



**Maryland Department of the Environment**

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# **Permit Review and Restoration Projects**

**Presented by:**

**Wetlands and Waterways Program**

**Maryland Department of the Environment**

**Habitat Goal Implementation Team  
Meeting**

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**Waterways Construction Act of 1933**

**Tidal Wetlands Act of 1970**

**Nontidal Wetlands Act of 1989**





# **Waterways Construction Act of 1933**

- **Recognizes that manmade changes to a waterway diminish its course, current or cross-section**
- **Evaluates activities in a waterway or its 100-year floodplain**
- **Prevents flooding on upstream/downstream property**
- **Maintains fish habitat and migration**
- **Protects waterway from erosion**





# **Waterway Construction Act**

## **Best Interests of State**

- **Harm to State Scenic and Wild River**
- **Blockage to fish passage**
- **Whether failure of new impoundment would likely result in loss of life or high value property**
- **Aquatic or terrestrial habitat and related flora and fauna**
- **Increase risk of flooding to other property owners**





## **Waterway Construction Act cont.**

- **Construction or substantial improvement to structure below 100-year flood elevation**
- **Water quality standards**





# **Tidal Wetlands Act of 1970**

- Maps State's tidal wetland resources
- Establishes regulatory protection program
  - State wetlands include all open water and vegetated tidal wetlands below mean high water
  - Private wetlands include all vegetated tidal wetlands above mean high water
  - Manages wetlands to provide reasonable use while ensuring essential resource protection





# **Tidal Wetlands Act**

## **Public Interest**

- **Ecological**
- **Economic**
- **Developmental**
- **Recreational**
- **Aesthetic values**
- **Water dependency**
- **Reduce flood damage and trap sediment**





## **Tidal Wetlands Act cont.**

### **Public Interest**

- **Enhancements of aquatic environment**
- **Consistency with other land use plans/laws**
- **Natural, scenic, and historic property values**
- **Characteristics of fill material**
- **Marine commerce**
- **Avoidance and minimization**
- **Navigation**







## **Tidal Wetlands Act cont.**

### **Public Interest**

- **Shore erosion**
- **Habitat**
- **Alterations to littoral drift**
- **Stormwater and waste**
- **Danger from natural hazards**



# **Nontidal Wetlands Act of 1989**

- Declares a goal of “no net loss” of wetland acreage and function and to strive for a gain over time**
- Other goals of the Nontidal Wetlands Protection Act**
  - Protect waters of the State**
  - Prevent further resources degradation and losses by regulation all activities impacting nontidal wetlands**
  - Expedite application process by coordinating review and imposing deadlines**



## **Nontidal Wetlands Act**

- **Water dependent and require access to nontidal wetland**
- **No practicable alternative**
- **Avoidance and minimization**





## **Nontidal Wetlands Act cont.**

- **Water quality standards**
- **Economic value of activity/ demonstrated public need vs. ecological and economic value of wetland; ability of wetland to continue to provide identified functions and benefits to general public**
- **Compliance with best management practices**
- **Degradation and loss of wetlands**
- **Mitigation**



## **Sources of Conflict**

### **1) Nature of the project:**

**Goals, Objectives, Site**

### **2) Conflicting resource goals:**

**Site, Other Requirements, Design**

### **3) Method of accomplishing the project:**

**Design, Construction, Post-construction**

### **4) Functions of the existing resource:**

**Site**



# **Goals, Objectives**

- **What are the project goals, need for project, and how will this particular project accomplish the goal?**
- **Is the site degraded and a good candidate for meeting project goals?**
- **What are the tradeoffs for this project?**



## **Design**

- **Does the design adequately consider site-specific characteristics, including hydrology?**
- **Are there impacts to regulated resources? If so, are the impacts:**
  - **Considered harmful to existing resources, whether onsite or offsite?**
- **Does the design address the cause of the problem?**



## **Design cont.**

- **In conflict with other requirements, conservation goals, standards, or laws?**
- **Necessary to accomplish the goals of the project?**
- **Is a structure requiring active operation required? If so, who will maintain and operate it? What may occur if the structure fails or is operated improperly?**





## **Construction Techniques**

- **1) Will the construction techniques adversely affect other resources or result in violations of other requirements?**
- **2) Will undesirable species be introduced as a result of construction techniques? How will undesirable species (e.g. Phragmites) be managed?**
- **3) Where will equipment be staged and how will it be operated?**
- **4) Where/how will excavated material be stored or disposed of?**

## **Avoidance and Minimization**

- **Can the project be done elsewhere on the property with fewer adverse impacts?**
- **Is the project over-designed? Can the project be designed with fewer or smaller structures or disturbance?**
- **Are there other construction techniques that can accomplish the project purpose with fewer impacts?**
- **Why are the alternatives with fewer adverse impacts not practicable for accomplishing the project purpose?**



## **Post-construction**

- **Is there a monitoring and remediation plan in place?**
- **What are the consequences if a project fails?**
- **Are there adequate adaptive plans in place to address potential project failure?**





## **“Red Flags”**

### **Alteration of Water Levels**

**Increase may:**

**Raise flood risk on adjacent property**

**Change existing plant community**

**Decrease may:**

**Discharge flows at erosive velocities**

**Transport stored sediment downstream and  
in floodplain**





## **Examples of Required Information**

- **Projects goals and objectives**
- **Project narrative and justification**
- **Alternatives analysis**
- **Hydrologic and hydraulic analysis**
- **Notification/permission of adjacent property owners**
- **Water quality data**





## **Examples of Required Information cont.**

- **Wetland determination/delineation**
- **Soil properties**
- **Sensitive species inventory**
- **Resource condition assessment**
- **Archeological/historic site inventory**
- **Bathymetric data**





## **Examples of Required Information** **cont.**

- **Site plans**
- **Construction techniques**
- **Type of structure/material**
- **Extent of impact**
- **Revised design**
- **Source/disposal of fill material**
- **Pre-construction monitoring**





## **Examples of Required Information cont.**

- **Approved erosion and sediment control plans**
- **Maintenance plan for operation of water control structure**
- **Post-construction monitoring and remediation plan**







## **Other Coordination and Requirements**

- **Public notice, opportunity to provide public comment and request public hearing**
- **Local government agency approval**
- **U.S. Army Corps of Engineers**
- **U.S. Coast Guard**
- **Maryland Historical Trust**
- **Time of year restrictions**
- **Use of special construction equipment or techniques**





## **Other Coordination and Requirements** **cont.**

- **Appeal of permit decision by person with standing**
- **Documentation of landowner permission to conduct activity**





## **Recommendations**

**Coordinate with regulatory agencies early before:**

**Submitting an application**

**Applying for restoration funds based on a specific design vision or method**

**Use Joint Evaluation process for soliciting comments and resolving issues with regulatory and stakeholder agencies**

**Prepare additional guidance on information requirements. Streamline requirements where appropriate.**





## **Next Steps**

**Meet with agency restoration practitioners at JE meeting**

**Coordinate with other agencies on guidance for ditch/ephemeral stream identification**

**Discuss information requirements**

**Opportunities for early coordination**





# **Maryland Department of the Environment**

## **Wetlands and Waterways Program**

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