

JURISDICTION AND ACTIVITIES
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
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I. EXECUTIVE SUMMARY

The jurisdiction of the Subcommittee on Water Resources and Environment consists generally of matters relating to water resources development, conservation and management, water pollution control and water infrastructure, and hazardous waste cleanup. The Subcommittee's jurisdiction during the 116th Congress will remain the same as in the 115th Congress.

Issues under the Water Resources and Environment Subcommittee include:

- Water resources programs (projects and regulations) – Army Corps of Engineers (Corps)
- Clean Water Act, water infrastructure and watershed protection programs – Environmental Protection Agency (EPA)
- Clean Water Act, regulatory authorities – EPA and Corps
- Superfund and Brownfields revitalization – EPA
- Ocean dumping – EPA and Corps
- Oil pollution – EPA and Coast Guard
- Tennessee Valley Authority (TVA)
- Saint Lawrence Seaway Development Corporation – Department of Transportation
- National Resources Conservation Service's Small Watershed Program – Department of Agriculture
- Deepwater ports – EPA, Coast Guard, Corps
- Invasive/aquatic nuisance species/harmful algal blooms – EPA, Coast Guard, Corps, and other agencies
- Coastal pollution and coastal zone management – EPA and National Oceanic and Atmospheric Administration (NOAA)
- Natural resource damages – NOAA, Department of the Interior, and other agencies
- Groundwater protection – primarily EPA and Corps
- Water resources policy – multiple agencies
- Toxic substances and public health – Agency for Toxic Substances and Disease Registry (ATSDR)
- Boundary water issues between the United States and Mexico – the International Boundary Water Commission at the Department of State

II. U.S. ARMY CORPS OF ENGINEERS WATER RESOURCES PROGRAMS

A. STUDIES AND PROJECTS

1. General Procedures

The Corps constructs projects for the purposes of navigation, flood control, hurricane and storm damage reduction and shoreline protection, hydroelectric power, recreation, water supply, environmental infrastructure, environmental protection, restoration and enhancement, and fish and wildlife mitigation.

The first step in a Corps water resources development project is a study of the feasibility of the project. If the Corps has done a study in the area before, the new study can be authorized by a resolution of either the House Committee on Transportation and Infrastructure (T&I) or the Senate

Committee on Environment and Public Works (EPW). If the area has not been previously studied by the Corps, then an Act of Congress is necessary to authorize the study, which is typically addressed through enactment of a water resources development act (or WRDA). Prior to the 112th Congress, the majority of studies historically were authorized by Committee resolution.

The next step is the funding of the feasibility study by both House and Senate Appropriations Committees in the Energy and Water Development Appropriations bill. Historically, the Corps performs the feasibility study for a potential project, the cost of which is shared 50 percent by the federal government and 50 percent by the non-federal interest. Section 1001 of the *Water Resources Reform and Development Act of 2014* (P.L. 113-121) encouraged the Corps to complete the majority of feasibility studies within three years from the date of initiation of the study, have a maximum federal cost of \$3 million, and undergo concurrent reviews from personnel at the district, division, and headquarters level of the Corps.

After a full study is completed, the results and recommendations of the study are submitted to Congress, usually in the form of a report of the Chief of Engineers. If such results and recommendations are favorable, the next step is authorization. Project authorizations are contained in water resources development acts, which the Committee has endeavored to enact on a biennial schedule. The final step after authorization is funding of project construction by the Appropriations Committees in the Energy and Water Development Appropriations bill.

2. Continuing Authority Programs for Small Projects

The Corps also has certain authorities to construct small projects without specific authorization by Congress. These authorities, collectively known as the "continuing authorities program," include: (1) beach erosion control projects with a Federal cost of not more than \$10 million; (2) navigation projects with a Federal cost of not more than \$10 million; (3) flood control projects with a federal cost of not more than \$10 million; (4) streambank and shoreline protection for public facilities projects with a federal cost of not more than \$5 million; (5) projects to mitigate shoreline damages from federal navigation projects with a Federal cost of not more than \$10 million; (6) projects of snagging and clearing for flood control with a federal cost of not more than \$500,000; (7) projects modifying the structure and operation of existing projects for improvement to the environment with a federal cost of not more than \$10 million; (8) the rehabilitation of certain dams with a federal cost not to exceed \$10 million; (9) projects for the removal of snags, obstructions, and other debris located in or adjacent to Federal navigation channels with no specific per project limit; and, (10) projects for the restoration and protection of aquatic ecosystems with a federal cost of not more than \$10 million. When project costs are relatively small, the continuing authorities program offers an attractive alternative to specifically authorized work because it involves an abbreviated approval process.

3. Cost Sharing

The *Water Resources Development Act of 1986* (P.L. 99-662), as amended, contains the cost sharing provisions that are generally applicable to Corps water resources projects.

a. Harbor development projects

For harbor development projects, non-federal interests are required to pay 10 percent of project construction costs to depths of 20 feet or less; 25 percent of project construction costs for

depths greater than 20 feet but not more than 50 feet; and 50 percent of project construction costs for depths greater than 50 feet. Since 1996, project construction costs include costs associated with dredged material disposal facilities. In addition, the non-federal interest must pay 10 percent of the cost (with interest) of general navigation features over a period not to exceed 30 years and provide all lands, easements, rights of way, and relocations necessary for project construction and maintenance. The cost of the lands, easements, rights of way, and relocations is credited against the additional 10 percent paid following construction.

Operation and maintenance costs are 100 percent federal for work associated with depths not greater than 50 feet and 50 percent federal for additional costs of maintaining depths greater than 50 feet. The federal share of operation and maintenance is appropriated from the Harbor Maintenance Trust Fund (HMTF). The HMTF was created in 1986 and consists of receipts from a 0.125 percent tax imposed on the value of cargo loaded or unloaded at U.S. ports. On March 31, 1998, the Supreme Court ruled that the tax on cargo that supports the HMTF is unconstitutional insofar as it applies to exports.¹ The tax on imports continues to be collected. For many years more revenue has been deposited than has been paid out by the HMTF. As a result, there is a growing balance in the trust fund of approximately \$10 billion. Many federal navigation projects are not currently at their authorized depths and widths.

b. Inland waterways transportation projects

The construction and major rehabilitation of inland waterways transportation projects is funded 50 percent from the Inland Waterways Trust Fund (IWTF), with the balance coming from general revenues. The IWTF consists of revenues generated from a 29 cents per gallon tax on inland waterways fuel. Operation and maintenance of the inland waterways system are 100 percent federal from general revenues. In recent years, the IWTF has been deficient in funding for authorized capital improvement projects on the inland waterway system. Revenues coming into the IWTF have been inadequate to carry out capital improvement projects in a timely manner.

c. Flood damage reduction projects

For flood damage reduction projects (previously called flood control projects), structural projects require a minimum non-federal share of 35 percent (25 percent for projects authorized before October 12, 1996) and a maximum of 50 percent. Non-structural projects require a fixed 35 percent non-federal share. The non-federal interest must pay at least 5 percent in cash of the costs of each project assigned to flood damage reduction during construction, and provide lands, easements, rights of way, relocations and dredged material disposal areas necessary for flood damage reduction. Additional cash is required to be paid during construction if the local non-cash contribution of lands, easements, rights of way, relocations and dredged material disposal areas, and the mandatory five percent cash contribution do not equal 35 percent (or 25 percent, depending on the date of project authorization), but the non-federal contribution is always limited to 50 percent of project costs assigned to flood damage reduction.

With the exception of the main-line levees within the Mississippi Rivers and Tributaries program, operation and maintenance of flood control projects are traditionally a non-federal responsibility.

¹ U.S. v. United States Shoe Corp., 523 U.S. 360 (1998).

d. Hurricane and storm damage reduction and shoreline protection projects

The cost of initial construction for hurricane and storm damage reduction and shoreline protection projects that protect public lands, or privately owned lands with appropriate public access, is cost-shared at 35 percent with non-federal interests. The cost of construction on non-federal public lands used for parks and recreation is cost-shared at 50 percent, and on federal lands, the cost is 100 percent federal.

The costs of periodic nourishment of projects on privately owned lands ranges from 35 percent non-federal costs for projects authorized on or before December 31, 1999, to 50 percent non-federal costs for projects authorized after this date where the periodic nourishment is carried out after January 1, 2003.

e. Environmental restoration and protection projects

For environmental (ecosystem) restoration and protection, the non-federal share of construction is 35 percent of total project costs. Operation and maintenance of such projects is a non-federal responsibility.

f. Water supply, recreation, and aquatic plant control

For municipal (drinking water) and industrial water supply, the non-federal share of project costs is 100 percent, repaid over time. For agricultural water supply (irrigation), the non-federal share is 35 percent, repaid over time. For recreation features, the non-federal share of the cost of construction is 50 percent of the separable costs allocable to recreation, and for recreational navigation, 50 percent of joint and separable costs. Operation and maintenance of water supply and recreation projects are a non-federal responsibility. The Corps may also participate with other federal and non-federal agencies for aquatic plant control of major economic significance. The costs of site-specific aquatic plant control efforts are shared with non-federal interests at 50 percent.

g. Environmental infrastructure

Since 1992, the Corps has been involved in the planning, design, and construction of environmental infrastructure projects for drinking water and wastewater. Environmental infrastructure projects constructed by the Corps are cost-shared with the non-federal interest responsible for 25 percent of the total costs.

4. Activities in the 115th Congress

Hearings:

- Hearing titled, "Building a 21st Century Infrastructure for America: Implementation of the Water Resources Reform and Development Act of 2014 and the Water Resources Development Act of 2016" (July 19, 2017).
- Hearing titled, "Building a 21st Century Infrastructure for America: Water Stakeholders' Perspectives" (September 26, 2017).

- Hearing titled, “America’s Water Resources Infrastructure: Approaches to Enhanced Project Delivery” (January 18, 2018).
- Hearing titled, “Building a 21st-Century Infrastructure for America: Water Resources Projects and Policy: Projects and Policies, Part 1” (March 15, 2018).
- Hearing titled, “Building a 21st-Century Infrastructure for America: Water Resources Projects and Policy: Projects and Policies, Part 2” (September 7, 2018).

Legislation:

- Public Law 115-270, the *America’s Water Infrastructure Act of 2018*, which included the Water Resources Development Act of 2018.

B. REGULATORY PROGRAM

1. Section 404 program

The Corps has primary responsibility for regulating activities in, and the disposal of dredged or fill material into, the “navigable waters of the United States” under several laws.

Under section 10 of the *Rivers and Harbors Appropriation Act 1899* (March 3, 1899), any alteration of, dredging in, or erection of any structure such as a wharf, pier, or dock in a traditionally-navigable waterway, requires a permit from the Secretary of the Army. The term “navigable waters” is broadly defined to include a wide array of water bodies. Under section 103 of the *Ocean Dumping Act* (Title I of P.L. 92-532), the transportation of dredged or other material for the purpose of dumping the material into the oceans requires a permit from the Secretary of the Army. The permits are issued pursuant to guidelines developed by EPA. Ocean dumping is discussed in more detail in section IV.

Section 404 of the Clean Water Act (CWA) provides that any person who discharges dredged material or fill material into the navigable waters, defined as including the “waters of the United States”, must have a permit from the Secretary of the Army. Unlike section 10 of the Act of March 3, 1899, under the CWA, the term “navigable waters” is not limited to the “traditionally-navigable waters,” but covers a wider array of water bodies, including wetlands. The EPA, in conjunction with the Corps, develops guidelines for the issuance of section 404 permits and has authority, under section 404(c), to review and deny permits where the discharge will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. Section 404(f) of the CWA also describes several specific activities, such as normal farming, ranching, and silvicultural activities, for which a CWA permit is not required, regardless of whether these activities take place in jurisdictional waterbodies; however, section 404(f)(2) limits the scope of the 404(f) exemption to activities that do not change the use of the waterbody, or impede its flow or reduce its reach.

Waters of the U.S. include many wetlands, which generally include swamps, marshes, bogs, and similar areas (which may often appear as dry land). To be considered a wetland, an area must meet three characteristics: (1) presence of hydric soils; (2) presence of vegetation typically adapted for life in saturated soil conditions; and, (3) presence of water in the root zone sufficient to create

anaerobic conditions for a designated period. Section 404 is the primary federal law for the regulation of activities occurring in wetlands.

2. Wetlands Protection

Collectively, wetlands provide benefits nationally by lessening flood damage, reducing erosion, recharging groundwater, filtering sediment, and abating pollution. Wetlands also sustain nearly one-third of U.S. endangered and threatened species.² They provide breeding and wintering grounds for waterfowl and shorebirds.

U.S. Fish and Wildlife Service (FWS) has estimated that over one-half of the wetlands existing in the lower 48 states at the time of European settlement no longer exist.³ In 1988, the National Wetlands Policy Forum recommended, and President George H. W. Bush endorsed, an interim goal of no overall net loss of remaining wetlands as defined by acreage and function, and a long-term goal to increase the quantity and quality of U.S. wetlands.

Section 307 of the *Water Resources Development Act of 1990* (P.L. 101-640) also includes, as part of the Corps' water resources development program, an interim goal of no overall net loss of the remaining U.S. wetlands base as defined by acreage and function, and a long term goal of increasing the quality and quantity of U.S. wetlands through a wetlands protection plan.

3. Notable Federal Court Decisions and Changes to CWA Regulatory Authorities

a. Activities Subject to CWA Section 404 Permitting Authorities

In June 1998, the U.S. Court of Appeals for the District of Columbia Circuit ruled the Corps had no authority under the CWA to regulate incidental fallback that occurs during dredging operations. On January 17, 2001, the Corps and EPA published in the Federal Register changes to the definition of "discharged material" to respond to the Court's decision.⁴

On May 9, 2002, the Corps and the EPA published in the Federal Register⁵ changes to the definitions of "fill material" and "discharge of fill material" that are subject to regulation under section 404 of the CWA. Among other things, this change attempted to resolve legal uncertainty whether the Corps could authorize mountaintop mining operations under section 404 of the CWA.

b. Jurisdictional Scope of the CWA

In January 2001, the U.S. Supreme Court ruled in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, that the Corps' jurisdiction over certain isolated waters and wetlands based solely upon the use of such waters by migratory birds exceeded its authority under the CWA.

In June 2006, the Supreme Court, in the consolidated cases of *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* ("*Rapanos*"), held that federal jurisdiction over two specific non-navigable waters exceeded the scope of federal authority under the CWA. However, a majority

² <https://www.epa.gov/wetlands/why-are-wetlands-important>.

³ See *Wetlands Losses in the United States, 1780s to 1980s: Report to Congress*, U.S. Fish and Wildlife Service, U.S. Department of the Interior (1990).

⁴ See 66 Fed. Reg. 4550.

⁵ See 67 Fed. Reg. 31129.

of the Court did not agree on a single test for determining the extent of CWA protections over navigable waters, including wetlands.

In response, in 2008, the Bush administration released joint agency guidance allowing the Corps and the EPA to assert CWA protections over waters based on either of the two legal theories advanced in the *Rapanos* decision – the “relatively permanent waters” theory authored by former Justice Scalia or the “significant nexus” theory authored by former Justice Kennedy.

On June 29, 2015, the Obama administration published in the Federal Register⁶ regulatory changes to the definition of “waters of the United States” under the CWA. Implementation of the 2015 Rule, commonly referred to as the Clean Water Rule, was initially stayed by the U.S. Court of Appeals for the Sixth Circuit; however, subsequent court decisions have, as of now, allowed the 2015 Clean Water Rule to go into effect in a number of states. In the remainder of states, the pre-2015 regulations and guidance documents outline the jurisdictional reach of the CWA.

The Trump administration has proposed several actions related to the definition of “waters of the United States.” First, in February 2017, the President signed Executive Order 13778, calling on the Corps and the EPA to review, and potentially revise, the 2015 Clean Water Rule. In addition, the administration has issued a rulemaking to suspend implementation of the 2015 Clean Water Rule until 2020 (published in the February 6, 2018 Federal Register); a proposal to repeal the 2015 Clean Water Rule (published in the July 27, 2017 Federal Register); and a proposal (announced on December 11, 2018) to revise the definition of “waters of the United States” with the intention to publish it in the Federal Register.

4. Activities in the 115th Congress

Hearings:

- Hearing titled, “America’s Water Resources Infrastructure: Approaches to Enhanced Project Delivery” (January 18, 2018).
- Hearing titled, “Building a 21st-Century Infrastructure for America: Water Resources Projects and Policy: Projects and Policies, Part 1” (March 15, 2018).

C. WATER RESOURCES MANAGEMENT, WATER SUPPLY, WATER INFRASTRUCTURE, AND WATERSHED PROTECTION

The Corps has a significant role in managing what can be competing interests for U.S. water resources. For example, the Corps is often responsible for managing the operations of Corps’ dams and reservoirs, where it must make decisions on how to manage existing water resources projects to fulfill the authorized purposes of such projects, including navigation, flood control, environmental and watershed protection, water supply, hydropower, endangered species management, and recreation. In 2016, the Government Accountability Office (GAO) issued a report (GAO-16-685) on the Corps’ efforts to periodically review and, where necessary, revise the operational manuals for Corps’ dams and reservoirs, which included a recommendation that the Corps better track its efforts, and prioritize water control manual revisions, as needed.

⁶ See 80 Fed. Reg. 37053.

The Corps is also a significant federal party in providing water supply storage to communities throughout the United States. Pursuant to the *Water Supply Act of 1958* (P.L. 85-500), the Corps may enter into contractual agreements with communities to provide municipal and industrial (M&I) water supplies, including water for the operation of municipal and community water systems for use in households, commercial operations, and public supplies, in connection with Corps water resources projects. Under these agreements, the Corps can contract with a state, a local water utility, or a municipality, for water storage space in a Corps' project that either allocates storage plans in existence prior to the construction of the project ("originally authorized agreements") or reassigns water storage from one use (e.g., hydropower generation) to M&I water supply ("reallocation agreements"). Water supply agreements typically charge M&I users for the portion of the costs to construct, operate, and maintain the project associated with the water supply allocation, and repayments are provided to the Corps through annual payments. In 2017, the GAO issued a report (GAO-17-500) on the Corps' water supply and water storage pricing activities. This report noted that the Corps currently maintains 340 separate water supply agreements for water stored at approximately 140 reservoirs managed by the Corps in 25 states, and suggested that future demand for water supply at Corps facilities will likely increase. However, GAO was also critical of the Corps' handling of existing water supply agreements, and recommended the Corps improve its practice of tracking and updating water supply agreements.

The Corps also plays a limited role in addressing the water-related infrastructure and watershed protection needs of the United States. Communities seek federal assistance to help address inadequate or aging wastewater treatment facilities and sewer overflow problems. Water resources development acts have included specific authorizations for the Corps to help communities address these problems. For example, as part of an effort to evaluate potential innovative and alternative means for funding water infrastructure projects, the Committee authorized a new low-cost loan and loan guarantee program, known as the Water Infrastructure Finance and Innovation Act (WIFIA) as part of the *Water Resources Reform and Development Act of 2014* (P.L. 113-121). While created specifically to address local drinking and wastewater infrastructure needs, WIFIA loans may be an option for funding congressionally-authorized water resources development projects. The Corps has been working with the EPA to finalize a structure for implementation of the WIFIA authority, but, to date, no water resources development projects have been funded through this mechanism.

1. Activities in the 115th Congress

Hearings:

- Hearing titled, "Building a 21st Century Infrastructure for America: Implementation of the Water Resources Reform and Development Act of 2014 and the Water Resources Development Act of 2016" (July 19, 2017).
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III. ENVIRONMENTAL PROTECTION AGENCY (EPA)

A. CLEAN WATER ACT PROGRAM

The *Federal Water Pollution Control Act* (commonly known as the Clean Water Act), as amended in 1972 by P.L. 92-500, in 1977 by P.L. 95-217, in 1981 by P.L. 97-117, and in 1987 by P.L. 100-4, provides for a major federal-state program to protect, restore, and maintain the quality of U.S. waters. The EPA has the primary responsibility for carrying out the Act but significant parts of the program may be administered by states if approved by the EPA.

The Act generally has two major areas of emphasis: (1) regulatory provisions that (a) impose progressively more stringent requirements on industries and municipalities to reduce or eliminate the discharge of pollutants, and (b) regulate the discharge of dredged or fill materials into wetlands; and (2) funding provisions that authorize federal financial assistance for municipal wastewater treatment plant construction. Additional areas emphasize planning, financial, and technical assistance for various regions and issues.

The Act also established a goal of eliminating the discharge of pollutants into navigable waters of the U.S. by 1985 with an interim goal of attaining water quality that provided for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water by 1983. "Navigable waters" is defined in the Act as "waters of the United States, including the territorial seas" – a term that is interpreted to include various non-navigable tributaries and wetlands.⁷

The Act recognizes two distinct pathways in which pollutants are introduced into the Nation's waters – point sources of pollution, and non-point sources of pollution. Point sources are defined by section 402 of the Act as "any discernable, confined and discrete conveyance . . . from which pollutants are or may be discharged," including pipes, ditches, conduits, and channels, and are regulated under the National Pollutant Discharge Elimination System. Non-point sources of pollution include all remaining sources outside the definition of a point source, such as precipitation runoff from farms, fields, household lawns, and golf courses. The Act does not formally regulate non-point sources of pollution, but provides financial incentives to encourage states to address and control these sources of pollution (section 319).

1. The National Pollutant Discharge Elimination System – Point source discharges

To implement and achieve this policy, the Act imposes technology-based discharge control requirements on industrial and municipal dischargers. Industries must meet various standards based on the type of pollutant discharged and the age of the facility (*e.g.*, "best available technology economically achievable"). For municipalities, secondary treatment (defined in regulation as an 85 percent reduction in certain conventional pollutant concentrations as well as maintaining pH levels within a certain range) must be achieved. Additional limitations may also be imposed on dischargers meeting these technology-based standards where pollution levels in receiving waters continue to be too high to protect designated uses; this is accomplished through water quality based effluent limitations.

⁷ See earlier discussion on the jurisdictional scope of the Clean Water Act, which also affect the EPA's implementation of the program.

The EPA is responsible for defining what the required level of treatment is for municipalities and for each type of industry to meet the EPA's standards. The EPA also must develop water quality criteria, specifying the maximum concentrations of pollutants permitted for different designated uses of waters. These requirements are implemented and enforced through permits. All point source dischargers that discharge pollutants directly into navigable waters must obtain a permit for that discharge either from the EPA or a state, if the state has an EPA-approved permitting program. Currently, 45 states and the U.S. Virgin Islands have approved permitting programs. Permits are based on both technology requirements and water quality impacts, and set the concentration and amount of pollutants allowed to be discharged. Several provisions in the Act provide for time extensions and modifications of these requirements upon a satisfactory showing that specified conditions exist to justify the extension or modification.

A state may exercise its own permit program in lieu of the federal program if it meets specified requirements, such as the requirement to develop water quality standards. Water quality standards consist of a designated use for a body of water, such as fishable and swimmable, suitable for spawning, or drinking water source; criteria for the amounts of various pollutants which will permit and sustain that use; and a policy to prevent or minimize degradation of water quality. The Act requires states to adopt water quality criteria (as part of a water quality standard) for any toxic pollutant for which the EPA has developed criteria, the discharge or presence of which in the affected water body could reasonably be expected to interfere with the designated uses of the water body. States can use either the EPA developed water quality criteria or different ones if the state can demonstrate to the EPA that the different criteria are justified in the particular case. States are to adopt these criteria whenever they review their water quality standards, which must occur at least every three years.

For water bodies not meeting water quality standards following implementation of technology-based controls, more stringent limitations on dischargers may be imposed to protect the quality of the receiving waters.

Indirect dischargers, those entities that discharge to publicly owned treatment works (POTW) rather than directly to navigable waters, must meet treatment standards similar to those established for direct industrial discharges since POTWs traditionally are designed primarily for the treatment of domestic sewage. Pretreatment requirements, authorized in section 307 of the Act, are either enforced by the POTW or by state or federal authorities.

Section 402(p) of the Act establishes a program for regulating stormwater discharges. This section authorizes a "phased-in, tiered" approach, which requires large and medium municipal and most industrial dischargers to obtain permits from the EPA or state permitting authorities. The first phase, or Phase I, required permits from larger stormwater dischargers, including municipalities generally serving populations of 100,000 or more, and several categories of industrial activities, including construction activities affecting five or more acres of land. The Phase I requirements went into effect in 1990. Phase II of the stormwater program extended the permitting requirements to smaller municipalities, and construction activities affecting between one and five acres. The Phase II stormwater requirements went into effect on March 10, 2003.

The Act also regulates discharges from concentrated animal feeding operations (CAFO). CAFOs are typically large agricultural operations where animals are kept and raised in confined situations. These operations generally congregate animals, feed, manure, dead animals, and

production operations on a confined land area. Operations that meet the EPA's regulatory definition of a CAFO may be regulated under the NPDES system.

Finally, the Act includes several different enforcement provisions, authorizing administrative, civil, and criminal penalties, as well as citizen suits.

2. Non-point sources of pollution

To address non-point sources of pollution, including runoff from farms, urban areas, construction sites, and forests, states are required under section 319 to develop management programs for identifying and controlling non-point pollutant sources. Section 319 also provides federal financial assistance, in the form of grants, to encourage and assist states in the control of nonpoint sources of water pollution. The provision requires states to identify areas not meeting water quality standards because of non-point sources of pollution and to develop programs, as necessary, if states are to receive implementation grants. Notwithstanding the expiration of the authorization for grants in fiscal year 1991, the non-point source program has continued to receive appropriations for state implementation efforts.

3. Wastewater infrastructure financing

Titles II and VI of the Clean Water Act provide authority for grants to states and municipalities and the establishment of clean water state revolving loan funds, respectively, for the construction of treatment works. The Construction Grants program contained in Title II was phased out in favor of state revolving funds in the *Water Quality Act of 1987* (P.L. 100-4). Congress appropriated approximately \$60 billion over the life of the Construction Grants program.

The Clean Water State Revolving Fund (CWSRF) was authorized in the *Water Quality Act of 1987* (P.L. 100-4). Through the CWSRF program, each state and Puerto Rico maintain revolving loan funds to provide low-cost financing for approved water quality infrastructure projects. Funds to establish or capitalize the CWSRF programs are provided through federal capitalization grants and state matching funds (equal to 20 percent of federal government grants). From 1987 through 2017, Congress has appropriated more than \$42 billion in capitalization grants. CWSRF revenues also include a statutorily-required state match, bond proceeds, loan principal repayments, and interest earnings on investments and from loans.

The state revolving funds (SRFs) are available to make low-interest loans, buy or refinance local debt, subsidize or insure local bonds, make loan guarantees, act as security or guarantee of state debt, earn interest, and pay administrative expenses. All projects must ensure maintenance of progress toward the goals of the Act and meet the standards and enforceable requirements of the Act. SRF monies also may be used to implement other water pollution control programs such as non-point source pollution management and national estuary programs. The EPA has approved 57 states and territories for funding under the SRF program. Through the end of fiscal year 2017, SRFs have provided over \$126 billion in assistance for wastewater projects through over 38,000 individual assistance agreements.

The EPA, the Congressional Budget Office (CBO), and a coalition of industry and other interested stakeholders, all have estimated that significant increases in investments are needed to address wastewater needs over the next 20 years. These estimates fall between the CBO's low-cost

estimate of a \$3.2 billion annual gap, and the CBO's high-cost estimate of an \$11.1 billion annual gap.

4. Other Clean Water Act authorities

The Clean Water Act contains several targeted programs and authorities designed to improve water quality throughout the United States.

The National Estuary Program authorizes federal financing for the development and implementation of comprehensive conservation and management plans for improving the overall ecological health of U.S. estuaries. Section 320 of the Act designates 28 priority estuaries eligible for priority consideration under the National Estuary Program. Federal appropriations for the National Estuary Program are authorized through fiscal year 2020.

The Clean Lakes Program, established under section 314, authorizes financial and technical assistance to states for restoring publicly owned lakes. The program has funded a total of approximately \$145 million of grant activities since 1976 to address lake problems, but there have been no appropriations for the program since 1994.

The Act also authorizes several targeted programs for improving regional water quality:

- Section 117 authorizes funding for the operation of the EPA's Chesapeake Bay Program Office;
- Section 118 authorizes funding for the EPA's Great Lakes National Program Office and the Great Lakes Restoration Initiative;
- Section 119 authorizes funding for the EPA's Long Island Sound Office;
- Section 120 authorizes funding for the Lake Champlain Management Conference;
- Section 121 authorizes funding for the EPA's Lake Pontchartrain Basin Restoration Program;
- Section 122 authorizes funding for technical assistance and grants to carry out pilot projects for watershed management of wet weather discharges and stormwater best management practices; and
- Section 123 authorizes funding for the EPA's Columbia River Basin Restoration program.

5. Activities in the 115th Congress

Hearings:

- Hearing titled, "Building a 21st Century Infrastructure for America: The Role of Federal Agencies in Water Infrastructure" (March 9, 2017).
- Hearing titled, "Building a 21st Century Infrastructure for America: Improving Water Quality through Integrated Planning" (May 18, 2017).
- Hearing titled, "Building a 21st Century Infrastructure for America: Water Stakeholders' Perspectives" (September 26, 2017).

Legislation:

- The *America's Water Infrastructure Act of 2018* (P.L. 115-270). This Act included the following Clean Water Act related authorities:
 - Authorization of a stormwater infrastructure funding task force, based on *H.R. 3906, the Innovative Stormwater Infrastructure Act of 2018* (approved by the House, by voice vote, under suspension of the rules on July 16, 2018);
 - Authorization of an EPA-led wastewater technology clearinghouse;
 - Authorization of technical assistance for rural, small, and tribal municipalities for treatment works, under section 104 of the CWA;
 - Authorization of appropriations for the EPA's Long Island Sound program office, under section 119 of the CWA;
 - Authorization of appropriations for the EPA's Columbia River Basin Restoration program, under section 123 of the CWA;
 - Authorization of appropriations for the EPA's sewer overflow and stormwater reuse municipal grants, under section 221 of the CWA; and
 - Authorization of assistance for individual household decentralized wastewater systems, under title VI of the CWA.
- The *Water Infrastructure Improvement Act* (P.L. 115-436). This Act codified in the CWA the ability of municipalities to develop a plan that integrates wastewater and stormwater management. This Act also directs the EPA to establish an Office of the Municipal Ombudsman to provide technical assistance to municipalities in meeting the requirements of the CWA. Finally, the Act directs the EPA to promote the use of green infrastructure.

B. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT

The *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) (P.L. 96-510), commonly referred to as Superfund, was enacted to develop a comprehensive program to clean up the worst abandoned or uncontrolled U.S. hazardous waste sites. The EPA has primary responsibility for carrying out this Act. The law requires that responsible parties pay for hazardous waste cleanups wherever possible and provides for a hazardous substances trust fund, the Superfund, to pay for remedial cleanups in cases where responsible parties cannot be found or otherwise be held accountable. Superfund is also available for responding to emergency situations involving hazardous substances. In addition, the law is designed to advance scientific and technological capabilities in all aspects of hazardous waste management, treatment, and disposal.

Superfund is a response to hazardous waste events of the late 1970s, such as those involving Love Canal, a community in Niagara Falls, New York, and Times Beach, Missouri. Superfund was enacted in 1980 as a \$1.6 billion five-year program to address the hazardous waste problem. In recognition both of the enormity of the problem and the importance of the Superfund program to address hazardous waste sites, in 1986, Superfund was reauthorized in legislation that authorized the program at \$8.5 billion over five years. The taxes that funded the program were extended in 1990, but they expired on December 31, 1995, and have not been reinstated.

The Superfund trust fund initially obtained its revenue from several sources: a tax on crude oil and petroleum products, a tax on certain feedstock chemicals, a tax on certain imported substances derived from taxable chemicals, an environmental tax imposed on a portion of the modified alternative minimum taxable income of a corporation, cost recoveries from responsible parties, penalties and punitive damages assessed under Superfund, money appropriated from general revenues, and income from investment of the fund balance. However, since the taxing authority expired on December 31, 1995, and has not been reinstated, most of the Superfund expenditures have come from a transfer of general fund revenues to the Superfund program.

Recently, in 2015, the GAO released a report (GAO-15-812) that assessed recent trends in federal funding and cleanup of non-federal Superfund sites. According to this report, annual federal appropriations to the Superfund program generally declined from about \$2 billion to about \$1.1 billion in constant 2013 dollars from fiscal years 1999 through 2013. The EPA expenditures of site-specific cleanup funds on remedial cleanup activities at nonfederal National Priorities List sites also declined from about \$0.7 billion to about \$0.4 billion during the same period. Finally, GAO found that while from fiscal years 1999 through 2013, the total number of nonfederal sites on the National Priorities List remained relatively constant, the number of remedial action project completions and construction completions generally declined.

Superfund imposes liability on certain persons that arranged for disposal of hazardous substances found at a site, present and certain former owners and operators of a site, and certain transporters who disposed of hazardous substances at a site. As interpreted by the courts, liability under Superfund is strict, joint and several, and retroactive.

Strict liability is liability without fault or negligence. Liability is established simply by showing that a person either owns the site currently or owned it when hazardous substances were disposed there, or sent any type or amount of a hazardous substance there, and that costs have been incurred to respond to a release or threatened release of a hazardous substance. Joint and several liability means that, if liability is established, any liable person can be held responsible individually or together with other liable persons for 100 percent of the cleanup costs, although total recoveries cannot exceed total costs. Retroactive liability means that Superfund's liability regime applies to parties for conduct that took place prior to the law's enactment in 1980.

Response actions under Superfund are divided into two categories – removal and remedial actions. Removal actions are intended to be short-term, emergency responses to an immediate need. Except in certain exigent circumstances, a removal action cannot require the obligation of more than \$2 million or take longer than 12 months from the date of initial response. In addition, a removal action must contribute to the efficient performance of any long-term, remedial action with respect to the release or threatened release concerned.

The more visible aspect of the Superfund program is the long-term, remedial action program, which provides for long-term remedies to the most serious hazardous waste sites. The initial step in having a site considered for a remedial action under Superfund is for the EPA's National Response Center to be notified of a release or threatened release of a hazardous substance. This information is usually provided by state and local governments, but may be provided by anyone, including interest groups and individuals. This notification results in a site being entered into CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System), which is the EPA's computerized database of potential Superfund sites. The EPA will then perform a preliminary assessment, which is the process of collecting and reviewing available

information about a known or suspected hazardous waste site or release. The EPA uses this information to determine if the site requires further study. If further study is needed, a site inspection is undertaken.

A site inspection is a technical phase that follows the preliminary assessment and is designed to collect more extensive information about the hazardous waste site. A site inspection can include data collection and sampling. The preliminary assessment and site inspection tend to greatly reduce the number of sites considered for inclusion in Superfund. Over one-half of the sites which have received preliminary assessments and site inspections have been determined to be sites where no further federal action is necessary. Sites remaining in the inventory are eligible for ranking under the Hazard Ranking System.

The Hazard Ranking System is a scoring system the EPA uses to evaluate the relative risk to human health and the environment posed by uncontrolled hazardous waste sites. It is a numerically-based scoring system that uses information obtained from the preliminary assessment and site inspection. The Hazard Ranking System assigns each site a score ranging from 0 to 100 based on the likelihood that a site has released or has the potential to release contaminants into the environment; the characteristics of the waste (toxicity and waste quantity); and the people or sensitive environments affected by the release or threatened release. If a site receives a hazard ranking system score of 28.5 or more, the site is eligible for listing on the National Priorities List.

The National Priorities List is a listing of sites that are eligible for Superfund financed cleanup activities. The fact that a site has been placed on the National Priorities List does not affect the obligation of responsible parties to pay for or conduct the cleanup. After a site has been placed on the National Priorities List, it is subjected to a remedial investigation in order to select the cleanup strategy best suited for the traits of that site. A remedial investigation entails extensive sampling and laboratory analyses to generate more precise data on the types and quantities of waste at the site, the soil type and water drainage patterns, and the resulting environmental or health threats. At the same time as the remedial investigation is occurring, a feasibility study is conducted. The feasibility study analyzes the specific needs of the individual site, and evaluates alternative cleanup approaches on the basis of their relative effectiveness and cost.

The EPA, using the direction given it in the 1986 amendments, issued regulations in 1990 to modify the National Contingency Plan and developed guidance for remedy selection using nine criteria divided into three groups. The first two criteria are referred to as the threshold criteria because they must be satisfied in order for a remedy to be eligible for selection. The threshold criteria are overall protection of human health and the environment, and compliance with all legally applicable or relevant and appropriate requirements contained in other environmental laws (the so-called ARARs).

The second set of criteria is the primary balancing criteria. These criteria are: long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. These criteria are used to help select one alternative from the full range of potential remedies that meet the threshold criteria.

The third group of criteria, the modifying criteria, is state acceptance and community acceptance of the proposed remedial action. These criteria are used to evaluate community and state concerns. EPA may change the selected remedy based on expressed concerns of the state and community.

A Record of Decision is prepared to document site conditions and offer an explanation and justification of the EPA's remedy selection. The EPA or responsible parties will then prepare a remedial design consisting of the preparation of plans and specifications for implementing the chosen remedial alternative. Finally, the EPA or responsible parties will embark upon construction or other work necessary to implement the remedial alternative.

The EPA has authority to settle Superfund liability claims. In addition, since 1986, the EPA has had specific authority to engage in mixed funding that authorizes cleanups using both Superfund and responsible party financing at the same site. The EPA also has authority to engage in *de minimis* settlements with parties that contributed very small amounts of waste at a hazardous waste site so that small contributors may be released from further negotiation or litigation.

In 2002, the *Small Business Liability Protection Act* (P.L. 107-118) amended CERCLA to exempt certain persons and small businesses from liability under Superfund for the transportation and disposal of certain household hazardous wastes. It also promotes the redevelopment of brownfields by exempting certain persons from liability for contamination existing at a site that they purchase after the date of enactment of this legislation, and limits federal enforcement at sites addressed under state voluntary cleanup programs.

In addition to response costs, natural resource damages are addressed in Superfund.⁸ The Department of the Interior (DOI) has promulgated regulations to implement the natural resource damages provisions of section 107(f) of the Act.

The *Emergency Planning and Community Right to Know Act of 1986*, although not written as an amendment to the Superfund program, is closely associated with Superfund and was enacted as title III of the *Superfund Amendments and Reauthorization Act of 1986* (P.L. 99-499). The program establishes extensive reporting requirements under which facilities that handle, store, or generate hazardous chemicals must notify appropriate state and local officials of the identity of chemicals kept at the site (subject to reporting thresholds) and their accompanying health hazards, the volume of such chemicals kept in inventory at the site, and the storage location for such chemicals. Persons who manufacture, process, or otherwise use chemicals that are in excess of reporting thresholds must submit an annual report of chemical emissions to air, water, and soil at the site.

1. Activities in the 115th Congress

Hearings:

- Hearing titled, "Building a 21st Century Infrastructure for America: Revitalizing American Communities through the Brownfields Program" (March 28, 2017).

Legislation:

- The *Brownfields Utilization, Investment, and Local Development Act of 2018* (P.L. 115-141, Division N). This Act, based, in part, on H.R. 1758, the *Brownfields Reauthorization Act of 2017* (reported by the Committee on Transportation and Infrastructure on July 27, 2017, by voice vote), amends the liability provisions of the Superfund law as they relate to

⁸ Natural resource damages are further discussed in section XI(B).

facilities owned or under the control of municipalities or to lessees of brownfields properties.

C. BROWNFIELDS REVITALIZATION

Brownfields are abandoned, idled, or underused industrial and commercial properties where the expansion, redevelopment, or reuse of the property may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Revitalization and redevelopment of these sites can promote economic development, revitalize neighborhoods, and enable the creation of public parks and open space, and can preserve existing properties, including undeveloped green spaces.

In 2001, Congress created specific authority for the EPA to address brownfields with the enactment of the *Brownfields Revitalization and Environmental Restoration Act of 2001* (P.L. 107-118), as an amendment to CERCLA. This legislation authorizes funding through the EPA for brownfields assessment and cleanup grants, provides targeted liability protections for innocent landowners, bona fide prospective purchasers, and contiguous property owners, and increases support for State and tribal voluntary cleanup programs.

The Act provides grant authority totaling \$250 million annually, including authorizing \$200 million annually in federal appropriations for brownfields assessment and cleanup, for the establishment of brownfields revolving loan funds, and for brownfields-related research and job training. The Act was amended in 2018 to allow individual brownfields remediation grants to rise from \$200,000 per site to \$500,000 per site, and to allow the Administrator of the EPA to further increase the amount of the grant up to \$650,000 per site, where additional resources may be necessary due to the size and contamination level. The 2018 amendments to the Act also authorized the EPA to award multipurpose brownfields grants, up to \$1 million per grant, to allow eligible entities to submit funding applications for both site characterization and cleanup activities at one or more brownfield sites in the same grant.

The Act also authorizes appropriations of \$50 million each year for state and tribal response programs. States may use this assistance to establish or enhance their response programs, capitalize existing revolving loan programs, and develop risk-sharing pools, indemnity pools, or insurance mechanisms to provide financing for remediation activities.

Since the enactment of the 2002 brownfields law, the Executive Branch has consistently requested, and Congress has funded, far less than the fully-authorized levels for assessment and cleanup grants. For example, in fiscal year 2018, Congress appropriated \$80 million for brownfields site assessment and cleanup grants, and the fiscal year 2019 Presidential Budget requested \$62 million for this authority.

1. Activities in the 115th Congress

Hearings:

- Hearing titled, “Building a 21st Century Infrastructure for America: Revitalizing American Communities through the Brownfields Program” (March 28, 2017).

Legislation:

- The *Brownfields Utilization, Investment, and Local Development Act of 2018* (P.L. 115-141, Division N). This Act, based, in part, on H.R. 1758, the *Brownfields Reauthorization Act of 2017* (reported by the Committee on Transportation and Infrastructure on July 27, 2017, by voice vote), amends the liability provisions of the Superfund law as they relate to facilities owned or under the control of municipalities or to lessees of brownfields properties.

D. DRINKING WATER INFRASTRUCTURE, WATER SUPPLY, AND WATERSHED PROTECTION

Over the years, the Committee has exercised jurisdiction over various agency programs and activities (and legislative proposals) regarding the construction, rehabilitation, improvement and financing of drinking water and water supply infrastructure. For example, the Corps has limited authority to provide emergency assistance for drinking water supplies and, on a site-specific basis, has authority to conduct various water infrastructure projects. The Corps also currently owns and operates the Washington Aqueduct facilities, which provide drinking water for Washington, D.C., and a small portion of the surrounding region. The Committee, however, does not have jurisdiction over the EPA's regulatory requirements in the context of the Safe Drinking Water Act.

1. Activities in the 115th Congress

Hearing titled, "Building a 21st Century Infrastructure for America: The Role of Federal Agencies in Water Infrastructure" (March 9, 2017).

IV. CORPS OF ENGINEERS/EPA - OCEAN DUMPING

A. BACKGROUND

Title I of the *Marine Protection, Research, and Sanctuaries Act of 1972* (P.L. 92-532), often referred to as the "Ocean Dumping Act," provides for the regulation of the dumping of material into the ocean. Except as authorized by a permit, no person may transport any material from the U.S. for the purpose of dumping it into ocean waters. Without a permit, no material may be transported from any location for the purpose of dumping it into the ocean where a vessel or aircraft registered in the U.S., or flying the U.S. flag, or where a U.S. department, agency, or instrumentality is involved. Also, except as permitted, no person may dump any material transported from a location outside the U.S. into the territorial sea, or into the contiguous zone to the extent it will affect the territorial sea or the territory of the United States.

The EPA regulates the dumping of material other than dredged material while dredged material is regulated by the Corps in accordance with criteria developed by the EPA. No permit may be issued under the Ocean Dumping Act for the dumping of radiological, chemical, and biological warfare agents, high-level radioactive waste, or medical waste.

The EPA may issue permits for the transportation of materials outside the U.S. for the purpose of dumping, or for the dumping of materials into the oceans, where the EPA Administrator determines that the dumping will not unreasonably degrade or endanger human health, welfare or

amenities, or the marine environment, ecological systems, or economic potentialities. The EPA is to establish and apply criteria for reviewing and evaluating permit applications. The EPA is authorized to designate recommended sites or times for dumping and, where found necessary to protect critical areas, is required to designate sites or times within which dumping is prohibited.

The Corps is authorized to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters where it determines that the dumping will not unreasonably degrade or endanger human health, welfare or amenities, or the marine environment, ecological systems, or ecological health, welfare, or amenities, or economic potentialities. The Corps must apply the criteria established by the EPA.

The Corps makes an independent determination as to the need for the dumping, based upon an evaluation of the potential effects of a permit denial on navigation, economic and industrial development, and foreign and domestic commerce. An independent determination is also made as to other possible methods of disposal and appropriate locations for the dumping. In considering appropriate locations, the Corps is directed to utilize, to the maximum extent feasible, recommended sites designated by the EPA.

Prior to issuing a permit, the Corps must first notify the EPA. When the EPA disagrees with the Corps' determination with regard to the statutory criteria, or with regard to a site where dumping is prohibited by the EPA, the determination of the EPA prevails. Provision is made, however, for a waiver. When the Corps finds that no economically feasible method or site is available for the deposition of the dredged material, a waiver may be requested. The EPA must grant the waiver within 30 days unless it finds that the dumping will result in an unacceptable adverse effect on municipal water supplies, shellfish beds, wildlife, fisheries, or recreational areas. Finally, in connection with federal projects involving dredged material, the Corps may, in lieu of the permit procedure, authorize ocean dumping through regulations that incorporate the same requirements which would apply in the case of permits issued by the agency.

Several amendments to this law were included in the *Ocean Dumping Ban Act of 1988* (P.L. 100-688). Under this legislation, ocean disposal of sewage sludge and industrial waste is prohibited after December 31, 1991. All ocean dumping of sewage sludge and industrial waste has now ceased. The *Marine Protection, Research, and Sanctuaries Act* (P.L. 92-532) was also amended in Title V of the *Water Resources Development Act of 1992* (P.L. 102-580). The title establishes a national contaminated sediment task force to improve existing programs related to the disposal of contaminated sediments. Additionally, the title enhances the roles of the EPA and an affected state in regulating ocean dumping. The ocean dumping program was reauthorized through fiscal year 1997.

1. Activities in the 115th Congress

No formal Congressional oversight was taken in the 115th Congress with respect to the ocean dumping jurisdiction of the Committee.

V. EPA/COAST GUARD - OIL POLLUTION

A. BACKGROUND

The discharge of oil or hazardous substances into or upon the navigable waters of the U.S. is prohibited by section 311 of the CWA. The section also includes contingency planning

requirements for spill prevention, control, and countermeasures; penalties for various violations; and other provisions related to oil and hazardous substance spills. The *Oil Pollution Act of 1990* (OPA) (P.L. 101-380) included amendments to the CWA as well as free-standing provisions and other amendments to provide a more comprehensive scheme of spill cleanup, compensation, prevention, and mitigation measures. The OPA had been pending for over a decade but was enacted largely in response to the 1989 *Exxon Valdez* oil spill.

Under the OPA (as well as under section 311 of the CWA), owners or operators of vessels and onshore or offshore facilities are strictly, jointly and severally liable for cleanup costs and covered damages resulting from oil spills. Strict liability means there is liability without a showing of fault or negligence. Joint and several liability means that any liable person can be held responsible individually or together with other liable persons for 100 percent of covered damages, although total recoveries cannot exceed total costs. Covered damages include: the costs of cleanup and removal; natural resources damages, including loss of use of natural resources; injury or loss of real or personal property; loss or impairment of income, profits, or earning capacity; loss of subsistence use of natural resources; costs of providing increased or additional public services; and loss of taxes, royalties, rents, fees, or net profit shares.

The statutory limits on the OPA liability are: \$3,000 per gross ton or \$22 million, whichever is greater, for larger, single-hull tankers; \$3,000 per gross ton or \$6 million, whichever is greater, for smaller, single-hull tankers; \$1,900 per gross ton or \$16 million, whichever is greater, for larger double-hull tankers; and \$1,900 per gross ton or \$4 million, whichever is greater, for smaller double-hull tankers. Owners or operators of certain-size vessels and "offshore facilities" must demonstrate financial responsibility (through the use of certificates of financial responsibility, or COFRs) sufficient to meet the maximum amount of possible liability. There is no liability limit in the case of gross negligence, willful misconduct, failure to report a spill, or violation of certain federal regulations. There is no federal preemption of state laws related to the liability for oil spills.

The OPA requires the President to ensure effective and immediate removal of a discharge. This requirement may be satisfied by the President removing or arranging for the removal of the discharge; directing or monitoring all federal, state, and private actions to remove a discharge; or removing or destroying a discharging vessel by whatever means are available. The President also must establish a Coast Guard District Response Group in each Coast Guard District to assist in cleanup, maintain equipment, and assist in developing Area Contingency Plans. The Area Contingency Plans are to be developed by federal, state, and local interests to provide a joint response effort for the removal of a worst-case discharge. The Plan will describe the responsibilities of all parties, list all available equipment, describe expedited procedures for the use of dispersants, and include integration with other contingency plans.

The OPA also included many provisions to help prevent oil spills. For example, the law requires the phase-out of existing single-hull oil carrying vessels of more than 5,000 gross tons starting in 1995. The phase-out is accomplished by a schedule that requires that the oldest and largest vessels be retrofitted or retired first. (As a practical matter, older vessels will not be retrofitted; they will be retired.) Double hulls will be required for all oil-carrying vessels by 2015. Smaller vessels, such as inland barges, must have double hulls or an equally effective double containment system by 2015.

The program established a cleanup and compensation fund, the Oil Spill Liability Trust Fund, financed by a per barrel petroleum fee. The most recent taxing authority for the fund, a 9-

cent per barrel tax, enacted as section 405 of the *Emergency Economic Stabilization Act of 2008* (P.L. 110-343) expired on December 31, 2017. The Fund also has borrowing authority of up to \$1 billion if the balance in the Fund is insufficient to fully respond to a spill. The Fund will pay for cleanup costs and damages of up to \$1 billion per incident, but natural resources damages are limited to \$500 million. The Fund will be used for immediate response costs and for costs beyond those paid by the spiller if liability limits are reached.

The OPA also increased penalties to \$250,000 and up to three years in prison for an individual or \$500,000 for an organization for failure to report a spill. Civil penalties for a spill were increased to \$32,500 per day of violation or \$1,100 per barrel of oil discharged, and new administrative penalties were established. A minimum penalty of \$130,000, but no more than \$4,300 per barrel, is set for penalties involving gross negligence or willful misconduct. Pursuant to other legislation, penalties are increased on a periodic basis to account for inflation. To minimize the effects and frequency of spills and to minimize cleanup time and damages, the Act also established a \$25 million dollar oil pollution research and development program.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to the OPA during the 115th Congress.

Legislation:

- Section 3508 of the *Foreign Spill Protection Act of 2017* (P.L. 115-91). This section amended section 1001 of the OPA to clarify that foreign facilities that are located offshore and outside the boundary of the exclusive economic zone (EEZ) are liable for removal costs and damages that result from oil spills that reach (or threaten to reach) U.S. navigable waters.

VI. TENNESSEE VALLEY AUTHORITY

A. BACKGROUND

The Tennessee Valley Authority (TVA) was established in 1933 to aid in the development of the Tennessee River Valley region through the proper use, conservation, and development of the region's natural resources. The region includes parts of seven states – Virginia, Kentucky, Tennessee, North Carolina, Mississippi, Alabama, and Georgia. The TVA is an independent government corporation, with headquarters in Knoxville, Tennessee. Since its inception, in order to carry out its assigned tasks, it has:

- Constructed a system of reservoirs for navigation, hydroelectric power, flood control and recreation;
- Established an Environmental Research Center to develop new and more effective environmentally benign fertilizers and address other environmental issues in the Tennessee Valley region and throughout the U.S.;

- Established a tributary area development program to help area organizations take advantage of opportunities offered by the resources of each area—new farm products, manpower training, tourist services, and the like;
- Instituted a program to provide technical assistance to communities in preventing flood damages;
- Established a forestry organization to work with the states, landowners, and industries to improve the regions' timber stands;
- Established the Land Between the Lakes National Recreation Area, comprising 170,000 acres in a 40-mile long strip of land between Kentucky Lake and Lake Barkley in Kentucky and Tennessee; and
- Established various watershed management and water quality monitoring and protection programs.

One of the most significant programs of the TVA has been the furnishing of plentiful, low cost electricity to the region. During the TVA's first 20 years, most of the power generated was hydroelectric. By 1950, with increased power needs, the TVA began building coal-fired steam electric plants, and those now account for about 75 percent of the TVA's power generation. The TVA has also constructed nuclear plants to supply additional power needs, although the nuclear program has encountered various setbacks over time, including construction and safety problems and excess power capacity in the region. The TVA currently has three nuclear power plants in operation.

Prior to 1959, construction of the power projects was financed mainly by Congressional appropriations. The power program is now completely self-financed through power revenues. In 1959, Congress provided the TVA with borrowing authority to finance power system construction through the sale of bonds or notes. By statute, bonding authority is limited to \$30 billion. Revenues from power users are used to repay borrowed funds and to repay funds previously appropriated by the Congress for the TVA power program.

The TVA's non-power programs, such as navigation, flood control, and environmental management, are also completely self-financed through power revenues. Recent issues include the long term-management of the TVA's debt load and pension obligations, labor relations, and long-term management of coal ash and other fossil-fuel residuals.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight or consider any legislation related to the TVA in the 115th Congress. However, the Committee did request, and receive, a report from GAO (GAO-17-343) related to the TVA, titled "Tennessee Valley Authority: Actions Needed to Better Communicate Debt Reduction Plans and Address Billion in Unfunded Pension Liabilities."

VII. SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

A. BACKGROUND

The Saint Lawrence Seaway Development Corporation (SLSDC) is a wholly-owned government enterprise created in 1954 to construct, operate, and develop jointly with Canada a seaway between Montreal and Lake Erie. The Corporation is operated under the Secretary of Transportation's general direction and supervision.

Specifically, the SLSDC (1) constructs, maintains, and operates the U.S. Seaway facilities; (2) finances the U.S. share of Seaway costs on a self-liquidating basis by issuing revenue bonds to the U.S. Treasury; and (3) establishes with Canada's Saint Lawrence Seaway Authority mutually satisfactory arrangements for controlling and operating the Seaway. The Seaway allows for a 2,400-mile system of waterways extending from the Atlantic Ocean to the St. Lawrence River to the headwaters of the Great Lakes. The Seaway has two sections—the Saint Lawrence River section, which extends from Montreal to Lake Ontario, and the Welland Canal section, which connects Lake Ontario and Lake Erie.

During the 97th Congress, legislation was enacted which relieved the SLSDC of the obligation to repay its outstanding debt. The *Water Resources Development Act of 1986* (P.L. 99-662) provided that tolls paid to the U.S. along the Seaway would be paid to the Harbor Maintenance Trust Fund (HMTF) and then rebated to those who paid the tolls. The HMTF, established primarily to pay for the Corps' harbor operation and maintenance costs, is also authorized to pay for operation and maintenance of Seaway facilities. The *Department of Transportation and Related Agencies Appropriations Act, 1995* (P.L. 103-331) abolished U.S. tolls along the Seaway. The *Water Resources Development Act of 2007* (P.L. 110-114) authorized the Seaway, in partnership with the Corps, to undertake a 10-year asset renewal effort for U.S.-controlled assets of the Seaway.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight or consider any legislation related to the SLSDC in the 115th Congress. However, enactment of the *Water Resources Development Act of 2018* (P.L. 115-270) authorized the construction of the expanded Soo Locks, at Sault Ste. Marie, Michigan. The Committee did request, and receive, a report from GAO (GAO-18-610) related to the SLSDC, titled "Great Lakes-St. Lawrence Seaway: Assessing Risks and Measuring Performance Could Improve Maritime Transportation."

VIII. NATURAL RESOURCES CONSERVATION SERVICE

A. BACKGROUND

The Natural Resources Conservation Service (NRCS) of the Department of Agriculture is authorized to give technical and financial help to local organizations in planning and carrying out watershed projects for flood protection, agricultural water management, recreation, municipal and industrial water supply, and wildlife enhancement.

The watershed work plan for a project, which is the basis for authorization of the project, is prepared by a suitable local organization with assistance from the NRCS and in coordination with other federal agencies. If the estimated federal cost of a project does not exceed \$5,000,000 and the

project does not contain any single structure having a total capacity of more than 2,500 acre-feet, it can be undertaken without congressional authorization.

If the estimated federal cost exceeds \$5,000,000 or if the work plan contains a single structure having a total capacity of more than 2,500 acre-feet, it must be submitted to Congress for authorization, after being cleared by the Office of Management and Budget (OMB). If none of the structures in the plan will have a total capacity of more than 4,000 acre-feet, then the project is authorized by resolutions of the House and Senate Committees on Agriculture.

If any structure in the plan will have a total capacity of more than 4,000 acre-feet, it is referred to the House Committee on Transportation and Infrastructure and the Senate Committee on Environment and Public Works. Authorization is accomplished by resolutions of these two committees. Specific appropriations are not made for studies or construction of individual watershed projects. Rather, a lump sum is appropriated to the NRCS and initiation of the planning or construction of the projects is approved by the Chief of the Service.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight or consider any legislation related to the NRCS in the 115th Congress. However, Conferees for the Committee on Transportation and Infrastructure were approved for consideration of provisions related to the NRCS in H.R. 2, the *Agricultural Improvement Act of 2018*.

IX. DEEPWATER PORTS

A. BACKGROUND

The *Deepwater Port Act of 1974* (P.L. 93-627) provides for federal licensing and regulation of offshore ports designed to receive oil from vessels too large to enter conventional ports. Deepwater ports consist of pumping and pipeline facilities in open, deep water (beyond the territorial sea). The Act authorizes the Secretary of Transportation to license owners and operators and to issue regulations to control the location, construction and operation of deepwater ports. The purpose of the Act is to provide a mechanism for permitting the construction and operation of deepwater port facilities while ensuring the protection of the marine and coastal environment and recognizing and protecting the interests of affected states. The Subcommittee shares jurisdiction over the Act with the Subcommittee on Coast Guard and Maritime Transportation.

One deepwater port facility, the Louisiana Offshore Oil Port (LOOP), in the Gulf of Mexico is presently operating. Various sponsors have proposed additional deepwater ports.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight or consider any legislation related to the Act in the 115th Congress.

X. INVASIVE/AQUATIC NUISANCE SPECIES, BALLAST WATER, AND HARMFUL ALGAL BLOOMS

A. BACKGROUND

The regulation of ballast water and other incidental discharges from vessels is jointly managed by the EPA and the Coast Guard, primarily through section 312 of the CWA. This new provision, enacted by the *Vessel Incidental Discharge Act of 2018* (Title IX of P. L. 115-282), establishes uniform, environmentally sound standards and requirements for the management of discharges incidental to the normal operation of a vessels, while preserving a role for states to effectively ensure the protection of local water resources. The Act uses, as a baseline, ballast water discharge performance standards similar to the current international standards for ballast water discharges, and requires that most commercial vessels install (and maintain in good working order) treatment technologies to both prevent the introduction or spread of aquatic invasive species, as well as address other incidental discharges from vessels that may adversely affect local water quality. Discharges from recreational vessels are exempt from the CWA permitting requirements pursuant to the *Clean Boating Act of 2008* (P.L. 110-288). The Subcommittee shares jurisdiction over the regulation of ballast water with the Subcommittee on Coast Guard and Maritime Transportation.

Congress enacted the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (Title I of P.L. 101-646) (NANPCA) to help reduce the introduction and spread of nonindigenous, invasive aquatic species (zebra mussels, sea lamprey, round goby, and other animals, plants, and organisms). This statute, implemented by numerous agencies, established an Aquatic Nuisance Species Task Force charged with the development and implementation of a program to prevent the introduction and dispersal of aquatic nuisance species, as well as to monitor, control, and study such species. Section 1104 of NANPCA created a national ballast water management demonstration program.

Congress also enacted the *Harmful Algal Bloom and Hypoxia Research and Control Act of 1998* (P.L. 105-383) to establish a Federal Inter-Agency Task Force on Harmful Algal Blooms and Hypoxia. This authority has twice been amended: in 2004, through the *Harmful Algal Bloom and Hypoxia Amendments Act of 2004* (P.L. 108-456), and in 2013, through the *Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014* (P.L. 113-124). The Subcommittee has jurisdiction over the activities of this Task Force, as they relate to the authorities of the EPA, the Corps, and the chair of the Task Force, the National Oceanic and Atmospheric Administration (NOAA).

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to aquatic or invasive species or harmful algal blooms during the 115th Congress.

Legislation:

- The *Water Resources Development Act of 2018* (P.L. 115-270), included specific authorities for the Corps to undertake aquatic invasive species research, to implement a harmful algal bloom technology demonstration program, and to limit the spread of aquatic invasive species through a watercraft inspection program in the Columbia River basin.

- The *Vessel Incidental Discharge Act of 2018* (P.L. 115-282, Title IX), amended both the CWA and the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (P.L. 101-646) to create a new program for the management and control of incidental discharges, including ballast water, from the normal operation of commercial vessels.

XI. ADDITIONAL AREAS

A. COASTAL POLLUTION AND COASTAL ZONE MANAGEMENT

Protection of the ocean and coastal environment has been an issue of increasing concern to the Committee. Several laws under the Committee's jurisdiction address ocean and coastal pollution. For example, the CWA contains provisions, including ocean discharge criteria and the National Estuary Program, targeted exclusively at coastal waters. In addition, because the definition of navigable waters of the U.S. includes coastal waters, the entire CWA generally applies to these waters. The Marine Protection, Research, and Sanctuaries Act and the Coastal Zone Management Act also are devoted to protecting coastal resources.

The *Coastal Zone Act Reauthorization Amendments of 1990* (P.L. 101-508) amended the Coastal Zone Management Act to increase the protection of water quality in and around coastal areas. The 1990 Act also included free-standing provisions (section 6217, Protecting Coastal Waters) to establish a program jointly administered by the EPA and the NOAA to address coastal nonpoint source pollution. The *NOAA Authorization Act of 1992* (P.L. 102-567) added a new Title V, the National Coastal Monitoring Act, to the existing Marine Protection, Research, and Sanctuaries Act. The new title establishes a coastal monitoring program implemented jointly by the EPA and the NOAA. In the 104th Congress, the Committee's jurisdiction was broadened and clarified to include marine affairs, including coastal zone management as it relates to pollution of navigable waters. However, the House Natural Resources Committee has primary jurisdiction over other aspects of marine affairs, including coastal zone management. In the 106th Congress, legislation to establish a Commission on Ocean Policy was enacted into law (P.L. 106-296). The U.S. Commission on Ocean Policy submitted its report to Congress and to the President on September 20, 2004. The Commission's report included numerous recommendations for addressing all aspects of ocean and coastal policy.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to coastal pollution or coastal zone management during the 115th Congress.

B. NATURAL RESOURCE DAMAGES

The Subcommittee has jurisdiction over natural resource damage provisions in CERCLA (Superfund) and the Oil Pollution Act. The Subcommittee shares jurisdiction over the Oil Pollution Act with the Subcommittee on Coast Guard and Maritime Transportation.

Section 107(f) of CERCLA and Section 1006(e) of the Oil Pollution Act authorize federal, state, and tribal governments to act as trustees for natural resources (such as birds, animals, trees, fish, groundwater, etc.) injured, lost, or destroyed by the discharge of oil or hazardous substances. Federal trustees include the Secretaries of the Interior, Commerce, Agriculture, and Defense. Under these provisions, trustees may seek damages for injuries to natural resources, including: (1)

assessment costs; (2) the cost of restoring and rehabilitating the damaged resources; (3) the cost of replacing or acquiring the equivalent of unrestored or unrehabilitated damaged resources; (4) compensation for lost use of the resources; and (5) compensation for non-use (or passive use) values of the damaged resources. Both the DOI, under Superfund, and the NOAA, under the Oil Pollution Act, have promulgated regulations governing the administration of natural resource damage claims.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to natural resource damages during the 115th Congress.

C. GROUNDWATER PROTECTION

Groundwater is one of our largest natural resources. Located underground and usually within 2,500 feet of the surface, groundwater reservoirs, or aquifers, contain nearly 50 times the volume of U.S. surface waters, constitute 96 percent of all the fresh water in the U.S., and are the primary drinking water source for half of the population. In particular locations, this resource may be threatened by various sources, including municipal, residential, agricultural and industrial activities. The EPA reports that over 80 percent of Superfund sites that have been investigated involve groundwater contamination.

In recent years, the EPA has developed a Comprehensive State Groundwater Management Protection Program to help states strengthen their groundwater programs. The voluntary guidance recognizes that states, rather than the federal government, have the primary role in managing and protecting groundwater resources within their jurisdiction. Groundwater protection is also addressed in a wide array of federal statutes. Some of these, such as Superfund and the CWA, are within the Committee's jurisdiction. Others, such as the Solid Waste Disposal Act—also referred to as the Resources Conservation and Recovery Act—and the Federal Insecticide, Fungicide, and Rodenticide Act, are outside the Committee's jurisdiction.

In the past decade, Congress has made various efforts to strengthen groundwater protection, assessment, and research programs. Two major environmental laws—the Safe Drinking Water Act and the Superfund law—were amended during the 99th Congress, establishing important groundwater protection measures. The *Water Quality Act of 1987* (P.L. 100-4), which amended the CWA, provided grants to states for groundwater protection activities. Congress included several provisions in the *Safe Drinking Water Act Amendments of 1996* (P.L. 104-182) to increase financial and technical assistance for state and local efforts to protect groundwater (e.g., grants for state groundwater protection strategies, source water protection, and watershed management).

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to groundwater during the 115th Congress.

D. WATER RESOURCES POLICY

The Subcommittee exercises jurisdiction over matters generally relating to the appropriate federal role in water resources conservation, development, and management. Specific areas include

drought management, water reclamation and reuse, desalination, and comprehensive watershed protection. The Subcommittee also reviews matters related to federal interagency coordination in water resources programs and assistance to states in water resources planning, conservation, development, and management. These issues are generally addressed in the biennial water resources development acts.

1. Activities in the 115th Congress

- Hearing titled, “Building a 21st Century Infrastructure for America: Implementation of the Water Resources Reform and Development Act of 2014 and the Water Resources Development Act of 2016” (July 19, 2017).
- Hearing titled, “America’s Water Resources Infrastructure: Approaches to Enhanced Project Delivery” (January 18, 2018).
- Hearing titled, “Building a 21st-Century Infrastructure for America: Water Resources Projects and Policy: Projects and Policies, Part 1” (March 15, 2018).

E. TOXIC SUBSTANCES AND PUBLIC HEALTH

The Subcommittee has jurisdiction over the Agency for Toxic Substances and Disease Registry (ATSDR), a sub-agency within the U.S. Department of Health and Human Services, which serves to implement the health-related sections of laws that protect the public from hazardous wastes and environmental spills of hazardous substances. The ATSDR was established through enactment of the CERCLA, to assess the presence and nature of health hazards at specific Superfund sites. Its mission has expanded to include public health assessment at non-Superfund sites, when requested by the EPA, states, or individuals. The ATSDR is also authorized to assist the EPA when determining which substances should be regulated and the levels at which substances may pose a threat to human health. Finally, the ATSDR is responsible for the establishment and maintenance of toxicological databases, information dissemination (including to first responders), and medical education.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to toxic substances or the ATSDR during the 115th Congress.

F. BOUNDARY WATER ISSUES

The national ownership of waters, sanitation, water quality, and flood control in the U.S.-Mexico border region are issues under the Subcommittee’s jurisdiction that are executed by the International Boundary and Water Commission.

1. Activities in the 115th Congress

The Subcommittee did not conduct any specific Congressional oversight related to boundary water areas during the 115th Congress.