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Environment Other Laws and Requirements Section 404 of the Clean Water Act

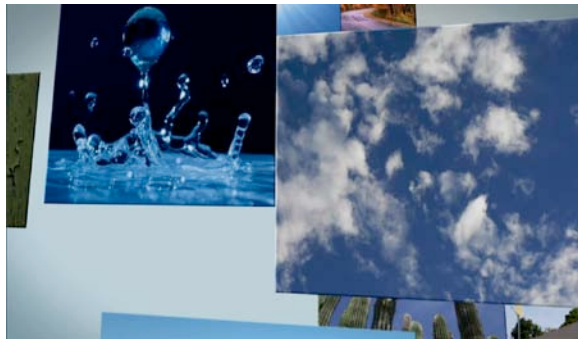
www.fhwa.dot.gov/federal-aidessentials

An overview of the law that serves to restore and maintain the integrity of the Nation's waters



Local public agencies may encounter several areas of environmental law on a Federal-aid project. These areas address a project's effects on:

- The natural environment—meaning the air, water, and habitats for endangered species
- The social environment—particularly related to minority and low-income populations
- Historic sites
- Parks and recreation areas



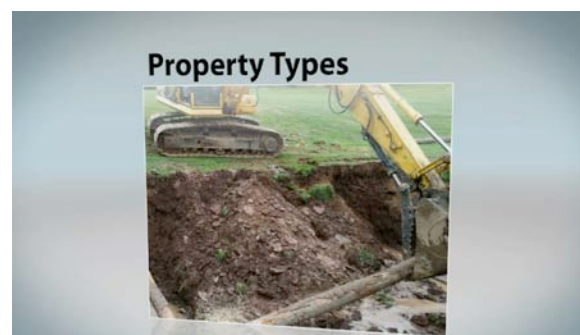
The National Environmental Policy Act, known as NEPA, provides a framework for environmental analyses, reviews, and consultations. NEPA's process "umbrella" covers a project's compliance with all pertinent Federal environmental laws.

Agencies may recognize a need to comply with an environmental law under the NEPA umbrella, but it's the environmental law itself that is the source of the requirement.

One such law that is designed to restore and maintain the chemical, physical, and biological integrity of the Nation's waters is the Clean Water Act. The act includes the navigable waters, and their tributaries, wetlands, lakes, rivers, and streams that have an ecological connection with navigable waters and/or support interstate commerce.

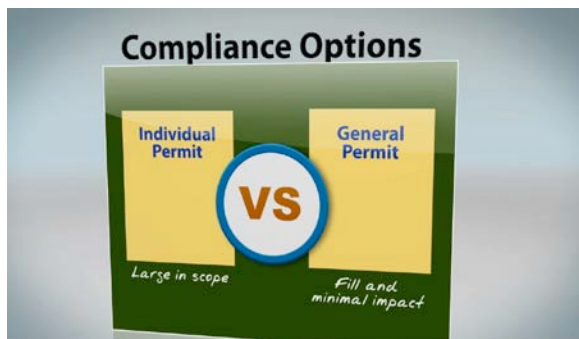
Our Nation's waters are protected because they provide many functions, such as habitat for fish and shellfish, waterfowl and other wildlife, rare and endangered species, and for water quality and flood control.

If your project necessitates the discharge of dredged or fill materials into wetlands or other "waters of the United States," your agency must first obtain the appropriate authorization from the U.S. Army Corps of Engineers. Depending on the complexity of the project and its potential for environmental effects, the Corps of Engineers will consider authorizing your project by a general or individual permit.



General permits are a form of permit used to authorize specific activities determined to have no more than minimal impact on the aquatic environment.

Individual permits are required for projects considered large in scope or involving potentially conflicting issues in environmentally sensitive areas. Any project involving fill or potential adverse impacts to navigable waters requires an individual permit.



The public interest is an important component of an individual permit evaluation process. The individual permit evaluation process includes issuance of a public notice, solicitation of comments from government agencies and the public, and a decision document describing the environmental impacts and the findings of the public review process. The Corps of Engineers will add any special conditions deemed appropriate for minimizing adverse impacts to the environment. All special and general conditions of the authorization must be followed.

The quality of your permit application, along with your record of accomplishment for following through on environmental commitments, will be considered during the review of your project.

Now, let's look at some effective practices when applying for a permit as well as some resources that will help construct a road through an environmentally sensitive area.

Many activities and requirements are associated with obtaining a permit. You can find this information on the Corps of Engineers Web site.

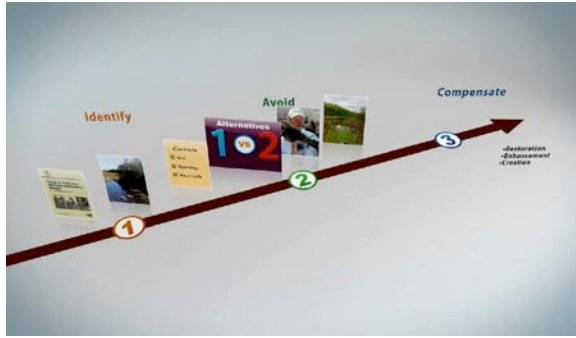
Most activities start with the delineation of the wetlands, an assessment of the function and service of the wetlands, and of other special aquatic sites potentially affected. For example, is it a simple drainage ditch or a high functioning and ecologically valued system with rare species and a thriving habitat?

Boundaries are determined using methods discussed in the Corps of Engineers' *Wetland Delineation Manual* and include an evaluation of the soil, hydrology, and plant life present at the site. Agencies should use either a qualified consultant or employees to conduct these technical studies.

The Corps of Engineers expects permit applicants to take all reasonable measures to avoid or minimize environmental damage. Therefore, applicants must analyze all practical alternatives and consider measures to minimize the project's footprint or fill material, and provide adequate planning and supervision during the project construction.

For example, applicants should control soil erosion, revegetate disturbed areas, relocate channels only during dry conditions and stabilize channels prior to introducing flow. Applicants should also take measures to minimize the spread of invasive species. In environments where the natural habitat is thriving, more avoidance and mitigation measures will be required in the design of the project.

For unavoidable impacts, the Corps of Engineers would likely require wetland losses be restored, enhanced or created at another site to replace those wetland functions that were lost as a result of your project.



To illustrate how a project sponsor might proceed through the permit application process, let's look at a project that proposes to add lanes to a road that crosses a stream.

The project team hires an environmental consultant to define the stream and wetland boundaries and then evaluates its function and service. The consultant assigns them a high function. In her report, she describes the area as:

- Supporting an abundance and diversity of wildlife and aquatic life, including a population of trout, and
- Providing recreational fishing

When it becomes apparent that the agency must relocate the stream, it adds a hydraulic engineer and a fisheries biologist to the team, which begins an internal discussion on the practical measures needed to minimize impacts. In addition to using silt barriers and screen fencing during construction, the plan includes:

- Upgrading the culvert to minimize sedimentation problems and remove any barriers to fish passage
- Establishing native species in the new stream by replanting vegetation and restoring fish habitat

The team presents its proposal to the Corps of Engineers, which is impressed with the analysis and interdisciplinary approach. The Corps issues a general permit on the condition that the team commits to completing construction before fish spawn in late spring.

This example illustrates that several resources and practices are available to help agencies construct roads in environmentally sensitive areas.

Items to include in your knowledge "tool box" are:

- Your agency's storm water management manual that provides guidance, options, and tools available to protect water quality, enhance water availability, and reduce flooding potential
- Maps of wetlands, wildlife, and fish inventories to identify high-quality aquatic resources
- An inventory of proven methods for minimizing and mitigating impacts to aquatic resources
- Standard specifications that may address best practices for restoration in your area
- Internal controls for inspecting the project and ensuring your agency's follow through on all environmental commitments.



It is your agency's responsibility to comply with the Clean Water Act and all other Federal and State laws governing water quality.

Make sure that your toolbox resources help to identify the wetlands in your area and provide proven methods for minimizing environmental impacts.



Your State department of transportation can provide guidance to help develop approaches for complying with the Clean Water Act.

Web Resources

- Link to U.S. Army Corps of Engineers national Web site
<http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>
- Link to help you find the appropriate U.S. Army Corps of Engineers district regulatory Web site
<http://www.usace.army.mil/LinkClick.aspx?link=http%3a%2f%2fwww.saj.usace.army.mil%2fDivisions%2fRegulatory%2fHQAvatar.htm&tabid=330&mid=1192>
- FHWA's Environmental Guidebook provides information on water quality, watershed, and wetlands topics
<http://environment.fhwa.dot.gov/guidebook/index.asp>
- FHWA Natural Environment Web page provides examples of exemplary endangered species and ecosystem management
<http://www.fhwa.dot.gov/environment/natural.htm>
- Link to Association of State Wetland Managers, which helps States and LPAs with wetland regulatory and management programs
<http://www.aswm.org/>
- EPA's Handbook for Developing Watershed Plans to Restore and Protect Our Waters
http://water.epa.gov/polwaste/nps/handbook_index.cfm#contents

The content of this document is not a substitute for information obtained from State departments of transportation, appropriate FHWA Division Offices, and applicable laws. Scenarios have been simplified for emphasis and do not necessarily reflect the actual range of requirements applicable to the scenario or this topic. This document was created under contract number DTFH61-11-D-00025 by the Federal Highway Administration, U.S. Department of Transportation, and is offered to the public to heighten and focus awareness of Federal-aid requirements within the local public agencies community and reinforces the importance of these necessary policies, procedures, and practices.

This companion resource is the script content for the video production of the same name.