

6.E WATER RESOURCES

This section of the Environmental Impact Statement (EIS) discloses potential impacts to water resources which include water quality, wetlands, floodplains, coastal resources, and wild and scenic rivers.

WATER QUALITY

The Federal Water Pollution Control Act, as amended (commonly referred to as the Clean Water Act (CWA)), provides the authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent or minimize the loss of wetlands, and regulate other issues concerning water quality. The Fish and Wildlife Coordination Act applies if a proposed Federal action would impound water within an area greater than ten acres, or divert, drain, control, or otherwise modify the waters of any stream or other body of water. Coordination with the U.S. Environmental Protection Agency (USEPA) must occur if there is the potential for contamination of an aquifer designated as a sole or principal drinking water resource for the area, as required by section 1424(e) of the Safe Drinking Water Act, as amended.

Water quality standards are the foundation of the water quality-based control program mandated by the CWA. A water quality standard defines the water quality goals for a waterbody, or portion thereof, by designating the use or uses to be made of the water, by setting criteria necessary to protect the uses, and by protecting water quality through antidegradation provisions. States adopt water quality standards to protect public health or welfare and to enhance the quality of water. A water quality standard consists of four basic elements:

- **Designated/beneficial uses** of the waterbody (e.g., recreation, water supply, aquatic life, agriculture). Appropriate uses are identified by taking into consideration the use and value of the waterbody for public water supply; for protection of fish, shellfish, and wildlife; and for recreational, agricultural, industrial, and navigational purposes. In designating uses for a waterbody, states and tribes examine the suitability of a waterbody for these uses based on the physical, chemical, and biological characteristics of the waterbody; its geographical setting and scenic qualities; and economic considerations. The characteristics necessary to support a use can be identified so that waterbodies having those same or similar characteristics can be grouped together to support a particular use.
- **Water quality criteria** to protect designated uses (i.e., numeric pollutant concentrations and narrative requirements). Numeric criteria are important where the cause of toxicity is known or for protection against pollutants with potential human health effects. Narrative criteria "free from" toxicity criteria typically serves as the basis for limiting the toxicity of waste discharges to aquatic species, based on whole effluent toxicity testing.
- **Antidegradation policy** to maintain and protect existing uses, high quality waters (i.e., waters whose existing quality is better than the established standards for the designated use), and outstanding national resource waters.

- **General policies** addressing implementation issues (e.g., low flows, variances, mixing zones).

Pursuant to Section 303(d) of the CWA, each state is required to identify those water features (i.e., assessment units – lakes, reservoirs, rivers, and streams) for which existing pollution controls are not stringent enough to allow the water feature to achieve state water quality standards. These water features that are unable to meet state water quality standards are considered to be water quality limited or “impaired waters.” Every state prepares a list of impaired waters under Section 303(d) of the CWA.

To be safe for intended uses, the quality of surface waters should not exceed the established standards. When the thresholds indicate that the potential exists for significant water quality impacts, additional analysis in consultation with state or Federal agencies responsible for protecting water quality will be necessary. These agencies may require specific information or studies.

WETLANDS

Executive Order 11990, *Protection of Wetlands*, U.S. Department of Transportation (USDOT) Order 5660.1A; *Preservation of the Nation's Wetlands*, the Rivers and Harbors Act of 1899; and the CWA address activities in wetlands. Executive Order 11990 requires Federal agencies to ensure their actions minimize the destruction, loss, or degradation of wetlands and also assures the protection, preservation, and enhancement of the nation’s wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects. USDOT Order 5660.1A sets forth USDOT policy that transportation facilities should be planned, constructed, and operated to assure protection and enhancement of wetlands.

A significant impact on a wetland area would occur if a proposed action would result in any of the following:

- Adversely affect the function of a wetland to protect the quality or quantity of municipal water supplies, including sole source, potable water aquifers;
- Substantially alter the hydrology needed to sustain the functions and values of the affected wetland or any wetlands to which it is connected;
- Substantially reduce the affected wetland’s ability to retain floodwaters or storm-associated runoff, thereby threatening public health, safety, or welfare (this includes cultural, recreational, and scientific resources important to the public, or property);
- Adversely affect the maintenance of natural systems that support wildlife and fish habitat or economically-important timber, food, or fiber resources in the affected or surrounding wetlands;
- Promote development of secondary activities or services that would affect the above-mentioned resources; or
- Inconsistency with applicable state wetland strategies.

FLOODPLAINS

Executive Order 11988, *Floodplain Management*, directs Federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains. USDOT Order 5650.2, *Floodplain Management and Protection*, contains USDOT's policies and procedures for implementing Executive Order 11988. Agencies are required to make a finding that there is no practicable alternative before taking action that would encroach on a base floodplain based on a 100-year flood (7 CFR 650.25).

Floodplain impacts would be significant pursuant to the National Environmental Policy Act (NEPA) if it results in notable adverse impacts on natural and beneficial floodplain values. Mitigation measures for base floodplain encroachments may include committing to special flood-related design criteria, elevating facilities above base flood level, locating nonconforming structures and facilities out of the floodplain, or minimizing fill placed in floodplains.

COASTAL RESOURCES

Federal activities involving or affecting coastal resources are governed by the Coastal Barriers Resources Act (CBRA), the Coastal Zone Management Act (CZMA), and Executive Order 13089, *Coral Reef Protection*. The CBRA prohibits, with some exceptions, Federal financial assistance for development within the Coastal Barrier Resources System that contains undeveloped coastal barriers along the Atlantic and Gulf coasts and Great Lakes. The CZMA and the National Oceanic and Atmospheric Administration (NOAA) implementing regulations (15 CFR Part 930) provide procedures for ensuring that a proposed action is consistent with approved coastal zone management programs. Executive Order 13089 requires Federal agencies to ensure that any actions that they authorize, fund, or carry out will not degrade the conditions of coral reef ecosystems.

WILD AND SCENIC RIVERS

Within the Study Area, there are no wild and scenic rivers or river segments otherwise eligible under Section 5(d) of the Wild and Scenic Rivers Act.

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