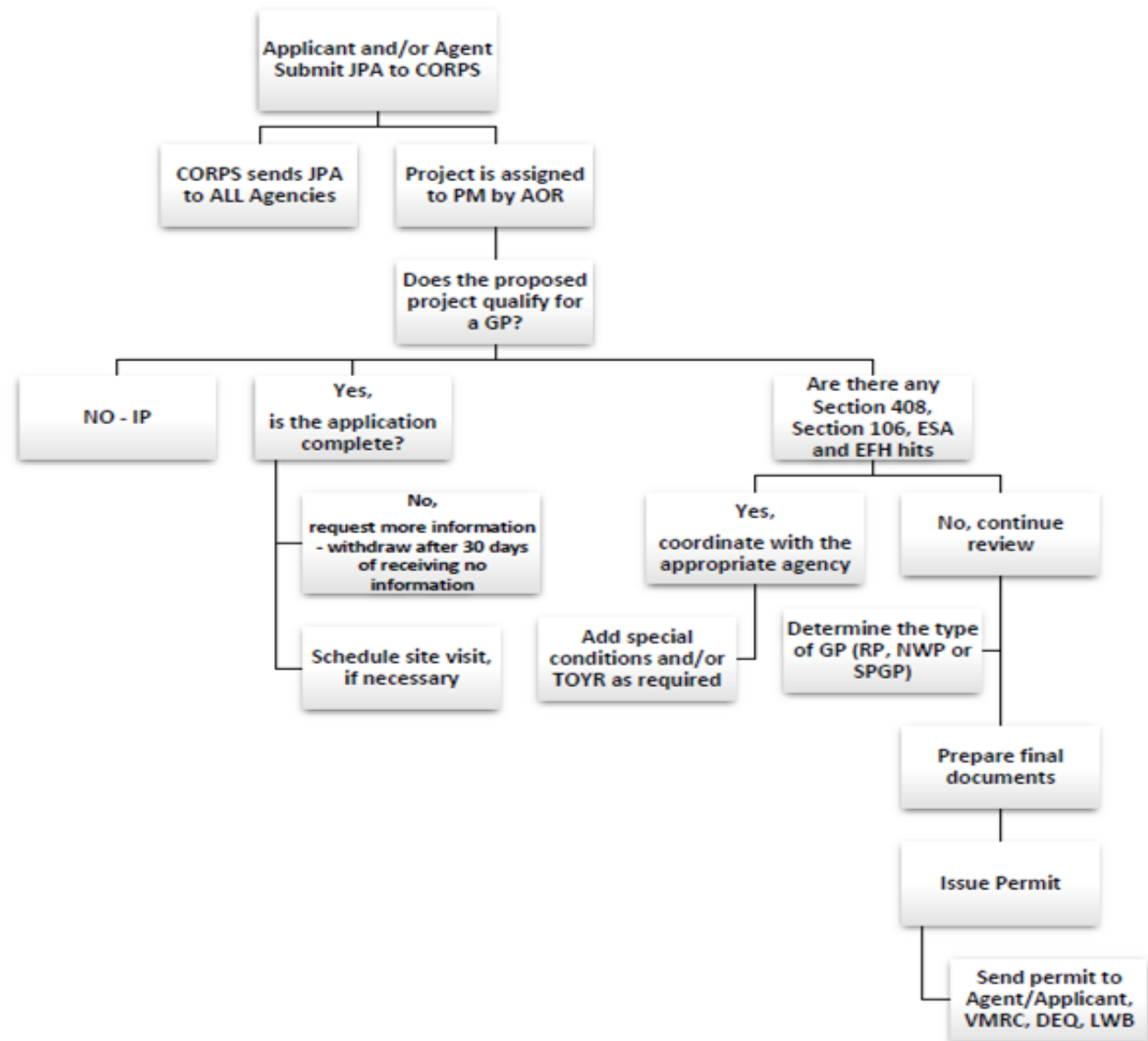
- NWP 13 - Bank Stabilization
- NWP 18 - Minor Discharges
- NWP 27 - Aquatic Habitat Restoration, Enhancement & Establishment Activities
- NWP 54 - Living Shorelines
- 23- SPGP - PASDO – Piers, Aquaculture, Shoreline, Dredging, Other

Each permit has specific limitations and review requirements. Should the proposed project exceed all available limits of the general permits available, then an individual permit would be necessary.

Corps Shoreline Stabilization Permits			
Permit	Statutory Authority	Limits	Other Information
NWP 13 – Bank Stabilization	10/404	• Cannot be more than 500 feet along the bank (unless waived by DE) • Cannot exceed 1 cubic yard per running foot (unless waived by DE)	Activity cannot impair surface water flow into or out of waters of the U.S. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. Native plant species appropriate for site conditions including salinity, must be used for bioengineering or vegetative bank stabilization.
NWP 18 – Minor Discharges	10/404	• Fill cannot exceed 25 cubic yards discharged below plane of O.H.W.M./HTL	Does not authorize discharges for stream diversions
NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities	10/404	None	Does not authorize stream channelization. Does not authorize relocation or conversion of tidal waters. Does not authorize conversion of natural wetlands or streams except for relocation activities. Compensatory mitigation is not required for NWP 27 activities however a detailed monitoring plan is required. NOAA/NMFS coordination is required.
NWP 54 – Living Shorelines	10/404	• Cannot extend farther than 30 feet channelward of mean low water in tidal waters (unless waived by DE) • Cannot be more than 500 feet along the bank (unless waived by DE)	May include stone or reef structures to protect the shoreline from low to moderate energy waves. Living shorelines must have a substantial biological component, either tidal or lacustrine fringe wetlands or oyster or mussel reef structures. Does not authorize beach nourishment or land reclamation activities. NOAA/NMFS coordination is required.
PASDO- CAT B 1. Piers and other Structures (piers, piles, buoys, floats, aids to navigation, osprey poles, e.g.) 2. Aquaculture/Mariculture 3. Shoreline Stabilization (Living shorelines, breakwaters, bulkheads, revetments, backfill, excavation, groins, jetties, e.g.) 4. Dredging (New, Maintenance, Discharge of dredged material) 5. Other (Boat ramps, signs)	10/404	New Dredging- < 2 surface acres < 0.10 acre of cobble, wetland, mudflat or shellfish beds (CAN be waived) No dredging of SAV or Coral reefs Discharge of dredged material must be < 5,000 CY Total amount of Vegetated Wetlands that may be filled, graded or excavated in SF cannot exceed the length of the activity along the shoreline in LF <1 acre of sandy fill material within WO TUS and No net loss of wetlands for restoration projects	New General Conditions added #11 & 12 for pile structures that include a ramp up/ soft start

Understanding and Navigating the Corps Permitting Process in Virginia

Permit Processing Map



The JPA

Everything COE Needs to Know

- complete application with a clear and concise description and diagrams, purpose and need, and properly filled out appendices
- missing information results in delayed processing /issuing permit
- Not all agencies require the same information in order to complete their review and sometimes it is necessary to request additional information

Appendix B: Projects for Shoreline Stabilization in tidal wetlands, tidal waters and dunes/beaches including riprap revetments and associated backfill, marsh toe stabilization, bulkheads and associated backfill, breakwaters, beach nourishment, groins, jetties, and living shoreline projects. Answer all questions that apply. Please provide any reports provided from the Shoreline Erosion Advisory Service or VIMS.

NOTE: It is the policy of the Commonwealth that living shorelines are the preferred alternative for stabilizing tidal shorelines (Va. Code § 28.2-104.1). **Information on non-structural, vegetative alternatives (i.e., Living Shoreline) for shoreline stabilization is available at http://ccrm.vims.edu/coastal_zone/living_shorelines/index.html.**

1. Describe each **revetment, bulkhead, marsh toe, breakwater, groin, jetty, other structure, or living shoreline project** separately in the space below. Include the overall length in linear feet, the amount of impacts in acres, and volume of associated backfill below mean high water and/or ordinary high water in cubic yards, as applicable:

**Describe the activity, materials used, fill
AND SF of restoration area**

2. What is the maximum encroachment channelward of mean high water? _____ feet.
Channelward of mean low water? _____ feet.
Channelward of the back edge of the dune or beach? _____ feet.
3. Please calculate the square footage of encroachment over:
 - Vegetated wetlands _____ square feet
 - Non-vegetated wetlands _____ square feet
 - Subaqueous bottom _____ square feet
 - Dune and/or beach _____ square feet

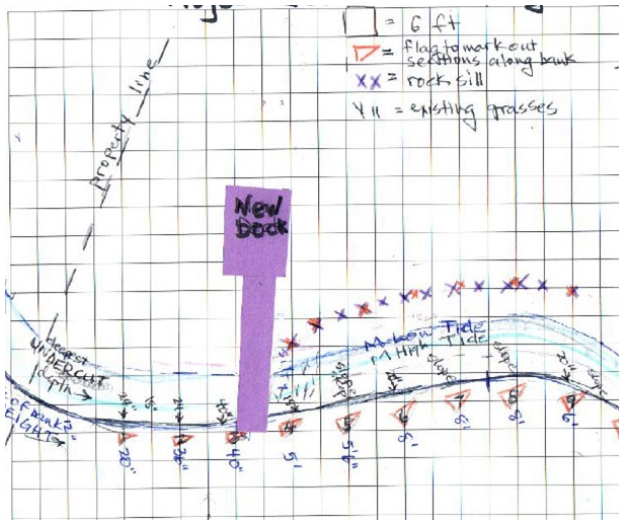
**Direct impacts caused by the
project,
DO NOT list the creation of
wetlands**

The JPA

Why words and diagrams matter

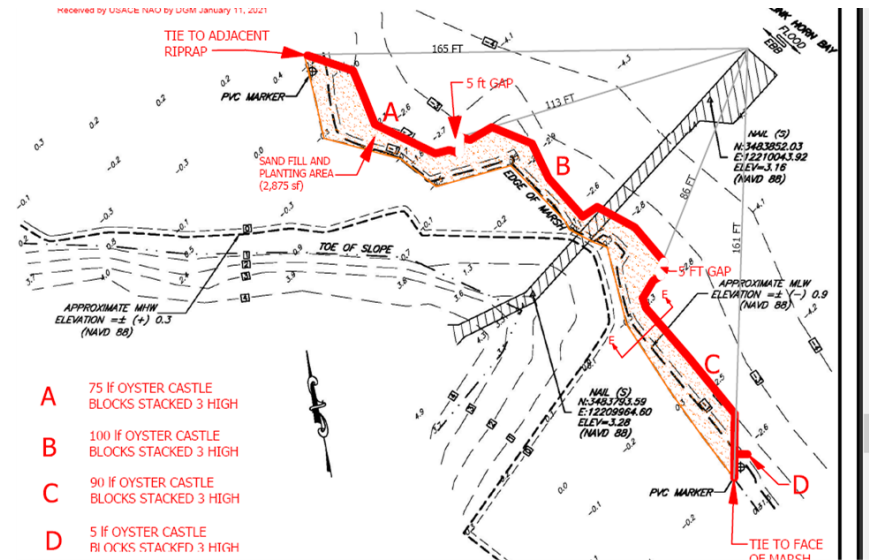
- Provide a detailed description of the project in the space below, including the type of project, its dimensions, materials, and method of construction. Be sure to include how the construction site will be accessed and whether tree clearing and/or grading will be required, including the total acreage. If the project requires pilings, please be sure to include the total number, type (e.g. wood, steel, etc), diameter, and method of installation (e.g. hammer, vibratory, jetted, etc). If additional space is needed, provide a separate sheet of paper with the project description.

Living Shoreline project with sill, sand replenishment, stone revetment, Planting of Spartina alterniflora and patens.



- Provide a detailed description of the project in the space below, including the type of project, its dimensions, materials, and method of construction. Be sure to include how the construction site will be accessed and whether tree clearing and/or grading will be required, including the total acreage. If the project requires pilings, please be sure to include the total number, type (e.g. wood, steel, etc), diameter, and method of installation (e.g. hammer, vibratory, jetted, etc). If additional space is needed, provide a separate sheet of paper with the project description.

The purpose of the project is to create a living shoreline in front of existing, eroding marsh. The existing shoreline experiences erosion primarily from boat wake due to extremely shallow off shore conditions, but also from minor (0.37 mile) fetch. The proposed living shoreline consists of 270 linear feet of oyster castle blocks stacked three blocks high underlain with filter fabric with 2,875 square feet of sand backfill landward of the blocks to prepare a planting area for Spartina alterniflora. The Spartina will be planted on 18 inch centers and the entire planting area will be encircled and protected with goose predation protection fencing. Oyster castle blocks will be hand placed on the fabric, then sand will be placed from equipment on a barge. Final grading will be done by hand to ensure that the existing marsh grade is matched.



The JPA

Revisions – Before Permit Issuance

- Revisions of a proposed project prior to the issuance of a permit should be sent to VMRC and the Corps PM.
- The new revisions will have to undergo project specific review to ensure compliance with regulations and to ensure that the correct permit will be issued based on newly available information.

Revisions – After Permit Issuance

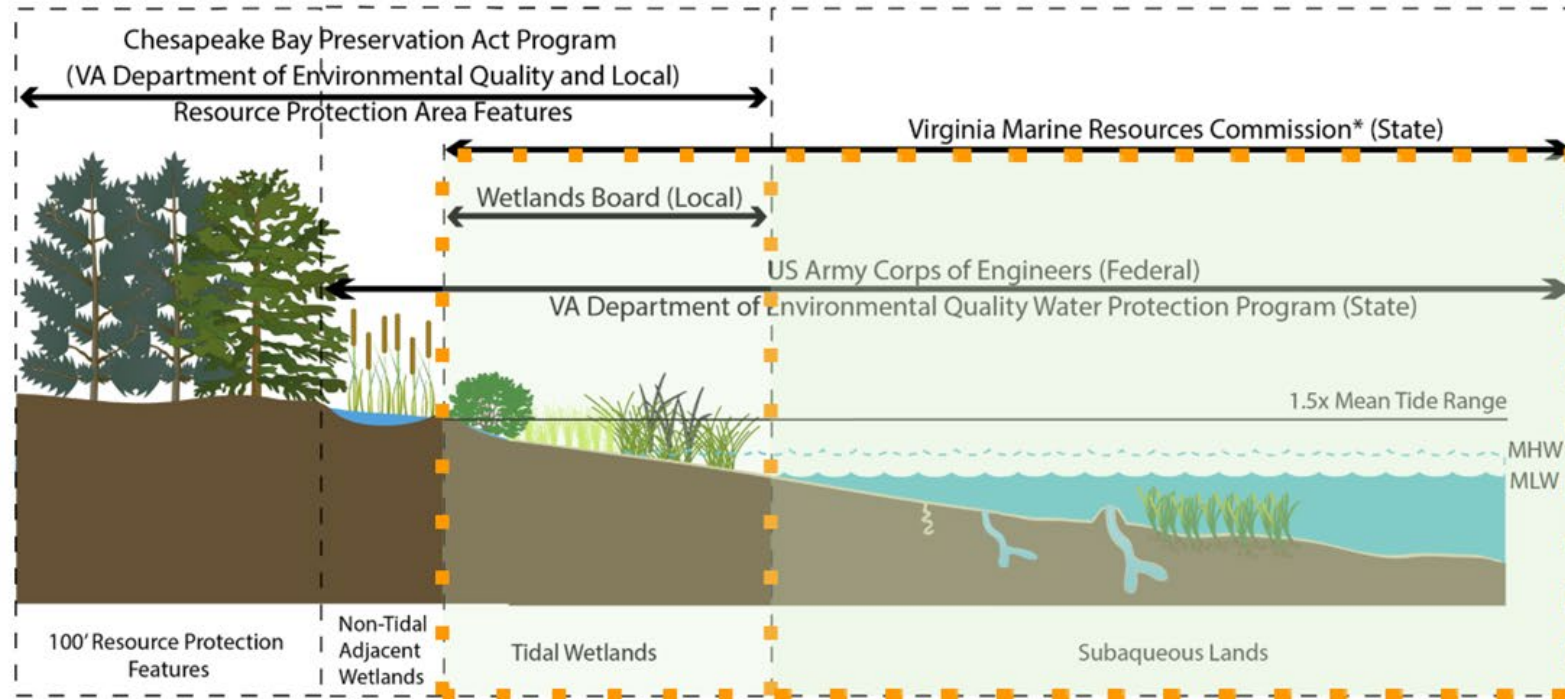
- Revisions of a proposed project AFTER the issuance of a permit should be sent to VMRC and the Corps PM.
- General Permits CANNOT be modified
 - If the new revisions include minor modifications with a decrease in impacts as compared to the issued permit, then the permit is still valid.
 - If the new revisions include significant changes, modifications or increase in impacts as compared to the issued permit, then the issued permit would have to be revoked and the entire review process restarted.

Essential Skills for Living Shorelines

Navigating Permitting at the State Level

VMRC Living Shoreline General Permits

Jurisdictional Boundaries Tidal Waters



* VMRC has oversight authority for the Tidal Wetlands Act and administers the Act in localities without a wetlands zoning ordinance and local wetlands board.

Virginia Shorezone Jurisdictions: legally defined shoreline resources and the relevant local, state and federal authorities. Note that some authorities cross resource boundaries and most resources have at least two responsible regulatory authorities. Symbols courtesy of the Integration and Application Network (ian.umces.edu/symbols/), University of Maryland Center for Environmental Science.

VMRC Living Shoreline General Permits

Pursuant to §28.2-104.1 of the Code of Virginia, it is the policy of the Commonwealth to support **living shorelines** as the preferred alternative for stabilizing tidal shorelines.

*"Living shoreline" means a shoreline management practice that provides **erosion control and water quality benefits**; protects, restores or enhances natural shoreline habitat; and **maintains coastal processes** through the strategic placement of plants, stone, sand fill, and other structural and organic materials.*

Living Shorelines: Default Approach

Living Shoreline

- Living Shorelines must be the primary approach to shoreline management unless best available science proves one is not suitable.

Mixed Media Shoreline

- When a LS is not suitable, living shoreline approaches should be incorporated where possible.

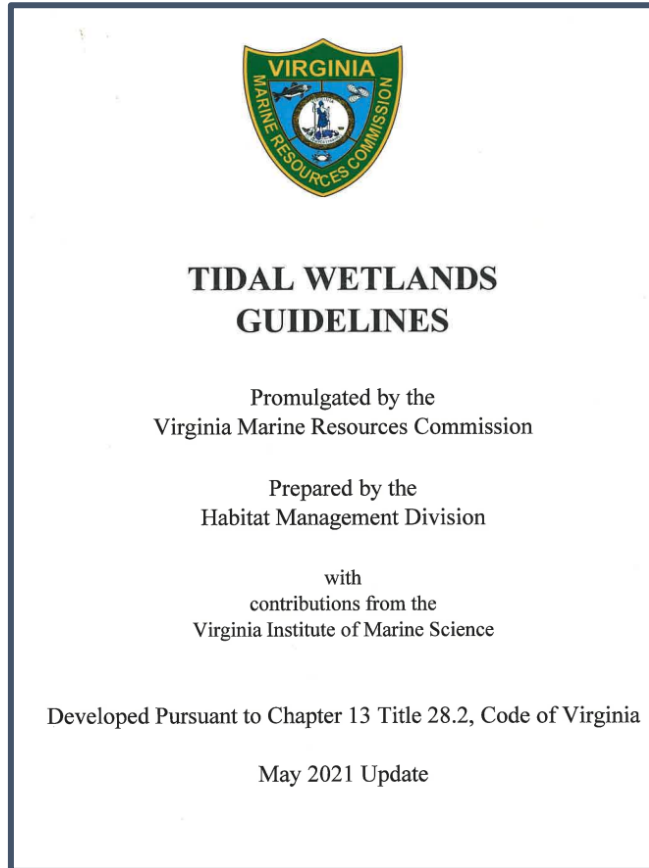
Rock

- Rock revetments are the next preferred alternative if a LS is not suitable based on best available science.

Code of Virginia 28.2-104.1 Living shorelines; development of general permit; guidance



Tidal Wetlands Guidelines



- Minimum Standards for the protection and conservation of wetlands
- Ensure protection of shorelines and sensitive coastal habitat from sea level rise and coastal hazards
- Designed to survive the impacts of sea level rise using 2017 NOAA Intermediate-High SLR Projection Curve or updated projection

VMRC Wetlands Guidelines:

https://mrc.virginia.gov/regulations/Final-Wetlands-Guidelines-Update_05-26-2021.pdf



Living Shoreline Group 1
General Permits (landward of
mean low water)

Important criteria for approval of Group 1 Permits

Proposal cannot extend channelward of mean low water.

No hard components – only sand, plantings, fiber logs and/or shell bags.

Fetch cannot exceed 0.5 mile.

All areas filled with sand must be planted and cannot exceed the (vertical) elevation of jurisdictional tidal wetlands.

Living Shoreline Group I General Permit





Living Shoreline Group 2
General Permits (intertidal
and subaqueous)

Important criteria for approval of Group 2 Permits

Adjoining property owners must be notified and express no opposition.

Fetch cannot exceed 1.5 miles.

Maximum depth at sills cannot exceed 2 feet at mean low water, and sills cannot extend more than 30 feet channelward of mean low water.

Sills must have 5-foot-wide gaps or windows per 100 linear feet.

Living Shoreline Group II General Permit



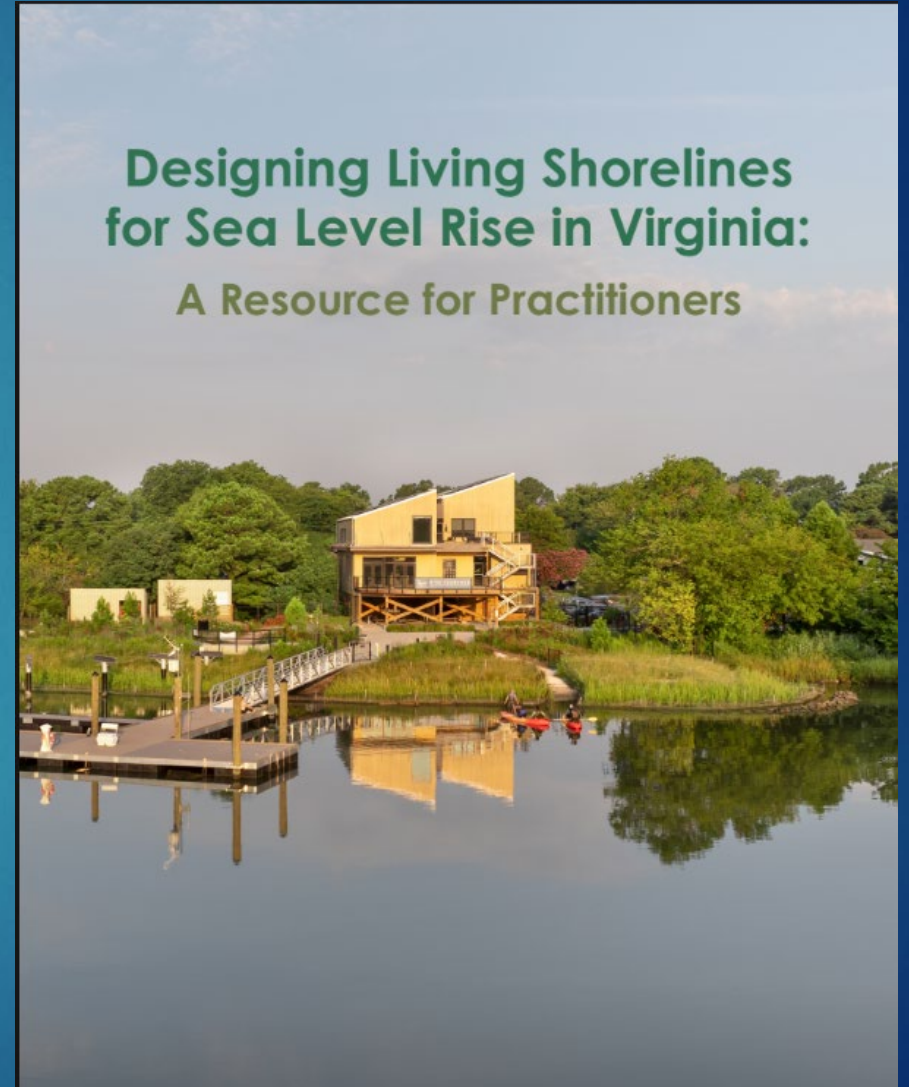
What is needed for a complete JPA?

- Applicant and Agent contact information, including project location
 - Adjacent Property Owner (APO) contact/mailing information
 - Description of the project, including cost
 - Areas that will be impacted
 - Type of construction and all materials
 - Any proposed stabilization or temporary measures to be used
 - Project drawings (vicinity map, plan view, and cross-sectional view drawings)
 - Staked alignment
- *Information provided in the JPA package must match the information provided in project drawings*

Storm Protection

1. Projects should be designed to mitigate coastal hazards...over **the useful life of the project.**
2. Projects should ensure that the stabilizing objectives address the most erosive conditions predictable to the site.
3. Project reviews shall include "the 10-year storm event water levels as calculated by NOAA and FEMA" (Storm Surge)
4. The Board must incorporate consideration of long-term sustainability and coastal resource resilience

**Designing Living Shorelines
for Sea Level Rise in Virginia:**
A Resource for Practitioners



Incorporating Sea Level Rise into Design

Proposed projects must allow the landward migration of existing vegetation over the useful life of the project using the 2017 NOAA Intermediate-High Projection Curve.



Online Resources for Identifying SLR Projections:

https://cwbi-app.sec.usace.army.mil/rccslc/slc_c_calc.html

<https://msc.fema.gov/portal/advanceSearch>

The Role of the Virginia Institute of Marine Science (VIMS)

- Codified Scientific Arm to the VMRC in marine science
- **Office of Research & Advisory Services**
 - 4 full time scientists to advise permit writers on the scientific evaluation of projects.
 - Will write advisory reports on projects when requested.
 - VIMS reports are highly weighted during permit reviews and public hearings.
 - *Best Available Science and LS Feasibility Determination*

VMRC Environmental Engineer Territory Map

	Justin Worrell (757) 247-8063	Justin.Worrell@mrc.virginia.gov
	Jeffrey Madden (757) 247-2276	Jeff.Madden@mrc.virginia.gov
	Mike Johnson (757) 247-2255	Mike.Johnson@mrc.virginia.gov
	Tiffany Birge (757) 247-2254	Tiffany.Birge@mrc.virginia.gov
	Claire Gorman (757) 247-2285	Claire.Gorman@mrc.virginia.gov
	Kirsten Travis (757) 247-8027	Kirsten.Travis@mrc.virginia.gov
	Brad Reams (757) 247-8120	Brad.Reams@mrc.virginia.gov
	Kylie Harris (757) 247-8032	Kylie.Harris@mrc.virginia.gov
	Olivia Upton (757) 247-8028	Olivia.Upton@mrc.virginia.gov

*Projects in nontidal territories are rotated among engineers



Essential Skills for Living Shorelines

Navigating Permitting at the Local Level

Chesapeake Bay Preservation Areas (CBPA)

Act to shape new development and redevelopment to be more resilient along the shoreline.

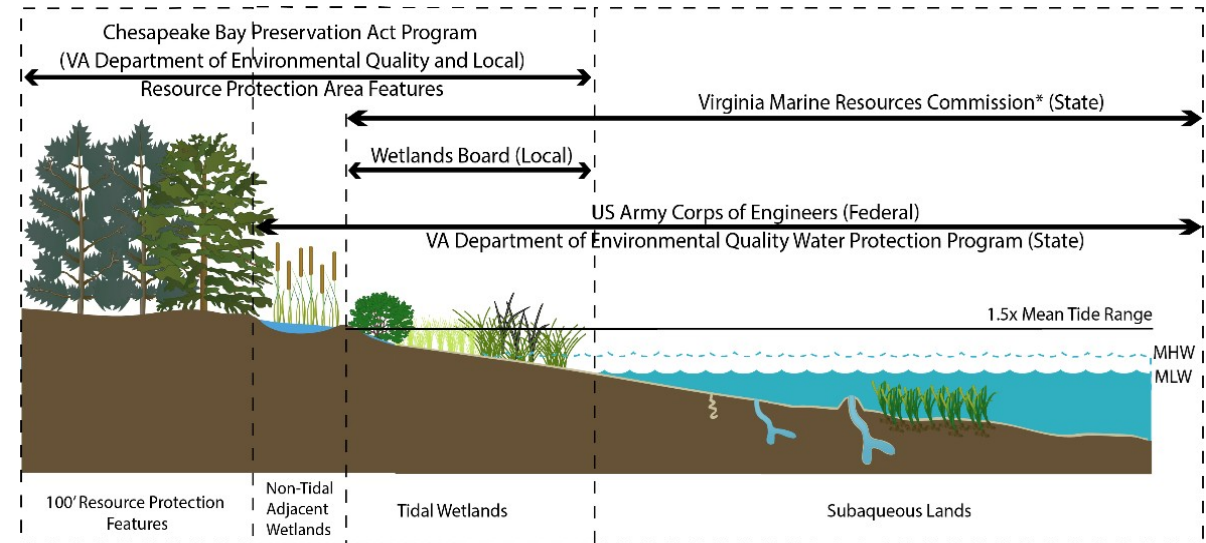
The Act grants localities the authority to prohibit development in shoreline areas to establish, restore and expand natural buffers, minimize land disturbance/impervious cover, protect indigenous vegetation, and provide for erosion and sediment control

Erosion & Sediment Control Program – deals with construction site activities

DEQ mandated program

Goal – To prevent erosion of land and degradation of state waters

Permitted Shoreline projects are exempt but only in jurisdictional wetland areas



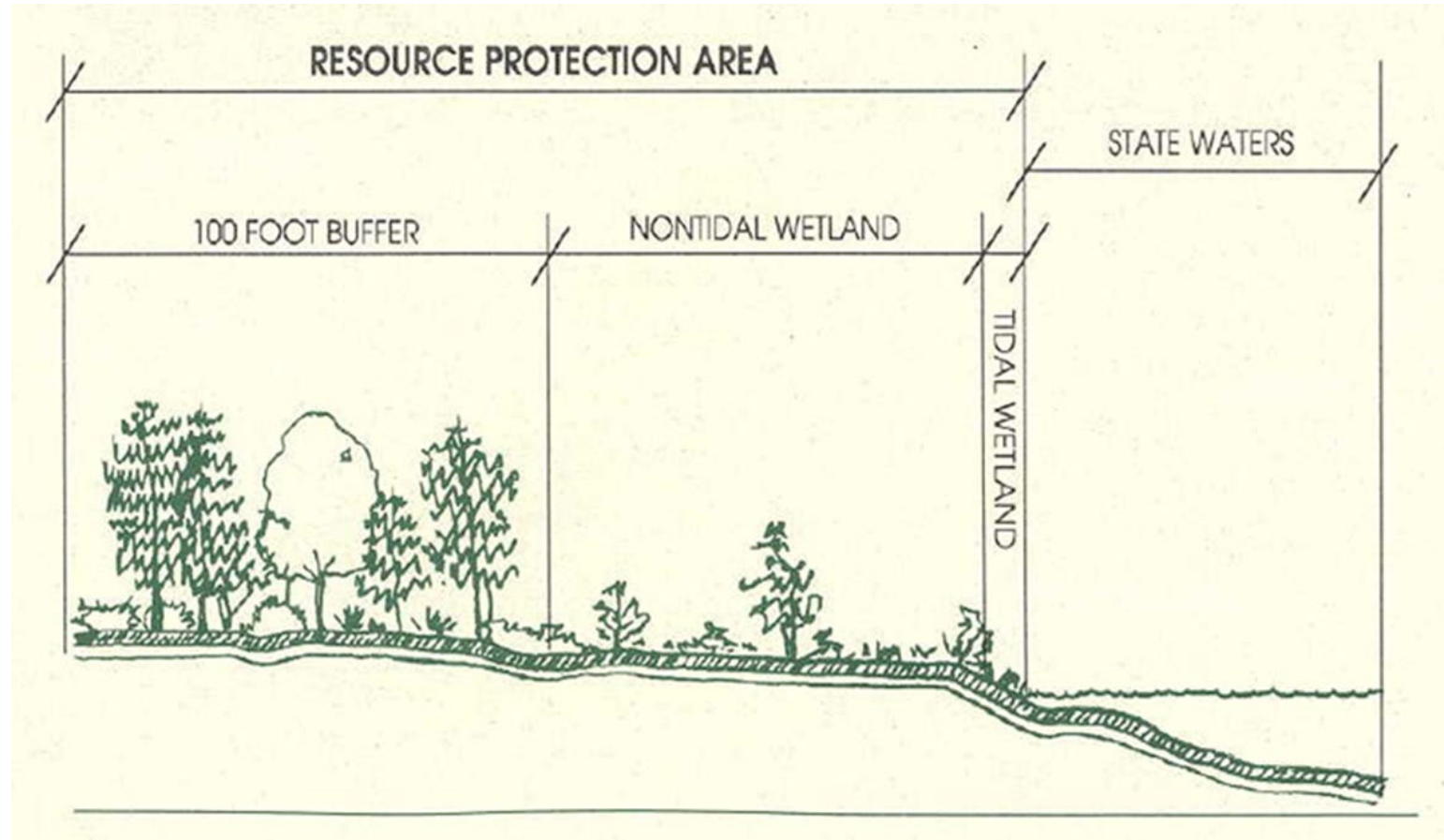
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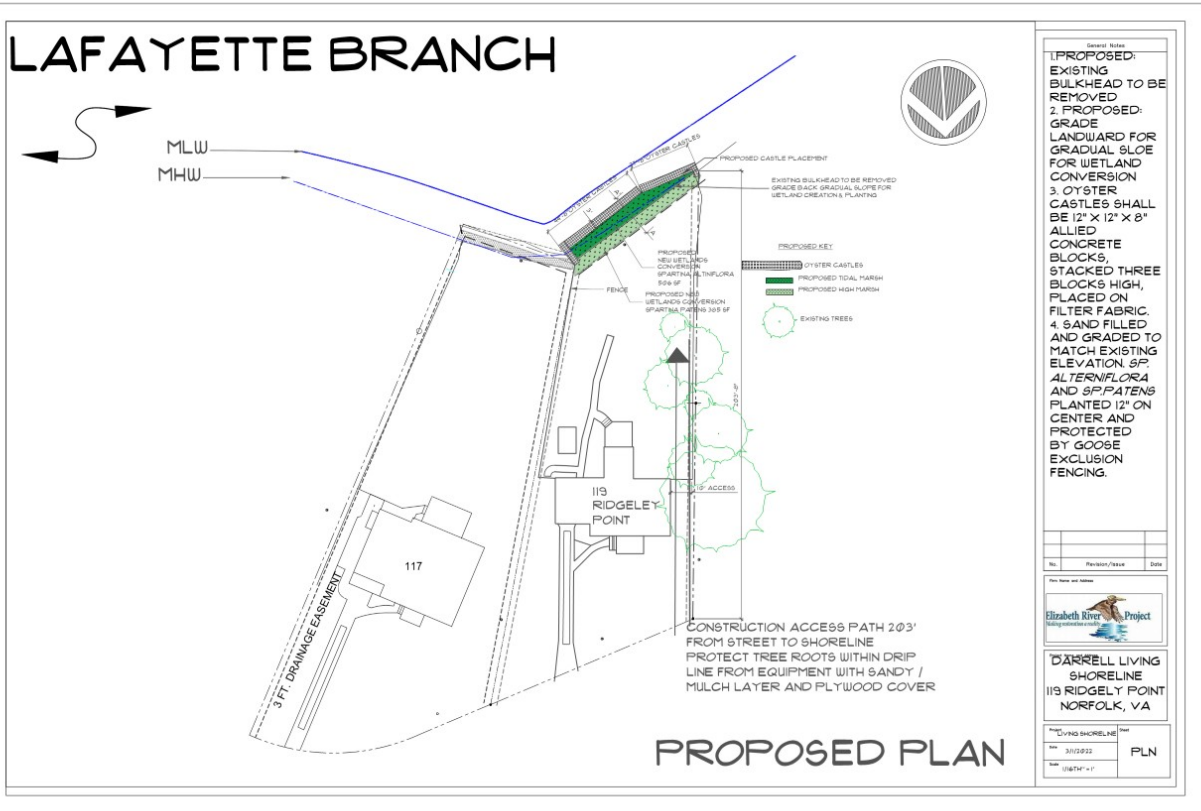
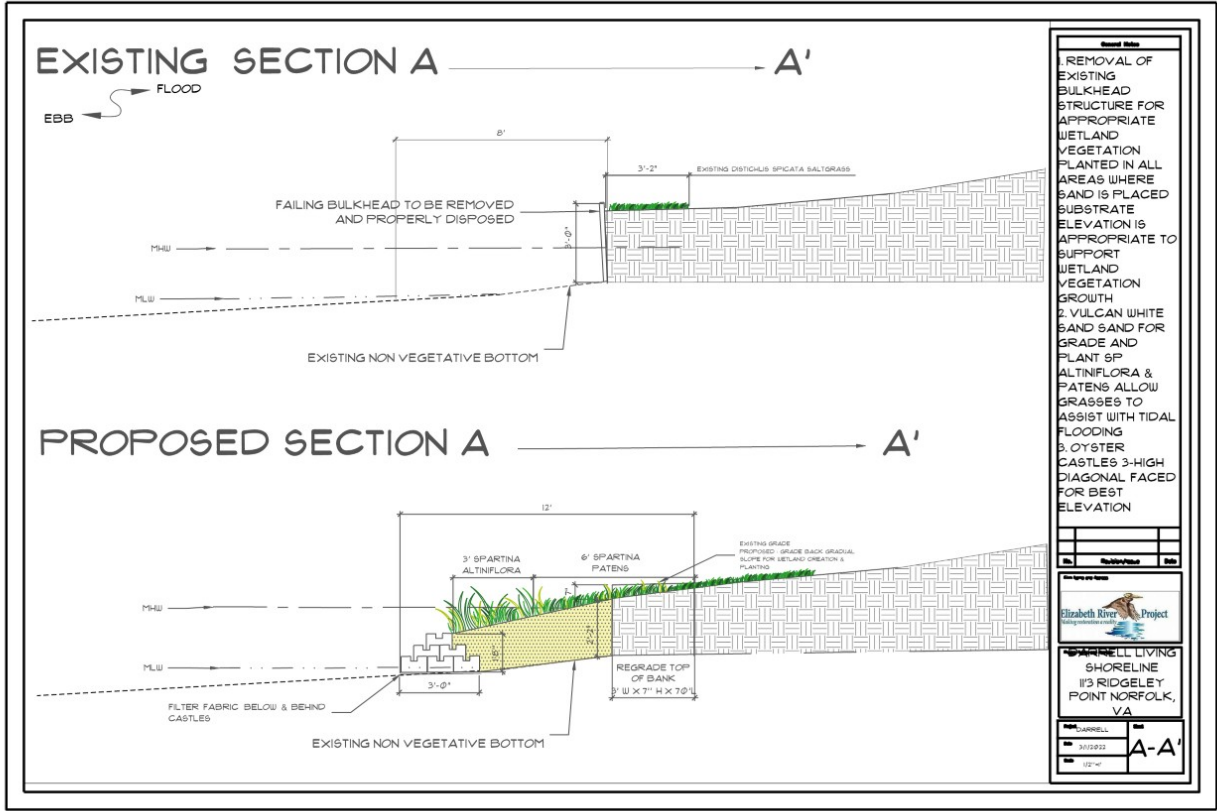
Chesapeake Bay Preservation Areas (CBPA)

Additional Permits Required for Every City

- ❖ Land Disturbance Permit
- ❖ All land disturbances within the Resource Protection Area require an approved Water Quality Impact Assessment (WQIA) and mitigation



Regulatory Compliance at the Local Level - Erosion and Sediment Control - Grading - Trees and Shrubs



After Design is Completed - Submit JPA

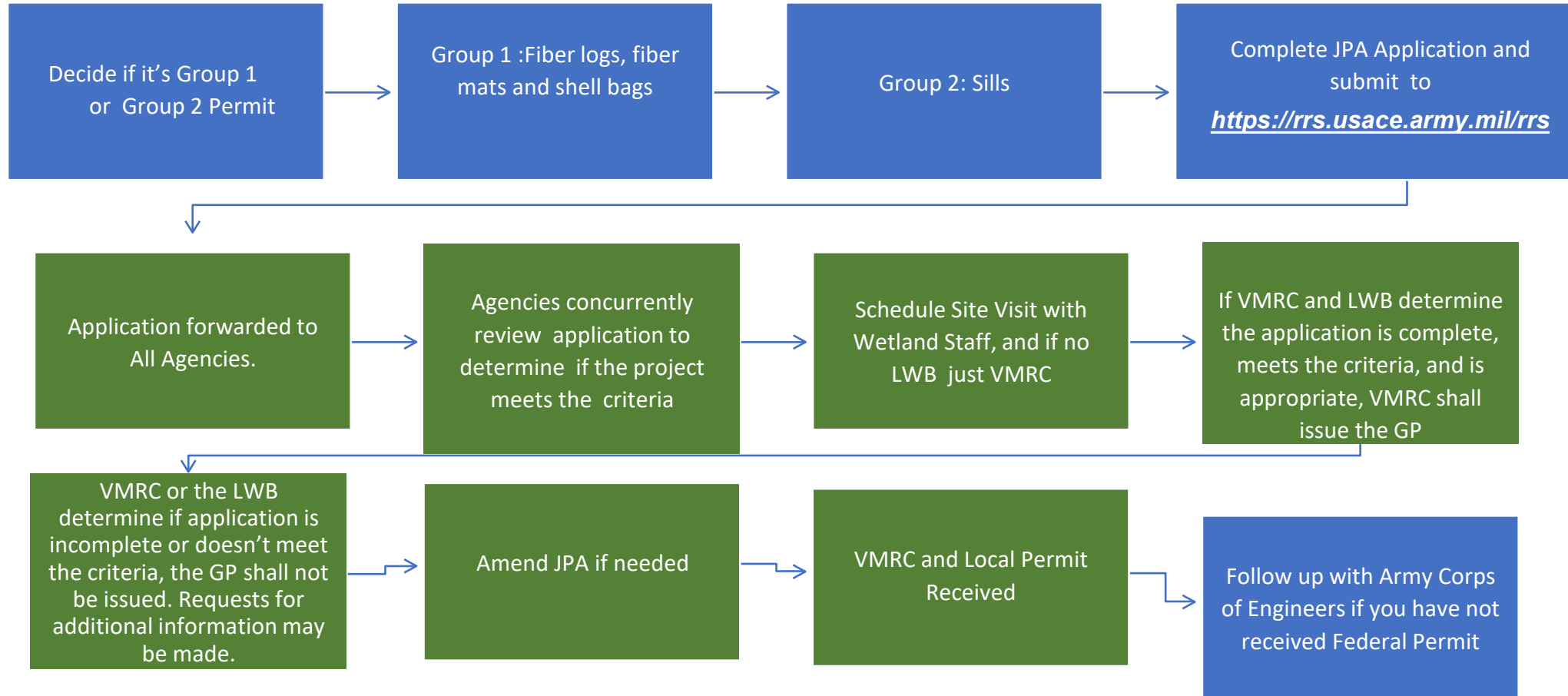
- ✓ Combine Design and Joint Permit Application (JPA) and collect Signatures from Property Owner
- ✓ Fill out JPA application and submit to US Army Corps of Engineers (<https://rrs.usace.army.mil/rrs>), which will be distributed to VMRC, VA DEQ (if needed), and Local Wetland Board
- ✓ *Site visit with VMRC and Local Agent*
- ✓ *Site Visit - Address any questions regulatory agencies might have about the application*

After Design is Completed - Submit JPA

You will receive Confirmation of your JPA from VMRC Agent - SAVE ALL CORRESPONDENCE

- ❖ Site visit with VMRC and Local Agent – Depending on the City, usually within 1 or 2 months of submission
- ❖ Set up site visit during Low Tide- Give options for days and times
<https://tidesandcurrents.noaa.gov/noaatidepredictions.html?id=8638671>
- ❖ Site Visit – Address any questions regulatory agencies might have about the application
- ❖ Follow up with the Army Corps Project Manager for JPA confirmation of permit application received

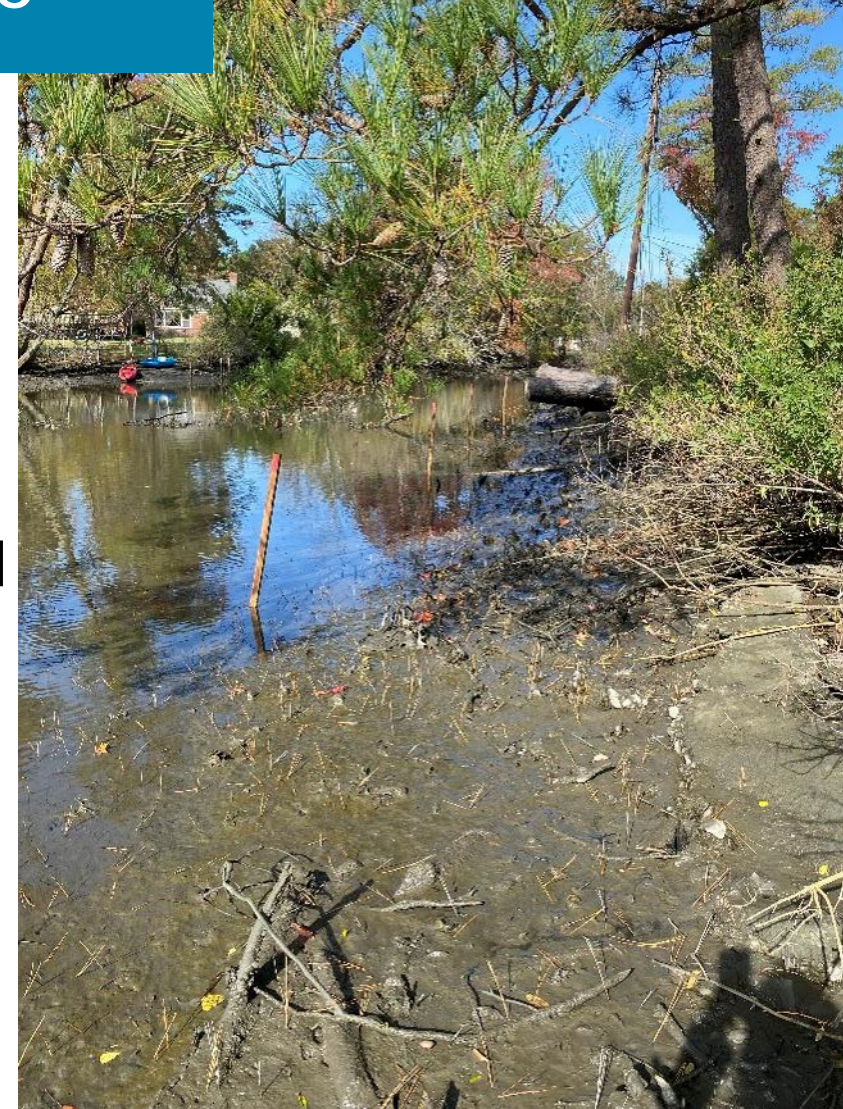
Navigating the JPA with Local Wetlands Boards and Staff



Site inspection with VMRC and LWB Representative

How to Be Prepared for VMRC Site Inspection?

- Contact the Property Owner and confirm the dates of the visit
- Bring all Documents- Plans, JPA, and questions prepared
- Flag Trees for removal if hazardous
- Alignment of proposed sill staked out MLW before Site inspection



A photograph of a body of water, possibly a lake or river, with reeds in the foreground. The image is overlaid with a green wavy pattern. The text "Thank you! Questions?" is centered in white.

Thank you!
Questions?