

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
FULL COMMITTEE**

HEARING CHARTER

Navigating the Clean Water Act: Is Water Wet?

Wednesday, July 9th, 2014
10:00 a.m. – 12:00 p.m.
2318 Rayburn House Office Building

PURPOSE

On Wednesday, July 9th at 10:00 a.m. in Room 2318 of the Rayburn House Office Building, the Committee on Science, Space, and Technology will hold a hearing entitled *Navigating the Clean Water Act: Is Water Wet?* The purpose of this hearing is to understand the scope and impact of the Environmental Protection Agency's (EPA) proposed rule entitled "Definition of the 'Waters of the United States' Under the Clean Water Act."¹

WITNESS LIST

- **The Honorable Robert W. Perciasepe**, Deputy Administrator, U.S. Environmental Protection Agency

BACKGROUND

Waterways have long served as highways for commerce. In 1824, the landmark Supreme Court decision in *Gibbons v. Ogden*² held that the power to regulate interstate commerce and ensure navigability was granted to Congress by the Commerce Clause of the U.S. Constitution.³ At a time when over-land roads were few and often poorly maintained, Congress sought to keep waterways free of obstacles to navigation. Consequently, the first Rivers and Harbors Act was passed in 1824 and appropriated funds to improve navigation on the Mississippi and Ohio rivers by removing sandbars, snags, and other obstacles.

In the original Rivers and Harbors Act and subsequent statutes of the same name, Congress charged the U.S. Army Corps of Engineers with implementation. The Rivers and Harbors Act of 1899⁴ prohibited the dumping of solid waste into navigable rivers and harbors. Further, the rapidly expanding electric generation sector relied heavily on hydropower, so the

¹ U.S. ENVIRONMENTAL PROTECTION AGENCY. *Definition of "Waters of the United States" Under the Clean Water Act*. EPA-HQ-OW-2011-0880. Apr 21, 2014. Available at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OW-2011-0880>.

² 22 US 1 (1824).

³ See also CONGRESSIONAL RESEARCH SERVICE. *Federal Oversight and State Cooperation in the Chesapeake Bay*. May 29, 2013. Available at <http://www.crs.gov/pdfloader/R43090>.

⁴ March 3, 1899, Ch. 425, Sec. 9, 30 Stat. 1151.

statute required a license from Congress to dam rivers. These early legislative precursors focused on protecting and improving the use of nation’s waterways for interstate commerce.⁵

Building upon these early efforts, yet still decades before the EPA was created, the Federal Water Pollution Control Act of 1948 represented the first comprehensive federal clean water program. The law bestowed upon the Department of the Interior the authority to collaboratively develop and implement antipollution programs. The law also established programs to build sewage treatment plants and help state governments pay for water-pollution control programs.⁶

Despite numerous revisions, this Act produced slow progress; by the 1970s only about half of the states had water quality standards. With the creation of the EPA, Congress recognized that states and the federal government must work together more effectively to promote environmental stewardship. In 1972, after significant modifications and amendments, the "Clean Water Act" (CWA) became the common name of the law.⁷ Table 1 lists public laws and major amendments that formed the CWA.

Table 1. Clean Water Act and Major Amendments⁸

Year	Act	Public Law
1948	Federal Water Pollution Control Act	P.L. 80-845
1956	Water Pollution Control Act of 1956	P.L. 84-660
1961	Federal Water Pollution Control Act Amendments	P.L. 87-88
1965	Water Quality Act of 1965	P.L. 89-234
1966	Clean Water Restoration Act	P.L. 89-753
1970	Water Quality Improvement Act of 1970	P.L. 91-224, Part I
1972	Federal Water Pollution Control Act Amendments	P.L. 92-500
1977	Clean Water Act of 1977	P.L. 95-217
1981	Municipal Wastewater Treatment Construction Grants Amendments	P.L. 97-117
1987	Water Quality Act of 1987	P.L. 100-4

The modern CWA established the basic structure for regulating the “waters of the United States.” It made it unlawful to discharge any pollutant into navigable waters, unless a permit was obtained. The law has civil, criminal, and administrative enforcement provisions and also allows citizens to file suit against persons who violate standards, limitations, or permit requirements.⁹

Currently, more than 65,000 municipal, industrial, commercial, or other sources must obtain discharge permits from EPA or states under the Act’s section 402 program and more than 150,000 sources must obtain permits for stormwater. Under section 404 of the CWA, a separate

⁵ Percival, et al. “Statutory Authorities for Protecting Water Quality.” ENVIRONMENTAL REGULATION LAW, SCIENCE, AND POLICY. 6th ed. 643.

⁶ *Id* at 643-44.

⁷ Percival, et al. “Statutory Authorities for Protecting Water Quality.” ENVIRONMENTAL REGULATION LAW, SCIENCE, AND POLICY. 6th ed. 644-45.

⁸ CONGRESSIONAL RESEARCH SERVICE. *Clean Water Act: A Summary of the Law*. Nov. 30, 2012. Available at <http://www.crs.gov/pdfloader/RL30030>.

⁹ See generally “Summary of the Clean Water Act.” ENVIRONMENTAL PROTECTION AGENCY. Available at <http://www2.epa.gov/laws-regulations/summary-clean-water-act>.

permitting regime further protects the nation's waters, including wetlands.¹⁰ According to a Congressional Research Service report, *Clean Water Act: A Summary of the Law* (Nov. 30, 2012):

*Some types of activities are exempt from permit requirements, including certain farming, ranching, and forestry practices which do not alter the use or character of the land; some construction and maintenance; and activities already regulated by states under other provisions of the act. EPA may delegate certain Section 404 permitting responsibility to qualified states and has done so twice (Michigan and New Jersey). For some time, the act's wetlands permit program has been one of the most controversial parts of the law. Some who wish to develop wetlands maintain that federal regulation intrudes on and impedes private land-use decisions, while environmentalists seek more protection for remaining wetlands and limits on activities that are authorized to take place in wetlands.*¹¹

Penalties for violations can be as much as \$25,000 per day. Criminal violations of the act for negligent or knowing violations are punishable by fines of \$50,000 per day and three years imprisonment. Cases of “knowing endangerment” carry a fine of up to \$250,000 and 15 years in prison.¹²

Although the CWA deals with water pollution, it does not specifically address drinking-water quality. A separate statute, the Safe Drinking Water Act of 1974 (P.L. 93-523), provides protection of public drinking water supplies.¹³

Jurisdictional Uncertainty

A series of Supreme Court decisions have rejected some attempts to expand control over previously unregulated areas and created ambiguity regarding the scope of CWA jurisdiction. According to a Congressional Research Service report, *Federal Oversight and State Cooperation in the Chesapeake Bay* (May 29, 2013):

*The U.S. Supreme Court has long held that a state owns the navigable waters within its borders. In 1842, the Court explained that when the United States was formed, "the people of each state became themselves sovereign; and in that character hold the absolute right to all their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government." Under the constitutional equal footing doctrine, states that later joined the union acquired the same rights granted to the original states, and therefore also acquired ownership of their state's navigable waters upon achieving statehood.*¹⁴

¹⁰ CONGRESSIONAL RESEARCH SERVICE. *Clean Water Act: A Summary of the Law*. Nov. 30, 2012. Available at <http://www.crs.gov/pdfloader/RL30030>.

¹¹ *Id.*

¹² *Id.*

¹³ The EPA is not proposing to modify the protections afforded by the Safe Drinking Water Act.

¹⁴ Congressional Research Service. *Federal Oversight and State Cooperation in the Chesapeake Bay*, pages 2-3. May 29, 2013. Available at <http://www.crs.gov/pdfloader/R43090> (internal citations omitted).

However, a state's authority over its waters is "subject to the power of Congress to control the waters for the purpose of commerce."¹⁵

The CWA regulates “navigable waters,” which the Act defines as “waters of the United States.”¹⁶ Over the past 30 years, the Supreme Court has examined the meaning of this statutory language three times.

First, in *U.S. v. Riverside Bayview*, the Court upheld the regulation of wetlands “adjacent” to navigable waters because it found that the adjacent wetlands were “inseparably bound up” with the navigable waters.¹⁷

In 2001, *Solid Waste Agency of N. Cook Cnty v. U.S. Army Corps of Engineers* (commonly referred to as the *SWANCC case*), the Supreme Court rejected CWA jurisdiction over isolated ponds because they lacked a “significant nexus” to navigable waters.¹⁸ After *SWANCC*, the agencies asserted that the decision only applied to isolated waters and that if a body of water connected to navigable waters, it was not an isolated water and was subject to CWA jurisdiction.¹⁹

The third case was *Rapanos v. U.S.* in 2006. In *Rapanos*, a majority of the Supreme Court rejected the “any connection” theory of jurisdiction, finding it was too broad a standard.²⁰ The plurality held that the plain language of the CWA “does not authorize this ‘Land Is Waters’ approach to federal jurisdiction” and that “[i]n applying the definition to ephemeral streams, wet meadows, storm sewers and culverts, directional sheet flow during storm events, drain tiles, manmade drainage ditches, and dry arroyos in the middle of the desert, the Corps has stretched the term ‘waters of the United States’ beyond parody.”²¹ Instead, the plurality held that the CWA “confers jurisdiction over only relatively *permanent* bodies of water.”²²

Justice Kennedy also criticized the Corps’ standard as too broad because it “leave[s] wide room for regulation of drains, ditches, and streams remote from any navigable-in-fact water and carrying only minor water volumes...”²³ In his concurrence, Justice Kennedy established a “significant nexus” standard.

Noting that the reach of the CWA is notoriously unclear, the Supreme Court also called on the agencies to undertake a rulemaking and clarify key jurisdictional standards.²⁴ Specifically, Justice Kennedy noted that the presence of an ordinary high water mark is not a

¹⁵ *Id.* (citing *United States v. Appalachian Electric Power Co.*, 311 U.S. 377, 423 (1940)).

¹⁶ 33 U.S.C. §§ 1344, 1362(7).

¹⁷ 474 U.S. 121 (1985).

¹⁸ 531 U.S. 159 (2001).

¹⁹ *See, e.g.*, Brief for the United States at 31, *Rapanos v. United States*, 547 U.S. 715 (2006) (No. 04-1034); *Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring) (“The Corps’ theory of jurisdiction in these consolidated cases—adjacency to tributaries, however remote and insubstantial—raises concerns”).

²⁰ 547 U.S. 715 (2006).

²¹ *Id.* at 734.

²² *Id.* (emphasis in original).

²³ *Id.* at 781 (Kennedy, J., concurring).

²⁴ *See, e.g.*, *Rapanos*, 547 U.S. at 726 (plurality); *id.* at 782 (Kennedy, J., concurring); *id.* at 758 (Roberts, C.J., concurring); *Sackett v. EPA*, 132 S. Ct. 1367, 1375 (2012) (Alito, J., concurring).

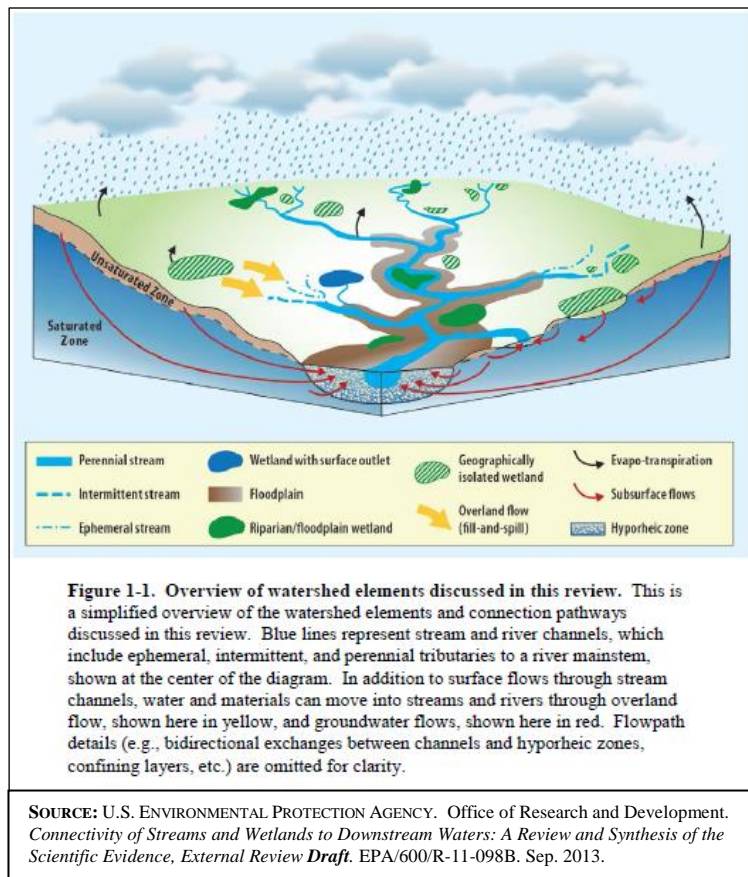
reliable standard for determining whether a water is a jurisdictional tributary.²⁵ Further, some within the regulated public called for a rulemaking to clarify the reach of the CWA.²⁶

In light of these concerns, the agencies proposed guidance in 2008, and 2011.²⁷

Connectivity Report

On September 17, 2013, the EPA and Army Corps of Engineers announced that a proposed rule defining the scope of CWA jurisdiction had been sent to the Office of Management and Budget (OMB) for interagency review. On the same day, EPA submitted its Draft Science Synthesis Report on the Connectivity of Streams and Wetlands to Downstream Waters²⁸ to its Scientific Advisory Board (SAB) for peer review. Along with the Report, the EPA assigned technical charge questions to the SAB expert panel with instructions to begin review of the Report.

The draft “Connectivity Report” evaluates potential connections between isolated streams and wetlands with navigable waters. The agencies assert “[t]his draft rule takes into consideration the current state-of-the-art peer reviewed science reflected in the draft science report. Any final regulatory action related to the jurisdiction of the Clean Water Act in a rulemaking will be based on a final version of this scientific assessment.”²⁹ However, EPA sent the rule to OMB before the SAB had begun reviewing the Report.



²⁵ *Rapanos*, 547 U.S. at 781; See also Matthew K. Mersel, U.S. Army Corps of Engineers, *The Ordinary High Water Mark: Concepts, Research, and Applications* (Mar. 20, 2013) (acknowledging that Corps standard for identifying streams is “vague” and has been applied “inconsistently”).

²⁶ Persons and Organizations Requesting Clarification of “Waters of the U.S.” by Rulemaking. Available at http://www2.epa.gov/sites/production/files/2014-03/documents/wus_request_rulemaking.pdf (EPA notes that “Request for a rulemaking process does not imply support for the rule as proposed”).

²⁷ CONGRESSIONAL RESEARCH SERVICE. EPA and the Army Corps’ Proposed Rule to Define “Waters of the United States.” June 24, 2014. Available at <http://www.crs.gov/pdfloader/R43455>.

²⁸ U.S. ENVIRONMENTAL PROTECTION AGENCY. Office of Research and Development. *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence, External Review Draft.* EPA/600/R-11-098B. Sep. 2013. Available at [http://yosemite.epa.gov/sab/sabproduct.nsf/0/7724357376745F48852579E60043E88C/\\$File/WOUS_ERD2_Sep2013.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/0/7724357376745F48852579E60043E88C/$File/WOUS_ERD2_Sep2013.pdf).

²⁹ EPA Press Release. Sep. 2013. Available at <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=23834>.

Under the Environmental Research, Development and Demonstration Authorization Act (ERDDAA), the “Administrator, at the time any proposed criteria document, standard, limitation, or regulation under the... [CWA]... is provided to any other Federal agency for formal review and comment, shall make available to the Board such proposed criteria document, standard, limitation, or regulation, together with relevant scientific and technical information in the possession of the Environmental Protection Agency on which the proposed action is based.”³⁰ The law explains that this process provides the Board with a critical opportunity to share with the Administrator “its advice and comments on the adequacy of the scientific and technical basis of the proposed criteria document, standard, limitation, or regulation.”³¹

The importance of the statutory peer review process is underscored by the fact that the Connectivity Report is classified as a “Highly Influential Scientific Assessment.” In a June 27, 2012 letter to the Committee, EPA confirmed that the “Synthesis is a ‘Highly Influential Scientific Assessment’ as defined by OMB.”³² Specifically, the OMB’s *Peer Review Bulletin*³³ states that “it is important to obtain peer review before the agency announces its regulatory options so that any technical corrections can be made before the agency becomes invested in a specific approach or the positions of interest groups have hardened.” The Bulletin notes that if the review occurs too late in the process “it is unlikely to contribute to the course of a rulemaking.”

The Committee has invited the EPA to reconcile the apparent divergence from the requirements of ERDDAA and OMB guidelines.³⁴

Further, pursuant to authority under ERDDAA, the Committee on Science, Space, and Technology provided the SAB with charge questions related to the Report.³⁵

Proposed Rule

On March 25, 2014, the EPA and the Corps jointly proposed a rule defining the scope of waters protected under the CWA. The proposal is open for comment until October 21, 2014. Some have raised concerns that the proposed rule could increase the reach of the CWA well beyond Congressional intent.³⁶ However, according to the agencies, the rule would only increase

³⁰ Environmental Research, Development and Demonstration Authorization Act of 1978, 42 USC § 4365.

³¹ *Id.*

³² Letter from Nancy Stoner, EPA Acting Assistant Administrator to House Committee on Science, Space, and Technology. June 27, 2012. Available at <http://science.house.gov/sites/republicans.science.house.gov/files/documents/06-27-2012%20EPA%20to%20Harris%20re%20CWA.pdf>.

³³ EXECUTIVE OFFICE OF THE PRESIDENT, OFFICE OF MANAGEMENT AND BUDGET. Final Information Quality Bulletin for Peer Review. Dec. 2004. Available at <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf>.

³⁴ Letter from House Committee on Science Space and Technology to EPA Administrator Gina McCarthy. Oct. 18, 2013. Available at http://science.house.gov/sites/republicans.science.house.gov/files/documents/Letters/101813_letter.pdf.

³⁵ Charge Questions from the House Committee on Science, Space, and Technology to the Science Advisory Board and the Panel for the Review of the EPA Water Body Connectivity Report. Nov. 6 2013. Available at [http://yosemite.epa.gov/sab/sabproduct.nsf/7FF38D8F9D02345485257C2300685787/\\$File/11-06-2013+Science+Committee+Letter+to+Dr++Rodewald+and+Dr++Allen.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/7FF38D8F9D02345485257C2300685787/$File/11-06-2013+Science+Committee+Letter+to+Dr++Rodewald+and+Dr++Allen.pdf).

³⁶ See e.g. Letter from 231 Congressmen to EPA and USACE. May 1, 2014. Available at <http://chriscollins.house.gov/sites/chriscollins.house.gov/files/Clean%20Water%20Act%20Letter%20FINAL.pdf>. Letter from 46 Senators and Representatives to EPA. May 8, 2014. Available at <http://www.lee.senate.gov/public/index.cfm/2014/5/western-caucuses-urge-epa-to-halt-waters-of-the-us-rule>.

jurisdictional areas by 3 percent and is intended to clarify the protections for "upstream waters and wetlands that are absolutely vital to downstream communities" by "strengthening the consistency, predictability and transparency of jurisdictional determinations."³⁷

Additional Reading:

Charles K. McFarland. *The Federal Government and Water Power, 1901-1913: A Legislative Study in the Nascence of Regulation*. LAND ECONOMICS Vol. 42, No. 4. Nov. 1966.

CONGRESSIONAL RESEARCH SERVICE. *Clean Water Act: A Summary of the Law*. Nov. 30, 2012. Available at <http://www.crs.gov/pdfloader/RL30030>.

CONGRESSIONAL RESEARCH SERVICE. *Controversies over Redefining "Fill Material" Under the Clean Water Act*. Jan. 23, 2014. Available at <http://www.crs.gov/pdfloader/RL31411>.

CONGRESSIONAL RESEARCH SERVICE. EPA and the Army Corps' Proposed Rule to Define "Waters of the United States." June 24, 2014. Available at <http://www.crs.gov/pdfloader/R43455>.

CONGRESSIONAL RESEARCH SERVICE. Federal Oversight and State Cooperation in the Chesapeake Bay. May 29, 2013. Available at <http://www.crs.gov/pdfloader/R43090>.

Herbert A. Johnson. *"Gibbons v. Ogden": John Marshall, Steamboats, and the Commerce Clause*. UNIVERSITY PRESS OF KANSAS. 2010.

U.S. ENVIRONMENTAL PROTECTION AGENCY. *Definition of "Waters of the United States" Under the Clean Water Act*. EPA-HQ-OW-2011-0880. Apr 21, 2014. Available at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OW-2011-0880>.

U.S. ENVIRONMENTAL PROTECTION AGENCY. Office of Research and Development. *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence, External Review Draft*. EPA/600/R-11-098B. Sep. 2013. Available at [http://yosemite.epa.gov/sab/sabproduct.nsf/0/7724357376745F48852579E60043E88C/\\$File/WOUS_ERD2_Sep2013.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/0/7724357376745F48852579E60043E88C/$File/WOUS_ERD2_Sep2013.pdf).

U.S. ENVIRONMENTAL PROTECTION AGENCY AND U.S. ARMY CORPS OF ENGINEERS. *Economic Analysis of Proposed Revised Definition of Waters of the United States*. March 2014. Available at <http://www2.epa.gov/uswaters/economic-analysis-proposed-revised-definition-waters-united-states>.

³⁷ U.S. ENVIRONMENTAL PROTECTION AGENCY. *Definition of "Waters of the United States" Under the Clean Water Act*. EPA-HQ-OW-2011-0880. Apr 21, 2014. Available at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OW-2011-0880>.

Appendix A

Excerpt of the definition from the proposed rule:

***Navigable waters* means the waters of the United States, including the territorial seas.**

(1) For purposes of all sections of the Clean Water Act, [33 U.S.C. 1251](#) *et. seq.* and its implementing regulations, subject to the exclusions in paragraph (2) of this definition, the term “waters of the United States” means:

- (i) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (ii) All interstate waters, including interstate wetlands;
- (iii) The territorial seas;
- (iv) All impoundments of waters identified in paragraphs (1)(i) through (iii) and (v) of this definition;
- (v) All tributaries of waters identified in paragraphs (1)(i) through (iv) of this definition;
- (vi) All waters, including wetlands, adjacent to a water identified in paragraphs (1)(i) through (v) of this definition; and
- (vii) On a case-specific basis, other waters, including wetlands, provided that those waters alone, or in combination [See Appendix B] with other similarly situated waters, including wetlands, located in the same region, have a significant nexus to a water identified in paragraphs (1)(i) through (iii) of this definition.

(2) The following are not “waters of the United States” notwithstanding whether they meet the terms of paragraphs (1)(i) through (vii) of this definition—

- (i) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act.
- (ii) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act the final authority regarding Clean Water Act jurisdiction remains with EPA.
- (iii) Ditches that are excavated wholly in uplands, drain only uplands, and have less than perennial flow.
- (iv) Ditches that do not contribute flow, either directly or through another water, to a water identified in paragraphs (1)(i) through (iv) of this definition.

(v) The following features:

(A) Artificially irrigated areas that would revert to upland should application of irrigation water to that area cease;

(B) Artificial lakes or ponds created by excavating and/or diking dry land and used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(C) Artificial reflecting pools or swimming pools created by excavating and/or diking dry land;

(D) Small ornamental waters created by excavating and/or diking dry land for primarily aesthetic reasons;

(E) Water-filled depressions created incidental to construction activity;

(F) Groundwater, including groundwater drained through subsurface drainage systems; and

(G) Gullies and rills and non-wetland swales.

(3) Definitions—

(i) **Adjacent.** The term *adjacent* means bordering, contiguous or neighboring. Waters, including wetlands, separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are “adjacent waters.”

(ii) **Neighboring.** The term *neighboring*, for purposes of the term “adjacent” in this section, includes waters located within the riparian area or floodplain of a water identified in paragraphs (1)(i) through (v) of this definition, or waters with a shallow subsurface hydrologic connection or confined surface hydrologic connection to such a jurisdictional water.

(iii) **Riparian area.** The term *riparian area* means an area bordering a water where surface or subsurface hydrology directly influence the ecological processes and plant and animal community structure in that area. Riparian areas are transitional areas between aquatic and terrestrial ecosystems that influence the exchange of energy and materials between those ecosystems.

(iv) **Floodplain.** The term *floodplain* means an area bordering inland or coastal waters that was formed by sediment deposition from such water under present climatic conditions and is inundated during periods of moderate to high water flows.

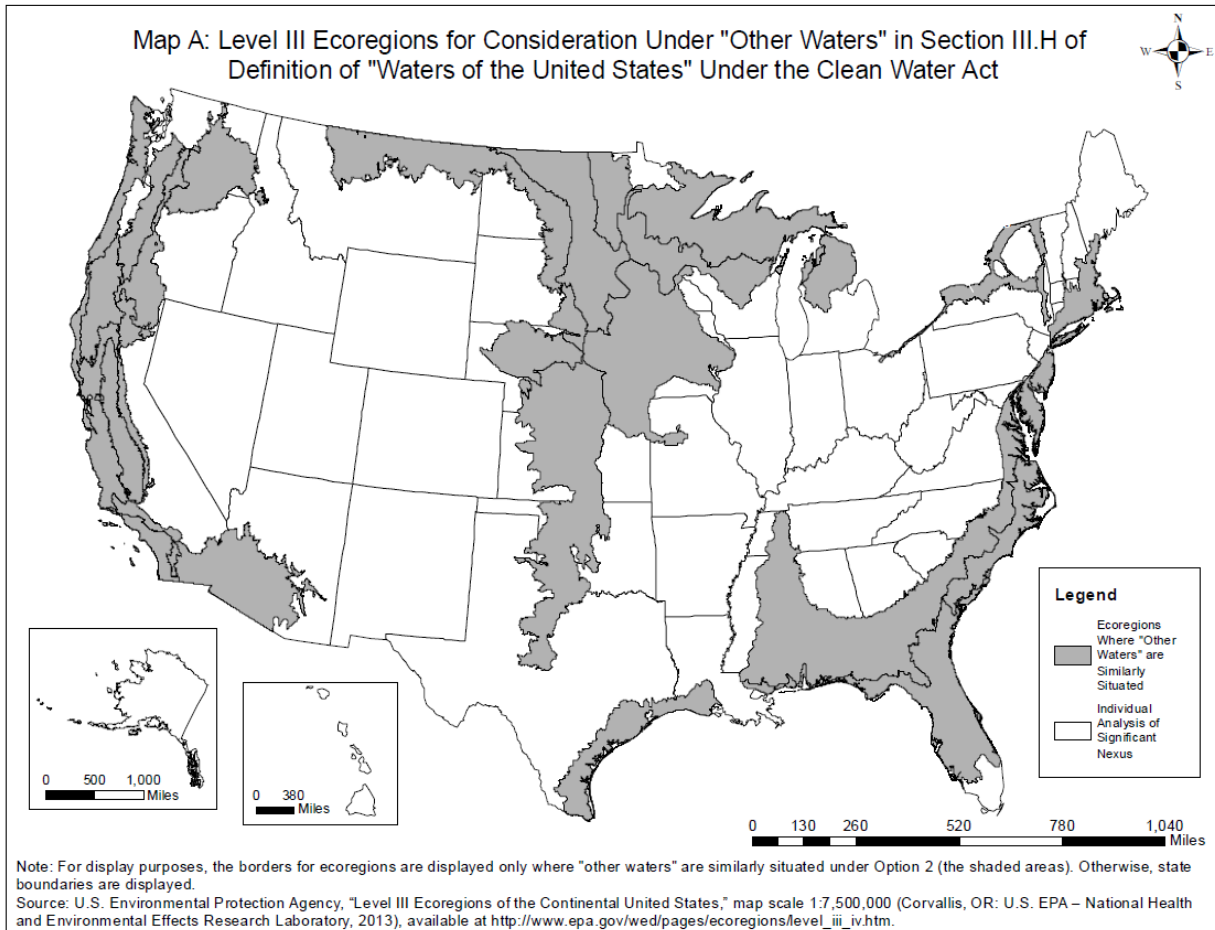
(v) **Tributary.** The term *tributary* means a water physically characterized by the presence of a bed and banks and ordinary high water mark, as defined at [33 CFR 328.3\(e\)](#), which

contributes flow, either directly or through another water, to a water identified in paragraphs (1)(i) through (iv) of this definition. In addition, wetlands, lakes, and ponds are tributaries (even if they lack a bed and banks or ordinary high water mark) if they contribute flow, either directly or through another water to a water identified in paragraphs (1)(i) through (iii) of this definition. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more man-made breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands at the head of or along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A tributary, including wetlands, can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, lakes, ponds, impoundments, canals, and ditches not excluded in paragraph (2)(iii) or (iv) of this definition.

(vi) *Wetlands*. The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

(vii) *Significant nexus*. The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition), significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition. For an effect to be significant, it must be more than speculative or insubstantial. Other waters, including wetlands, are similarly situated when they perform similar functions and are located sufficiently close together or sufficiently close to a “water of the United States” so that they can be evaluated as a single landscape unit with regard to their effect on the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition.

Appendix B



Map available in rulemaking docket with supporting materials at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2011-0880-0002>.