



Resource and Programmatic Assessment for the Proposed Revised Definition of “Waters of the United States”

U.S. Environmental Protection Agency
and
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Acronyms

AFO	Animal Feeding Operation
Agencies	U.S Environmental Protection Agency and the Department of the Army
AJD	Approved Jurisdictional Determination
Army	Department of the Army
CAAP	Concentrated Aquatic Animal Production
CAFO	Concentrated Animal Feeding Operations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
Corps	U.S. Army Corps of Engineers
CSO	Combined Sewer Overflow
CSS	Combined Sewer Systems
CWA	Clean Water Act
DOI	Department of the Interior
DOT	Department of Transportation
DWSRF	Drinking Water State Revolving Fund
EA	Economic Analysis
E.O.	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FY	Fiscal Year
FOSC	Federal On-Scene Coordinators
FRP	Facility Response Planning
FRS	Facility Registering Service
GAP	General Assistance Program
GPRA	Government Performance and Results Act
ICIS	Integrated Compliance Information System
ICR	Information Collection Request
JD	Jurisdictional Determination
K.S.A.	Kansas Statutes Annotated
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
NCP	National Oil and Hazardous Substances Pollution Contingency Plan

NEP	National Estuary Program
NEPA	National Environmental Policy Act
NHD	National Hydrography Dataset
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPFC	National Pollution Funds Center
NRCS	Natural Resources Conservation Service
NRDA	Natural Resource Damage Assessment
NRF	National Response Framework
NRPM	Notice of Proposed Rule Making
NRS	National Response System
NWI	National Wetlands Inventory
OPA	Oil Pollution Act
ORM2	Operation and Maintenance Business Information Link, Regulatory Module
OSLTF	Oil Spill Liability Trust Fund
PGP	Pesticide General Permit
PHMSA	Pipeline and Hazardous Materials Safety Administration
PJD	Preliminary Jurisdictional Determination
PHMSA	Pipeline and Hazardous Materials Safety Administration
PMOS	Permit Management Oversight System
POTW	Publicly-Owned Treatment Works
PWS	Public Water System
<i>Rapanos</i>	<i>Rapanos v. United States</i> , 547 U.S. 715 (2006)
RPA	Resource and Programmatic Assessment
RCRA	Resource Conservation and Recovery Act
RP	Responsible Party
RPW	Relatively Permanent Waters
SDWA	Safe Drinking Water Act
SPA	Source Protection Area
SPCC	Spill Prevention, Control and Countermeasure
SSS	Sanitary Sewer Systems
<i>SWANCC</i>	<i>Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers</i> , 531 U.S. 159 (2001)
TAS	Treatment in a Manner Similar to a State

TBEL	Technology-Based Effluent Limits
TNW	Traditional Navigable Water
TMDL	Total Maximum Daily Loads
TSDF	A Facility that Stores, Treats or Disposes of Hazardous Waste
USDA	U.S. Department of Agriculture
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WLA	Waste Load Allocations
WPDG	Wetland Program Development Grants
WPP	Wetland Protection Plan
WQBEL	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
WWTU	Wastewater Treatment Unit

EXECUTIVE SUMMARY

On February 28, 2017, the President of the United States issued Executive Order (E.O.) 13778 directing the U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) (“the agencies”) to reconsider the scope of the term “waters of the United States.” Consistent with the E.O., the agencies are now proposing to revise the definition of “waters of the United States.” The Clean Water Act (CWA) prohibits the discharge of pollutants to “navigable waters,” defined in the Act itself as “waters of the United States, including the territorial seas,” except in compliance with the Act. Thus, “waters of the United States” is a foundational term establishing the jurisdictional scope of the CWA.

The agencies are proposing to establish six categories of jurisdictional waters and would define eleven exclusions for features that would not be subject to jurisdiction under the CWA. The proposal would cover traditional navigable waters (TNWs), including the territorial seas; tributaries as defined; certain ditches; certain lakes and ponds; impoundments of jurisdictional waters; and wetlands adjacent to jurisdictional waters. It would exclude from the definition of “waters of the United States” certain waters and features, such as ephemeral features, certain ditches, prior converted cropland, and waste treatment systems.

This Resource and Programmatic Assessment (RPA) complements the Economic Analysis for the proposed rule and describes the agencies’ assessment of the potential effects of the proposed definition on the federal regulation of aquatic resources across the country, as well as the potential effects on CWA programs and certain other programs under other federal statutes. The RPA also provides snapshots of the applicable regulatory and legal framework currently in place in states and some tribes to provide context for how aquatic resources are regulated. The two documents together present a comprehensive assessment of this proposed rule’s potential impacts.

In the RPA’s aquatic resource assessment, the agencies describe how the proposed regulation compares to the baseline of the Clean Water Rule: Definition of “Waters of the United States” (hereinafter referred to as the 2015 Rule).¹ The 2015 Rule is the current definition of “waters of the United States” in the Code of Federal Regulations. However, as discussed further in this document, the 2015 Rule is enjoined in 28 states where the pre-2015 regulations are currently being implemented. Therefore, the agencies also provide a comparison against an alternate baseline of pre-2015 practice which represents the pre-2015 regulations as implemented consistent with Supreme Court decisions and informed by applicable guidance documents and longstanding agency practice. The agencies also identify available national datasets and discuss technical limitations faced by the agencies when analyzing the potential changes in jurisdiction for different types of aquatic resources. The Economic Analysis draws on the same aquatic resource assessment as the RPA and uses it as a baseline for analyzing costs and benefits of the proposal.

In the RPA’s assessment of state, tribal, and federal programs, the agencies have indicated where proposed changes in the definition of “waters of the United States” might affect CWA programs and other statutory programs. Some CWA programs are implemented by the federal government,

¹ 80 FR 37054 (June 29, 2015).

and others are implemented by state or tribal governments where the law provides for the assumption of those programs. The RPA assesses potential effects of a revised definition of “waters of the United States” on all CWA programs—including section 303(c) water quality standards (WQS), section 303(d) impaired waters and total maximum daily loads, section 401 state and tribal water quality certification programs, section 402 National Pollutant Discharge Elimination System (NPDES) permits, section 404 dredged and fill permit program, and section 311 oil spill prevention and planning programs—as such programs apply only to “waters of the United States.” States and tribes may implement, establish, or modify their own programs under state or tribal law to manage and regulate waters and wetlands independent of the CWA. The RPA focuses on describing existing state and tribal authorities and programs, recognizing that under current practice states and tribes may already address waters potentially affected by a revised definition; may want to develop or expand programs to cover certain waters not regulated under the proposed rule; or may choose not to regulate certain waters. These programs are discussed at a high level across all states and certain tribes. In addition, the agencies attempted to capture the breadth of individual state and certain tribal programs in Appendix B of this document.

Assessment of Aquatic Resources

In this RPA, the agencies evaluate the way in which the proposed definition addresses categories of aquatic resources across the country. In light of the August 16, 2018, nationwide injunction of the agencies’ final rule “Definition of ‘Waters of the United States’ – Addition of an Applicability Date to 2015 Clean Water Rule,” (hereinafter, the Applicability Date Rule), which has resulted in a patchwork of implementation approaches across the country, the agencies utilized two baselines.² The principal baseline for purposes of assessing the potential changes to categories of waters under the proposal is the definition promulgated by the agencies in 2015 and that is currently being implemented in 22 states, the U.S. Territories, and the District of Columbia. The alternate baseline is the agencies’ 1980s regulations as implemented using

² On August 16, 2018, the U.S. District Court for the District of South Carolina enjoined the Applicability Date Rule nationwide. See *South Carolina Coastal Conservation League, et al., v. Pruitt*, No. 2-18-cv-330-DCN, 2018 U.S. Dist. LEXIS 138595 (D.S.C. Aug. 16, 2018). In addition, on November 26, 2018, the U.S. District Court for the Western District of Washington vacated the Applicability Date Rule nationwide. See *Puget Soundkeeper Alliance, et al. v. Andrew Wheeler, et al.*, No. C15-1342-JCC (W.D. Wash. November 26, 2018). The agencies finalized the Applicability Date Rule on February 6, 2018 to add an applicability date of February 6, 2020 to the 2015 Rule in light of litigation surrounding the 2015 Rule and to give the agencies time to finalize their efforts to redefine “waters of the United States.” The 2015 Rule continues to be subject to a preliminary injunction issued by the U.S. District Court for the District of North Dakota as to 13 states: Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, Nevada, North Dakota, South Dakota, Wyoming, and New Mexico; Iowa was later added to the District Court’s preliminary injunction. See *North Dakota v. EPA*, 127 F. Supp. 3d 1047, 1055–56 (D.N.D. 2015) and *North Dakota v. EPA*, No. 3:15-cv-59-DLH-ARS (D.N.D. September 18, 2018). The 2015 Rule also is subject to a preliminary injunction issued by the U.S. District Court for the Southern District of Georgia as to 11 more states: Georgia, Alabama, Florida, Indiana, Kansas, Kentucky, North Carolina, South Carolina, Utah, West Virginia, and Wisconsin. See *Georgia v. Pruitt*, No. 15-cv-79 (S.D. Ga.). The 2015 Rule is also subject to a preliminary injunction issued by the U.S. District Court for the Southern District of Texas as to an additional three states: Louisiana, Mississippi, and Texas. See *Texas v. United States EPA*, No. 3:15-CV-00162 (S.D. Tex. Sep. 12, 2018). Additional information is in the “Baseline” section of Chapter I.

applicable guidance (hereinafter, the pre-2015 practice)³ in 28 states where three U.S. District Courts have preliminarily enjoined the 2015 Rule.

The agencies conducted two analyses to evaluate the potential change in the geographic scope of CWA jurisdiction. In one analysis, the agencies examined data records in the U.S. Army Corps of Engineers' (Corps) Operation and Maintenance Business Information Link, Regulatory Module (ORM2) database that documents Corps decisions regarding the jurisdictional status of various aquatic resource types (*i.e.*, jurisdictional determinations, or JDs). The aquatic resource types used in ORM2 generally track the *Rapanos* Guidance (*Rapanos v. United States*, 547 U.S. 715 (2006)) but do not directly correlate to the terms used in the proposed rule.

In addition, the agencies attempted to use publicly-available data from national datasets (the National Hydrography Dataset at High Resolution and the National Wetlands Inventory) in an effort to assess the potential extent of types of waters whose jurisdictional status might change as a result of the proposed rule. While the National Hydrography Dataset (NHD) and National Wetlands Inventory (NWI) datasets are widely used and recognized as the best available national datasets of their kind, they nonetheless have technical limitations that present significant challenges for the purpose of determining potential effects of the proposed rule with regard to both baselines, as more fully described in Chapter I. The NHD and NWI are not datasets of CWA jurisdiction but instead represent the most comprehensive data at a national level of the potential extent of streams, rivers, lakes, and wetlands across the country.⁴ These datasets do not use terms that directly correspond to the categories in the proposed rule or either baseline, so potential effects are described qualitatively and are not quantified.

Although the agencies are unable to estimate the specific aquatic resource jurisdictional changes that would occur as a result of the proposed rule, the agencies assume that the most significant changes the proposed rule makes from pre-2015 practice and the 2015 Rule are that “waters of the United States” would not encompass any ephemeral features⁵ and would reduce the scope of wetlands subject to federal regulation under the CWA. The proposed rule would also remove interstate waters as an independent category of jurisdiction, including tributaries of interstate waters, impoundments of interstate waters, and wetlands adjacent to the above waters. The agencies are unable to estimate whether this will represent a significant change in jurisdictional waters, given that some interstate waters would remain jurisdictional under the other proposed

³ As used hereinafter, pre-2015 practice means post-*Rapanos* pre-2015 practice.

⁴ It is the agencies' longstanding position that these datasets do not represent waters subject to CWA jurisdiction. See, *e.g.*, letter dated July 28, 2014 from EPA Office of Water Acting Assistant Administrator Nancy Stoner to Congressman Lamar Smith. Available at https://science.house.gov/sites/republicans.science.house.gov/files/documents/epa_releases_maps_letter.pdf.

⁵ Ephemeral features, including ephemeral streams, are not categorically jurisdictional under pre-2015 practice. As described in the agencies' *Rapanos* Guidance, under pre-2015 practice the agencies conduct a significant nexus analysis for certain types of waters referred to as “non-relatively permanent waters,” which includes ephemeral streams and some intermittent streams. See *Rapanos* Guidance at 7 (“‘[R]elatively permanent’ waters do not include ephemeral tributaries which flow only in response to precipitation and intermittent streams which do not typically flow year-round or have continuous flow at least seasonally. However, CWA jurisdiction over these waters will be evaluated under the significant nexus standard[.]”). The *Rapanos* Guidance also notes that “[t]he agencies generally will not assert jurisdiction over . . . small washes characterized by low volume, infrequent, or short duration flow.” *Id.* at 1.

categories of waters. The agencies, however, are not aware of any database that identifies the jurisdictional status of interstate waters based solely on the fact that they cross state lines or any other resource that would identify these waters and therefore lack the analytical ability to perform a comparative analysis with precision.⁶

The agencies' proposal would also reduce the scope of impoundments subject to regulation under the CWA, as impoundments of waters that are jurisdictional under one or both baselines but would not be jurisdictional under the proposed rule would themselves also no longer be jurisdictional. The agencies are unable to quantify the number or extent of impoundments of waters that would no longer be considered jurisdictional under the proposal. In addition, the agencies are unable to quantify the proposed change in CWA jurisdiction for tributaries on a national scale due to 1) insufficient information on the extent of ephemeral streams – though in portions of the country ephemeral streams are more prevalent and better mapped in the NHD (*e.g.*, the arid West) – and 2) the fact that ephemeral features, including ephemeral streams, are not categorically jurisdictional under pre-2015 practice. Because ephemeral streams represent a larger percent of waters in the arid West, any change in jurisdiction related to ephemeral features may be greater there than in other portions of the country, assuming those features would have been found to have a significant nexus with a TNW per the *Rapanos* Guidance.

The agencies anticipate that the types of wetlands most likely to change jurisdictional status following a revised definition are wetlands that no longer meet the proposed definition of “adjacent wetlands” and wetlands that were considered adjacent to waters that are no longer considered jurisdictional (*e.g.*, ephemeral streams found to have a significant nexus with TNWs and certain ditches). In addition, the agencies anticipate that there may be wetlands that would meet the proposed definition of “adjacent wetlands” and be jurisdictional under the proposed rule, but that do not have a case-specific significant nexus to a downstream TNW and would not be jurisdictional under pre-2015 practice.

Assessment of State, Tribal, and Federal CWA and Related Programs

These sections of the RPA present analysis of the scope of CWA programs and the potential effects of the proposed rule on those programs. The agencies acknowledge that determining what may happen following a new regulation requires making assumptions but have concluded that the available datasets of water resources are so limited in their scope, accuracy, and applicability as to prevent their use in determining the potential effects of the proposed rulemaking, even though they are the most accurate and comprehensive national datasets available. These limitations are detailed in Chapter I: Aquatic Resource Analyses.

Nothing in the CWA prohibits states from determining what kinds of aquatic resources they can regulate under state law in order to protect the interests of their citizens, as recognized in CWA section 101(b). State environmental and natural resource agencies and some local governments may use existing state legal authorities to address certain water resources that currently do not meet the definition of “waters of the United States.” As is discussed further in the chapter on

⁶ Under pre-2015 practice, the Corps documents CWA jurisdiction for section 404 purposes using the Approved Jurisdictional Determination Form, available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2314>. This form does not indicate whether a water is jurisdictional solely because it is an interstate water.

state programs, approximately half of states regulate at least some waters beyond the scope of CWA requirements. Similarly, some states have laws that constrain a state’s authority to regulate more broadly than the federal “floor” set by the CWA.

Tribes, as sovereign nations, hold a unique position in the United States. The relationship between the federal and tribal governments is a “government-to-government” relationship. There are 573 federally recognized Indian tribes within the United States, including 229 native tribes within the state of Alaska. Over 300 of these entities have reservation lands. Indian reservations include trust lands validly set aside for Indian tribes, even if such lands have not formally been designated as an Indian reservation. Section 518(e) of the CWA authorizes the EPA to grant eligible Indian tribes treatment in a manner similar to a state (TAS) for a variety of purposes. To date, tribes have TAS approvals for the development of WQS, water quality certification, and grant programs (sections 106 and 319 grant programs). No tribes have TAS for any CWA permitting programs (*i.e.*, sections 402 and 404). For reservation lands where tribes do not have TAS for a CWA regulatory program, the EPA (or the Corps for section 404) is generally responsible for administering those programs. Any changes to CWA jurisdiction over waters on reservation lands would affect where the EPA or the Corps would administer the relevant program.

Section 303(c) Water Quality Standards and 303(d) Impaired Waters Listing and Total Maximum Daily Load Program

All states and 45 tribes currently have approved federal WQS under CWA section 303(c). Under CWA 303(d) and the EPA’s implementing regulations, states are required to assemble and evaluate all existing and readily available water quality-related data and information and to submit to the EPA every two years a list of impaired waters that require Total Maximum Daily Loads (TMDLs). For waters identified on a 303(d) list, states establish TMDLs for all pollutants preventing or expected to prevent attainment of WQS. While several tribes have expressed interest in obtaining 303(d) TAS authority, none have submitted applications for 303(d) TAS to date.

States and tribes may adopt standards under state or tribal law for waters that are not “waters of the United States,” but they would not be in effect for CWA purposes. States could apply their WQS as a matter of state law, and tribes could apply their WQS to the extent their authority under tribal law would allow.

Section 311 Oil Spill Prevention (SPCC), Preparedness (FRP) and Response Programs

CWA section 311 and the Oil Pollution Act (OPA) of 1990 authorize the Oil Spill Liability Trust Fund (OSLTF) to reimburse costs of assessing and responding to oil spills to “waters of the United States” or adjoining shorelines. The OSLTF allows an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities. The OSLTF is not available to reimburse costs incurred by states or tribes to clean up spills and costs related to business and citizen impacts (*e.g.*, lost wages and damages) for spills affecting waters not subject

to CWA jurisdiction. The EPA also lacks authority to take enforcement actions based on spills solely affecting waters not subject to CWA jurisdiction.

Under the proposed rule, the scope of facilities required to prepare oil spill prevention and response plans could be affected. EPA-regulated oil storage facilities with storage capacities greater than 1,320 gallons (except farms) that have a reasonable expectation of an oil discharge to “waters of the United States” or adjoining shorelines are required to prepare and implement spill prevention plans. High-risk oil storage facilities that meet certain higher storage thresholds and related harm factors are required to prepare and submit oil spill preparedness plans to EPA for review. The U.S. Coast Guard (USCG) and Department of Transportation (DOT) also require oil spill response plans under their respective authorities. If no water that could be affected by an oil spill from a facility is jurisdictional, spill prevention and preparedness plans would not be required by federal law.

Unlike the sections 402 (National Pollutant Discharge Elimination System) and 404 (dredged or fill material) permit programs, states and tribes cannot be authorized to implement the section 311 program. However, coordination with states and tribes is a part of the program’s implementation by EPA Regions. Generally, all states have a program that covers at least some of the areas included in section 311. These programs vary from state to state in their requirements, coverage, and process. All states have some mechanism to allow for reimbursement for oil spill cleanup from responsible parties, while most states have mechanisms for clean-up cost recovery, civil penalties, and/or trust funds to aid in cleanup. Only a few tribes, such as the Navajo Nation, have an oil spill prevention program similar to the EPA’s Spill Prevention, Control and Countermeasure Program (SPCC). The agencies do not have sufficient information at this time to assess how these state or tribal programs and funding mechanisms could be affected by a revised definition of “waters of the United States.”

Section 401 Water Quality Certification

CWA section 401 provides that a federal agency cannot issue a permit or license for an activity that may result in a discharge to “waters of the United States” until the state or tribe where the discharge would originate has granted or waived water quality certification. As a result, section 401 certification provides states and authorized tribes an opportunity to address the proposed aquatic resource impacts of federally-issued permits and licenses. A change in the definition of “waters of the United States” would change both where federal permits are required and where section 401 certification applies. If, for example, a reduction in the scope of jurisdictional waters reduces the circumstances in which a federal permit is required, applicability of section 401 certification similarly will be reduced.

Section 402 National Pollutant Discharge Elimination System (NPDES) Permits (State and Federally-issued)

The CWA requires a permit for a discharge of a pollutant to a “water of the United States” from a point source (*e.g.*, a discrete conveyance such as a pipe, ditch, or channel). Forty-seven states and the U.S. Virgin Islands are authorized to administer the National Pollutant Discharge Elimination System (NPDES) program under state authorities. At this time, no tribe has received

authorization to implement the NPDES permitting program. Currently, the EPA issues all NPDES permits in the three states that have not been authorized to administer the program; tribal reservation lands; federal facilities (*e.g.*, military bases, national parks, federal lands); Washington, D.C.; and U.S. Territories, except the U.S. Virgin Islands.

Typically, an NPDES permit is required where a point source discharges a pollutant to a “water of the United States.” In practice, a change to the definition of “waters of the United States” may result in situations where the jurisdictional water receiving a discharge would now be identified further downstream from the NPDES-permitted facility. This in turn may result in changes to water quality-based requirements in NPDES permits at the facility.

Should the scope of CWA jurisdiction change, those states with authorized CWA section 402 programs may choose to continue issuing permits as they have been for “waters of the state.” Alternatively, if the discharge is no longer into a “water of the United States,” states may rewrite permits to recognize that the discharge requiring an NPDES permit is farther from the pollutant source. In addition, the EPA, on its own, would not enforce permits issued for discharges to “waters of the state,” if beyond the scope of the CWA. Outside of authorized CWA programs, the agencies are aware that many states already issue their own discharge permits under state law that are separate from the NPDES program permits issued in their state. *See Economic Analysis* for further discussion about the extent to which states regulate waters more broadly than the CWA requires. The agencies are not aware of any tribes with independent tribal pollutant discharge regulatory programs.

Section 404 Corps and State and Tribal Dredged and Fill Material Permit Programs

The CWA section 404 permitting program addresses the discharge of dredged or fill material from a point source into “waters of the United States,” unless the activity is exempt from CWA section 404 regulation (*e.g.*, certain farming and forestry activities). Section 404 requires a permit before dredged or fill material may be discharged to “waters of the United States,” and the Corps administers the day-to-day permitting program throughout most of the country, including on tribal reservation lands and in the U.S. Territories. Where CWA jurisdiction does not apply or would no longer apply for certain waters or features under a revised definition, there would be no section 404 permits required for dredged or fill activities in those waters or features.

Section 404(g) of the CWA allows a state or tribe to “administer its own individual and general permit program” for dredged and fill operations within their jurisdiction, except for “retained” waters, which are “those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark....”⁷ In order to qualify for this provision, the state or tribal program must meet requirements that assure a level of aquatic resource protection that is equivalent to that provided by the federal agencies. At present,

⁷ Retained waters are discussed further in a July 30, 2018 Memorandum for Commanding General, U.S. Army Corps of Engineers Subject: Clean Water Act Section 404(g) - Non-Assumable Waters. *See* <https://www.army.mil/e2/c/downloads/525981.pdf>.

Michigan and New Jersey are the only states that have assumed administration of the CWA 404 dredged and fill permitting program for certain waters. No tribes have assumed the program.

The agencies are aware of at least three tribes that independently administer their own dredged or fill permitting program under tribal law. Thirty-five states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands have some form of dredged and fill permitting programs for state waters, which vary in scope and do not necessarily address waters subject to CWA section 404 permitting.⁸ Twenty-eight of those states and the District of Columbia have dredged and fill permitting for at least some inland waters, while the other five states and the territories have programs that only cover coastal or tidal waters. Of those states with inland dredged and fill programs, 20 have permit requirements for isolated wetlands. The other states and territories and eligible tribes rely on the section 401 certification program for addressing federally-permitted dredged and fill activities.

Should the scope of CWA jurisdiction change, states and tribes with a state or tribal dredged and fill program may already address both “waters of the United States” as well as some waters that could become non-jurisdictional under the proposed rule. Other states or tribes with existing programs may consider modifying their programs for dredged and fill permitting of non-CWA jurisdictional waters. States or eligible tribes without a dredged and fill permitting program might evaluate whether to assume the CWA 404 program or develop such independent programs.

Non-CWA Programs

Safe Drinking Water Act and Source Water Protection

The Safe Drinking Water Act (SDWA) was established in 1974 to protect the quality of drinking water in the U.S. This law focuses on waters actually or potentially designated for drinking use, whether from above ground or underground sources. The Act authorizes the EPA to establish minimum standards to protect drinking water and requires all owners or operators of public water systems (PWSs) to comply with these primary (health-related) standards.

The primary components of the SDWA PWS regulatory program focus on treatment and prevention activities as the means of providing safe drinking water. Protection focused on surface water sources of drinking water occurs primarily through voluntary coordination efforts at the local or watershed scale and includes other federal and state regulatory programs, especially the CWA. Ultimately, protection of drinking water sources relies on implementation of unique state and tribal programs, as well as CWA programs such as WQS, section 311 oil spill prevention and response, section 402 permits, section 404 permits, TMDL development and implementation, and non-point source management. Potential effects on drinking water facilities

⁸ The 35 state dredged and fill permit programs include the two assumed 404 programs and five programs that only regulate coastal dredged and fill activities. For the purpose of the Economic Analysis’ section on Potential State and Tribal Response, the agencies have concluded that inland programs are more indicative of a state’s capacity to address waters that may no longer be federally jurisdictional under the proposed rule. Therefore, the Economic Analysis only counts the 30 inland state dredged and fill programs in its analysis.

associated with a change in the scope of CWA jurisdiction likely would depend on state and local or tribal regulations and programs that go beyond CWA requirements.

Resource Conservation and Recovery Act

Under the Resource Conservation and Recovery Act (RCRA), a facility that stores, treats or disposes of hazardous waste (TSDF) is generally required to obtain a permit. Hazardous wastes are classified as either listed wastes or wastes exhibiting a hazardous characteristic. Most states have been authorized to administer this permitting program, with the exceptions of Alaska and Iowa, along with some territories. No tribes have been authorized to administer the RCRA hazardous waste program. The EPA administers the RCRA program for regulated activities in unauthorized states, the U.S. Territories, and tribal reservation lands.

RCRA provides certain exemptions for facilities whose wastewater treatment systems are subject to the CWA, even where they do not possess a CWA permit. The wastewater treatment unit (WWTU) exemption applies to a facility using tanks for managing hazardous wastewaters when the wastewater treatment facility is subject to CWA section 402 or 307(b) requirements. Also, publicly-owned treatment works (POTWs) managing hazardous wastewaters are not required to have a RCRA permit as long as certain conditions are met, including having a section 402 permit (permit by rule under 40 CFR 270.60(c)).

The agencies do not have data to estimate how many facilities could experience a change from CWA 402 permitting to RCRA permitting, which could occur under a revised definition of “waters of the United States.”

Other Statutes and Programs

When reviewing individual requests for a federal approval or permit under the various CWA programs that are dependent upon the definition of “waters of the United States” to determine their jurisdictional boundaries, the approval or permit decision by the EPA and/or the Corps may implicate other federal laws, regulations, and policies. These federal laws, regulations and policies include, but are not limited to, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the National Historic Preservation Act (NHPA).

In many cases, the Corps’ permitting process has streamlined compliance with other federal laws. Should the revised definition of “waters of the United States” reduce the scope of waters regulated under CWA programs for a federal project, activity, program, permit or other applicable federal undertaking, the lead federal agency for the federal project would no longer comply with these other laws under the aegis of the section 404 permitting program. Nonetheless the lead federal agency would still be responsible for complying with any applicable federal laws, regulations, and policies. For non-federal projects that need to comply with other federal programs, grants, or permits, the requirements and avenue for compliance would shift, depending upon the applicable federal law or policy and its requirements. For example, under the proposed rule, fewer waters would be federally regulated under the CWA relative to pre-2015 practice or the 2015 Rule, thereby reducing the occurrence of a federal nexus (*e.g.*, federal permitting or federal funding) through a CWA permit or other CWA action. This potential decrease in ESA section 7 consultations associated with a CWA section 404 dredged and fill permit could result

in a corresponding increase in ESA section 10 permit activities for the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service.

Where waters would not be jurisdictional under the proposed rule, and no federal entity or funding is involved, other federal laws or policies may not be applicable to the proposed activity. A number of states have some laws, regulations, or policies that echo the intent of the federal authorities including, but not limited to, public review requirements, environmental resource considerations, historic properties preservation, and special species protections. A reduction in the scope of “waters of the United States” would not affect applicability of state laws. Where state laws, regulations, or policies could address such interests, effects of a revised definition would be more limited; however, the agencies do not have sufficient data at this time to estimate potential effects on other programs and statutes.

I. AQUATIC RESOURCE ANALYSES

Introduction

The U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) (“the agencies”) have proposed to revise the definition of “waters of the United States,” which delineates the scope of Clean Water Act (CWA) jurisdiction.⁹ This analysis of the proposed rule addresses and clarifies the aquatic resources that would be regulated under the CWA and those which would be outside the scope of the CWA. To better understand this potential change in the scope of CWA jurisdiction, the agencies investigated two types of analytic approaches with respect to aquatic resources. In one analysis, the agencies examined data records in the U.S. Army Corps of Engineers (Corps) database that documents Corps jurisdictional determinations (JDs) associated with various aquatic resource types. The agencies also attempted to use publicly available data from national datasets (*i.e.*, the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI)) to estimate the potential extent of aquatic resources across the country, but ultimately concluded that the limitations of the datasets precluded using the data to quantify the potential extent of waters whose CWA jurisdictional status could change under the proposed rule.

While complex and interrelated, the following chapter intends to describe various concepts crucial to any analysis, including data and methodology, relevant baselines, and how each of the proposed rule categories would be treated under the baseline of the 2015 Rule and the alternate baseline of pre-2015 practice. The “Data and Methodology” section describes the types of data that are available to the agencies as they attempt to describe the implications of the proposed rule and the methodologies used for these efforts. The “Baselines” section describes the two baselines used by the agencies of the 2015 Rule and pre-2015 practice and also describes the proposed rule.¹⁰ Using these baselines and, where possible, these datasets, the aquatic resource analysis examines the changes from each baseline to proposal for the following categories of waters: traditional navigable waters (TNWs); interstate waters; territorial seas; impoundments; tributaries; ditches; lakes and ponds; adjacent wetlands; nonnavigable, isolated, intrastate waters; and exclusions.

The two analytical approaches are described below, including data limitations. The agencies solicit comment on the analytical approaches taken and the datasets used in the analyses. The agencies also solicit comment regarding other datasets and sources that they could consider for

⁹ Jurisdiction under the Clean Water Act permitting programs requires a discharge of a pollutant from a point source to a “water of the United States.” Thus, questions about the agencies’ understanding of “discharge,” “pollutant,” and “point source” are also jurisdictional questions. However, as this rule is defining “waters of the United States,” the agencies mean geographic jurisdiction in any case where they say “jurisdiction,” “jurisdictional,” or “scope of the Clean Water Act.”

¹⁰ As this Resource and Programmatic Assessment is being written, the 2015 Rule is the law of the land in 22 states, the District of Columbia, and the U.S. territories, while pre-2015 practice remains the status quo in 28 states that have judicial stays on implementation of the 2015 Rule. However, the agencies expect this situation to be fluid, and believe relevant issues can best be captured by clearly discussing each baseline separately rather than identifying where each applied at a particular, but likely dynamically changing, point in time.

the aquatic resources analyses to quantify the potential change in jurisdiction between the proposed rule and the two baselines.

Data and Methodology

ORM2 Data Analyses

The Operation and Maintenance Business Information Link, Regulatory Module (ORM2) is the Corps' internal database system that documents CWA section 404 application and permit data, including information on JDs. A JD is a written Corps determination that a water is subject to regulatory jurisdiction under section 404 of the CWA (33 U.S.C. 1344) or a written determination that a water is subject to regulatory jurisdiction under Section 9 or 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.).¹¹ JDs are identified as either preliminary or approved, and both types are recorded in ORM2. An approved jurisdictional determination (AJD) is an official Corps document stating the presence or absence of "waters of the United States" on a parcel or a written statement and map identifying the limits of "waters of the United States" on a parcel. A preliminary jurisdictional determination (PJD) is a non-binding written indication that there may be "waters of the United States" on a parcel; an applicant can elect to use a PJD to voluntarily waive or set aside questions regarding CWA jurisdiction over a particular site and thus move forward assuming all waters will be treated as jurisdictional without making a formal determination.

In ORM2, the aquatic resource data records include the following categories for JDs made under the Corps' 1986 regulations and applicable guidance documents:

- Traditional navigable waters (TNWs)
- Relatively permanent waters (RPWs)
- Non-RPWs
- Wetlands associated with these categories
- Uplands
- Impoundments
- Isolated waters

The isolated waters category is used in the Corps' ORM2 database to represent intrastate, nonnavigable¹² waters which do not meet the requirements under the (a)(3) category of the Corps' 1986 regulations consistent with the Supreme Court's decision in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, 531 U.S. 159 (2001) (*SWANCC*). These waters may include lakes, ponds, streams, and ditches that lack a direct surface connection to other waterways, as well as non-adjacent wetlands. These waters are hereinafter referred to as "other waters." The Corps also has a category for "uplands," which is used for features that the Corps determined were uplands or dry lands on a site. The upland category also includes waters found to be non-jurisdictional due to the regulatory exclusions from the definition of "waters of the United States" or because the waters are generally

¹¹ 33 CFR 331.2.

¹² Nonnavigable as used in this context refers to waters that are not navigable-in-fact.

considered to not be “waters of the United States” per the 1986 preamble language or per the *Rapanos* Guidance.

To examine how assertion of jurisdiction could change under the proposed rule as compared to pre-2015 practice, the agencies reviewed CWA AJDs from ORM2¹³ in fiscal years (FYs)¹⁴ 2013 through 2017. As the agency that manages day-to-day implementation of the CWA section 404 program, the Corps conducts tens of thousands of preliminary and approved JDs each year.¹⁵ For other federal CWA programs, the EPA typically does not conduct JDs, except for enforcement purposes. Thus, most of the nation’s JDs for CWA purposes originate from the Corps. Corps AJDs are generally valid for five years unless new information warrants a revision or a District Engineer identifies specific geographic areas with rapidly changing environmental conditions that merit re-issuance on a more frequent basis.¹⁶ The agencies analyzed AJD data from the last five FYs for this analysis. During this period, the Corps conducted AJDs for 82,738 aquatic resources in the ten categories that are described below in the “Baseline” section of this chapter. Of these AJDs, 60,116 aquatic resources were determined to be jurisdictional. In addition, the Corps conducted 14,357 upland determinations in that same period. A single AJD may include multiple aquatic resources.

For the ORM2 analysis, the agencies generally did not review hardcopy AJD forms to analyze which aquatic resources might change jurisdictional status under the proposed rule. Instead, the agencies reviewed the FY2013-2017 ORM2 data to collect summary statistics regarding whether the Corps had made positive or negative JDs for the various categories of aquatic resources in ORM2, which are further described in Section D of this chapter.

After the 2015 Rule was finalized, the ORM2 database was updated so that the Corps could enter AJDs using the 2015 Rule’s “waters of the United States” definition. The agencies are not using data from ORM2 for AJDs that were made under the 2015 Rule for this analysis. The relatively small number of AJDs made under the 2015 Rule before it was stayed by the courts and in the parts of the country where the 2015 Rule is currently being implemented in light of the injunction of the Applicability Date Rule is not a representative sample when compared to the large numbers of AJDs documented in ORM2 under pre-2015 practice, which the agencies continued to implement nationwide from October 2015 to August 2018 and currently continue to implement in certain states during the various judicial stays of the 2015 Rule. The agencies were also concerned about using AJD information reflecting the categories of waters that the agencies would have found jurisdictional or non-jurisdictional under the 2015 Rule because a disproportionate number of the AJDs finalized under the 2015 Rule involve exclusions and non-significant nexus determination categories. Furthermore, the 2015 Rule has not been implemented at all in 13 states, so the available data are not national in scope for AJDs under

¹³ This includes only those JDs completed under pre-2015 implementation, not any completed under the 2015 Rule.

¹⁴ The fiscal year is the accounting period for the federal government which begins on October 1 and ends on September 30. The fiscal year is designated by the calendar year in which it ends; for example, fiscal year 2013 begins on October 1, 2012, and ends on September 30, 2013.

¹⁵ Only New Jersey and Michigan have assumed the CWA 404 program, although the Corps retains permitting authority over certain waters.

¹⁶ See Regulatory Guidance Letter 05-02 for more information. Available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll9/id/1246>.

that rule since AJDs in those 13 states were completed consistent with the 1980s regulations and relevant guidance.

Aquatic Resource Analyses

The results of the aquatic resource analyses are not meant to represent waters that are or are not jurisdictional under either baseline or the proposed rule. Data do not exist to calculate the extent of such waters. Thus, these analyses do not address the specific jurisdictional status of individual waters and do not address how states and tribes may currently address them through state/tribal authorities and programs. State and tribal authorities and programs are discussed in the Economic Analysis and elsewhere in this Resource and Programmatic Assessment (RPA).

The agencies assessed the U.S. Geological Survey's (USGS) NHD at high resolution and the U.S. Fish and Wildlife Service's (USFWS) NWI in an attempt to estimate the extent of certain water types across the country. The datasets represent the most comprehensive national datasets of the potential location and extent of streams, rivers, lakes, ponds, and wetlands. The agencies used the NHD to represent streams and the NWI to represent wetlands for the aquatic resource analyses.¹⁷ However, even where streams and wetlands are identified in the NHD and the NWI, the maps do not depict the scope of waters regulated under the CWA.¹⁸ The proposed rule, in particular, draws distinctions that, while significant, cannot be distinguished even imperfectly in these datasets. For example, the proposed rule differentiates between intermittent and ephemeral flow for purposes of federal regulatory jurisdiction under the CWA, but the NHD does not differentiate between streams with intermittent or ephemeral flow for most of the country. Likewise, the NWI uses a different definition of wetlands than the agencies' regulatory definition and does not contain sufficient information that would allow the agencies to identify those wetlands that meet or do not meet the definition of adjacent under either baseline or the definition of adjacent wetlands under the proposed rule, such as whether there is a berm between the wetland and the nearest jurisdictional water, and if so, what kind of surface hydrologic connections are present.

National Hydrography Dataset

The USGS created the NHD to assist scientists in modeling hydrologic features and for cartographic mapping purposes.¹⁹ The NHD is designed to be used in general mapping and in the analysis of surface water systems.²⁰ The NHD depicts aquatic resources such as lakes, ponds, streams, rivers, wetlands, and oceans throughout the United States (including many canals and ditches). NHD at high resolution is at the 1:24,000-scale²¹ or higher. In Alaska, the NHD is

¹⁷ Note that the aquatic resource analyses the agencies attempted are different from the analyses utilized in the agencies' Economic Analysis (EA). For more information about the analyses in the EA, please refer to that separate document.

¹⁸ See *supra* at footnote 4.

¹⁹ U.S. Geological Survey. 2014. "Frequently Asked Questions about the NHD & WBD Datasets." See also, Simley, Jeff. 2018. *GIS for Surface Water: Using the National Hydrography Dataset*. Redlands, CA: ESRI Press.

²⁰ *Id.*

²¹ Scale is the relationship between distance on the map and distance on the ground. If the scale were

available only at the 1:63,360-scale. Stream and river “flowlines” in NHD are characterized as “ephemeral,” “intermittent,” or “perennial” based on the original pre-digital mapping effort of USGS topographic maps. In NHD, perennial reaches are presumed to carry water throughout the year except during drought, whereas intermittent reaches are assumed to lack flow for some duration.²² The NHD defines ephemeral as having water only during or after a local rainstorm or heavy snowmelt. Many, but not all, canals and ditches are also mapped in the NHD. Appendix A provides additional information about NHD features.

Although many ephemeral streams are not mapped, those that are mapped are primarily mapped in NHD at high resolution. That said, even in the high-resolution dataset, many ephemeral streams are included in the “intermittent” category, particularly those outside of the arid West. (The NHD did not start classifying some streams in the digital dataset as “ephemeral” until the 2000s.²³)

Despite being a high-quality dataset, the high resolution NHD data has been demonstrated to under-represent the upstream-downstream extent of channel networks.²⁴ It does not map all surface waters and sometimes maps streams that do not exist or no longer exist on the ground (*i.e.*, it has errors of omission and commission). Smaller features would generally not be included in the NHD. The dataset also has positional inaccuracies. At high resolution, 90 percent of well-defined features are within 40 feet of their true geographic position. In addition, a designation of perennial, intermittent, or ephemeral in the NHD does not guarantee an accurate depiction of on-the-ground flow conditions. For example, a study comparing the field-verified flow regime (*i.e.*, perennial, intermittent, or ephemeral) of 105 headwater stream reaches in nine mesic forests across the contiguous United States and 178 headwater stream reaches in Oregon to the flow regime documented in various mapping resources found that high resolution NHD misclassified the flow regime 44.8 percent of the time across the mesic forest headwater reaches and 57.9 percent of the time across the Oregon headwater reaches.²⁵ While the USGS conducted some on-the-ground field inspection 30 to 60 years ago when creating the topographic maps from which the NHD was created, the resulting hydrographic classifications do not necessarily represent current hydrographic conditions. Misclassifications of NHD stream permanence are known to occur among flow regime types, including field-verified perennial streams identified as ephemeral and field-verified ephemeral streams identified as perennial.²⁶ Misclassifications can

1:24,000, for instance, then one inch on the map would represent 24,000 inches or 2,000 feet on the ground. If the scale were 1:63,360, then one inch on the map would represent 63,360 inches or one mile on the ground. See “Map Scales,” available at <https://pubs.usgs.gov/unnumbered/70039582/report.pdf>.

²²Definitions of terms used in the NHD and additional information on NHD features are available in the National Hydrography Dataset Feature Catalog, available at https://nhd.usgs.gov/userguide.html?url=NHD_User_Guide/Feature_Catalog/NHD_Feature_Catalog.htm.

²³ Simley, Jeff. 2006. “USGS National Hydrography Dataset Newsletter.” Vol. 5, No. 4, February 2006. Available at <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/newsletters>. See also, Simley, Jeff. 2015.

“USGS National Hydrography Dataset Newsletter.” Vol. 14, No. 6, April 2015. Available at <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/newsletters>.²⁴ See, *e.g.*, Fritz, Ken M., *et al.* 2013. “Comparing the Extent and Permanence of Headwater Streams from Two Field Surveys to Values from Hydrographic Databases and Maps. *Journal of the American Water Resources Association* 49(4) 867-882.

²⁴ See, *e.g.*, Fritz, Ken M., *et al.* 2013. “Comparing the Extent and Permanence of Headwater Streams from Two Field Surveys to Values from Hydrographic Databases and Maps. *Journal of the American Water Resources Association* 49(4) 867-882.

²⁵ *Id.*

²⁶ See, *e.g.*, *id.*

occur for a variety of reasons, from changes in land use and/or climate, observational errors, errors in data transcription (from the paper files to digital files), changes in data standards and definitions, inconsistent mapping techniques, differences in source material for creating the original topographic maps, or for cartographic reasons.

Finally, the NHD is not a regulatory dataset and does not indicate whether streams and other features are jurisdictional for CWA purposes. For example, some streams as identified in the NHD would not meet the proposed definition of tributary because they do not contribute perennial or intermittent flow to a TNW in a typical year.

The agencies used the NHD at high resolution in a Geographic Information Systems analysis to provide estimates of the extent of selected waterbody types within the dataset, with a specific focus on NHD mapped streams/rivers identified as ephemeral, intermittent, and perennial. The agencies also looked at the extent of unclassified streams/rivers – those streams and rivers that have not been assigned a flow permanence in the dataset – as well as canal/ditch features mapped in the dataset. Estimates of waters in NHD do not correspond to the scope of CWA jurisdiction under either baseline or the proposed rule; they indicate the extent and distribution of different stream types throughout the country. The agencies hoped that at a high level, the dataset could provide insight on how the proposed rule might affect their jurisdictional status under the CWA but have concluded that the calculations require too many assumptions to provide accurate quantitative data.

National Wetlands Inventory

The USFWS established the NWI to conduct a nationwide inventory of wetlands to provide biologists and others with information on the distribution and type of wetlands to aid in conservation efforts.²⁷ Today, NWI is used for general mapping of wetlands and deepwater habitats and for purposes of data analyses and modeling. The NWI is a mapping dataset that provides detailed information on the extent, characteristics, functions, and distribution of wetlands and deepwater habitats across the United States. These data are primarily derived from manual aerial image interpretation. The NWI is available as digital data at the 1:24,000-scale or higher throughout the country, except for large portions of Alaska (data in Alaska are at the 1:63,360-scale). Approximately 65 percent of Alaska is not currently available as digital data. Additional information on the NWI, including its limitations, is available in Appendix A.

Like the NHD, while the NWI is the most comprehensive national dataset of the potential extent of wetlands across the country, it has limitations. The NWI does not map all wetlands and sometimes maps wetlands that do not exist on the ground. At its best, NWI only approximates the location and boundaries of a Cowardin wetland type.²⁸ The NWI was not intended or designed for regulatory purposes. NWI uses the Cowardin wetland classification system, which

²⁷ U.S. Fish and Wildlife Service. “NWI Program Overview.” Available at <https://www.fws.gov/wetlands/nwi/overview.html>.

²⁸ Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC. Available at <https://www.fws.gov/wetlands/Documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States.pdf>.

is broader in scope than wetlands that meet the CWA regulatory definition of wetland. For CWA purposes, a water must have three specific factors to be classified as a wetland: hydric soils, hydrophytic vegetation, and hydrology. Specifically, the longstanding regulations define wetlands as “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.”²⁹ That definition would not change under the proposed rule. Also, the wetland boundaries as mapped in NWI do not equate to wetland delineation boundaries per the 1987 Corps wetland delineation manual³⁰ and its regional supplements. To properly apply the delineation manual for CWA purposes, one must conduct on-the-ground inspection. Wetlands that meet the regulatory definition of wetlands would also need to meet additional regulatory requirements (such as the conditions for applying the term “adjacency” under either baseline or as proposed) before they would be considered “waters of the United States.”

In an exploratory effort, the agencies attempted to estimate the potential effects of the proposed rule with regard to the jurisdictional status of adjacent wetlands using national geospatial datasets. The agencies have determined that the attempted analysis does not accurately assess the potential effects of the proposed rule. The agencies initially identified vegetated NWI wetlands as a reasonable surrogate for wetlands that are likely to meet the CWA regulatory definition of “wetland” for this analysis. These NWI wetland types are more likely to meet the federal regulatory definition of “wetland” than non-vegetated NWI wetlands, as under normal circumstances all three delineation factors are needed for wetlands to meet the regulatory definition, including the presence of hydrophytic vegetation.³¹ In attempt to estimate the NWI wetlands that are likely to be abutting rivers, streams, lakes, and ponds mapped in the high-resolution NHD, the agencies conducted an intersection analysis of the two datasets. Because the NWI is one of the largest polygonal datasets in the nation and national analyses of the data are challenging and time-consuming, the agencies determined that they would need to rasterize (*i.e.*, convert into pixels) the NWI data so that the agencies could aggregate vegetated NWI wetlands that are touching each other into one feature. The agencies converted NWI polygon features to raster cells (*i.e.*, grids of pixels) at a 30-meter resolution and then attributed features of the polygon with the maximum combined area of overlap with the raster cell to the entire cell. The agencies then associated vegetated NWI wetlands with the nearest stream category (ephemeral, intermittent, or perennial) derived from the high resolution NHD flowlines. NHD flowlines were also converted into 30-meter raster cells. All “ArtificialPath” features in NHD would have been attributed as “Other” for this analysis. However, prior to finalizing the exploratory analysis, the agencies determined that there were too many confounders introduced at each step of the analysis such that the analytical results were inconclusive for purposes of indicating potential changes in federal jurisdiction.

²⁹ 33 CFR part 328.3(b) and 40 CFR part 232.2.

³⁰ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Department of the Army, Vicksburg, VA. Available at <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4530>.

³¹ *Id.*

Uncertainties and Limitations

Although the agencies have information on where they have determined on a case-by-case basis if particular waters are or are not “waters of the United States,”³² they are not aware of any datasets that fully depict the jurisdictional extent of all waters under the 2015 Rule or pre-2015 practice. In addition, all data carry unavoidable uncertainties and associated limitations, which are discussed further below and in Appendix A for both the ORM2 database and the NHD and NWI datasets. The two efforts described above rely on the accuracy of that available information.

On a national level, ORM2 data are analyzed for reasonableness; when correction is warranted, it is accomplished by Corps field project managers. Not all individual records, however, are verified and data entry errors may exist.

The ORM2 database used in this analysis does not track all the categories of “waters of the United States” under the Corps’ 1986 regulations. The categories in ORM2 for AJDs made under pre-2015 practice are drawn primarily from the 2007 *Rapanos* AJD form.³³ The *Rapanos* AJD form was developed in coordination with the agencies’ guidance³⁴ following *Rapanos v. United States*, 547 U.S. 715 (2006) (*Rapanos*). The *Rapanos* Guidance was intended to address only those waters at issue in *Rapanos*, and thus does not discuss other categories of “water of the United States” covered by the 1986 Corps and 1988 EPA regulations.³⁵ The 2007 AJD form also includes the category of waters at issue in *SWANCC* —nonnavigable, isolated, intrastate waters. The ORM2 database lacks a separate category for interstate waters or the territorial seas for AJDs made under pre-2015 practice.

For the ORM2 analysis, it is important to note the limitations of using CWA AJDs to assess potential changes in jurisdiction that would result from the proposed rule. First, CWA JDs, whether approved or preliminary, are typically made at the request of the landowner or project proponent and do not represent a random sample. In other words, they usually represent where landowners or project proponents want to know if jurisdictional waters are located within their properties or project sites, including but not limited to purposes of conducting dredged or fill activities. Thus, some aquatic resource types may be over or under represented in the population of CWA AJDs. Second, there may be selection bias in terms of where the Corps has available information on AJDs. A landowner or applicant can decide whether they would like an AJD – meaning the Corps makes an official determination of whether an aquatic resource is jurisdictional – or whether they would prefer to voluntarily waive or set aside questions regarding jurisdiction with the use of a PJD and thus move forward assuming all waters will be

³² See, e.g., the Corps’ ORM2 database and the EPA’s Clean Water Act Approved Jurisdictional Determinations website. Available at: <https://watersgeo.epa.gov/cwa/CWA-JDs/>.

³³ A copy of the Corps’ Approved Jurisdictional Determination Form used under pre-2015 implementation is available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2314>.

³⁴ See “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States*,” (hereinafter “*Rapanos* Guidance”), first issued on June 6, 2007 and revised on December 2, 2008. Available at https://www.epa.gov/sites/production/files/201602/documents/cwa_jurisdiction_following_rapanos120208.pdf.

³⁵ 51 FR 41206 (Nov. 13, 1986), amending 33 CFR 328.3; 53 FR 20764 (June 6, 1988), amending 40 CFR 232.2.

treated as jurisdictional without making a formal determination. In addition, Corps Districts across the country vary in the numbers of AJDs and PJDs they issue based on local requests. However, PJDs cannot determine that something is not a “water of the United States” and/or whether there are no “waters of the United States” on the site.³⁶ Thus, the agencies have determined that only AJDs are appropriate to use in this analysis, while recognizing that these records may not be uniformly distributed across the country.

The states of New Jersey and Michigan have assumed administration of the CWA section 404 permit program for certain waters within their states. The Corps retains administration of the section 404 permitting program for specific waters within New Jersey and Michigan. Thus, the Corps conducts AJDs for only a subset of waters within New Jersey and Michigan, which have been included in the analysis of ORM2 data where available. The agencies did not supplement the ORM2 data with information from the state programs.³⁷

The terms used in the NHD and NWI datasets are different from terms used in the longstanding regulations, and they do not directly match the terms in the proposed rule. As further discussed below, under pre-2015 practice terms like “relatively permanent waters” in ORM2 do not directly equate to NHD-identified intermittent and perennial streams. Under the proposed rule, the term “intermittent” does not directly correspond to definition of intermittent used by the NHD. For example, the proposed rule includes streams that receive intermittent flow from melting snowpack, whereas such streams would likely fall under the NHD’s definition of ephemeral, which is based on the source of water flow.³⁸ Even if the terms did match, as described above, the dataset includes some ephemeral streams in the intermittent classification, so the NHD-estimated extents of perennial, intermittent, and ephemeral streams are likely not precise on a national level. In addition, the NHD does not include a flow permanence characterization for features that are classified as canals or ditches in the dataset as it does for stream and river features. The NHD does include a separate category for a stormwater canal/ditch, and aqueduct, as well as the general canal/ditch category.

NWI data in Alaska are not complete. The Corps’ ORM2 data is more comprehensive as it includes data for the entire state, where an AJD was requested. The agencies also did not include the U.S. Territories in the analysis.

Finally, the raster analysis the agencies attempted to use to analyze the NWI data would have introduced another source of uncertainty. The grid cell size of the raster data is 30 by 30 meters,

³⁶ When the Corps provides a PJD, or authorizes an activity through a general or individual permit relying on a PJD, the Corps is not making a legally binding determination of any type regarding whether jurisdiction exists over the particular aquatic resource in question even though the applicant or project proponent proceeds as though the resource were jurisdictional. A PJD is “preliminary” in the sense that a recipient of a PJD can later request and obtain an AJD if that becomes necessary or appropriate during the permit process or during the administrative appeal process. *See* 33 CFR 331.2.

³⁷ Dredged or fill permits issued by New Jersey and Michigan under their assumed programs are not federal section 404 permits; they are state-issued permits subject to the requirements of the CWA for “waters of the State.” “Waters of the State” at a minimum encompass “waters of the United States” but may or may not be broader than “waters of the United States,” as discussed further in Chapter II.

³⁸ The NHD defines “intermittent” as “[c]ontains water for only part of the year, but more than just after rainstorms and at snowmelt” and “ephemeral” as “[c]ontains water only during or after a local rainstorm or heavy snowmelt.” *See* <https://nhd.usgs.gov/userguide.html>.

resulting in pixels representing 900 square meters or approximately 0.22 acres on the ground. The minimum size threshold for a wetland to be included in NWI is 1/20th of an acre or 0.05 acres. That means that the grid size should be large enough to capture all wetlands that are mapped in NWI; however, with raster, the NWI polygons would be converted to coarse grids, so mapped boundaries will most likely be larger than the polygon itself. In addition, the NHD flowlines would also be rasterized into 30-meter grid cells, and the raster layer may not accurately depict the actual size of the stream or river on the ground. Thus, if conducting an overlay analysis, the gridded, generalized NWI data may have captured wetlands as “intersecting” the gridded, generalized NHD flowlines which in fact may not have actually intersected. The agencies are not able to estimate the magnitude of this error but concluded it would introduce sufficient uncertainty to undermine the validity of the analysis.

Baselines

On February 6, 2018, the agencies issued a final rule adding the applicability date of February 6, 2020, to the 2015 Rule.³⁹ When adding an applicability date to the 2015 Rule, the agencies clarified that until that date, they would interpret the scope of “waters of the United States” consistent with the 1980s regulatory definition of the term, implemented consistent with subsequent Supreme Court decisions and agency guidance documents. On August 16, 2018, the U.S. District Court for the District of South Carolina enjoined the Applicability Date Rule nationwide.⁴⁰ In addition, on November 26, 2018, the U.S. District Court for the Western District of Washington vacated the Applicability Date Rule nationwide.⁴¹ In light of the nationwide injunction of the Applicability Date Rule, the agencies are implementing the definition of “waters of the United States” differently in different parts of the country. In certain parts of the country, pre-2015 practice is being used to define “waters of the United States.” As of October 2018, the agencies are utilizing pre-2015 practice to define “waters of the United States” in 28 states due to preliminary injunctions of the 2015 Rule issued by the U.S. District Courts for the Southern District of Texas, the Southern District of Georgia, and the District of North Dakota.⁴² In the other 22 states, the District of Columbia, and the U.S. Territories, the agencies are utilizing the 2015 Rule’s definition of “waters of the United States.” Questions about application of the

³⁹ “Definition of ‘Waters of the United States’ – Addition of an Applicability Date to 2015 Clean Water Rule,” (referred to hereinafter as the Applicability Date Rule), 83 FR 5200 (February 6, 2018).

⁴⁰ *South Carolina Coastal Conservation League, et al., v. Pruitt*, No. 2-18-cv-330-DCN, 2018 U.S. Dist. LEXIS 138595 (D.S.C. Aug. 16, 2018).

⁴¹ *Puget Soundkeeper Alliance, et al. v. Andrew Wheeler, et al.*, No. C15-1342-JCC (W.D. Wash. November 26, 2018).

⁴² At the time of this writing, the 2015 Rule continues to be subject to a preliminary injunction issued by the U.S. District Court for the District of North Dakota as to 13 states: Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, Nevada, North Dakota, South Dakota, Wyoming, and New Mexico. See *North Dakota v. EPA*, 127 F. Supp. 3d 1047, 1055–56 (D.N.D. 2015). The District Court subsequently added Iowa to this preliminary injunction. See *North Dakota v. EPA*, No. 3:15-cv-59-DLH-ARS, Doc. 250 (D.N.D. Sept. 18, 2018). The 2015 Rule also is subject to a preliminary injunction issued by the U.S. District Court for the Southern District of Georgia as to 11 more states: Georgia, Alabama, Florida, Indiana, Kansas, Kentucky, North Carolina, South Carolina, Utah, West Virginia, and Wisconsin. See *Georgia v. Pruitt*, No. 15-cv-79 (S.D. Ga.). The 2015 Rule is also subject to a preliminary injunction issued by the U.S. District Court for the Southern District of Texas as to an additional three states: Louisiana, Mississippi, and Texas. See *Texas v. United States EPA*, No. 3:15-CV-00162 (S.D. Tex. Sep. 12, 2018).

definition of “waters of the United States” on tribal lands are being handled on a case-by-case basis. The agencies thus utilized a primary baseline of the 2015 Rule and an alternate baseline of pre-2015 practice for assessing potential changes in CWA jurisdiction.

The primary baseline for purposes of assessing potential changes in CWA jurisdiction is the 2015 Rule.⁴³ Although the 2015 Rule has not been implemented nationwide, it is the regulation currently in the Code of Federal Regulations. When this document refers to categories used in the 2015 Rule or pre-2015 practice, the agencies are specifically referring to the categories as they are implemented under the 2015 Rule or as they are implemented under the pre-2015 regulatory regime. For example, when discussing “tributary” under pre-2015 practice, the agencies are using that term as it is implemented under the 1980s regulations and subsequent guidance and do not mean to use the term as it defined in the 2015 Rule (or in the proposed rule).

The alternative baseline is the agencies’ pre-2015 practice. As described above, the agencies’ pre-2015 practice is the 1980s regulatory definition of “waters of the United States,” implemented consistent with subsequent Supreme Court decisions and informed by guidance documents. Prior to the nationwide injunction of the Applicability Date Rule, the agencies were utilizing this definition nationwide following the October 9, 2015, nationwide stay of the 2015 Rule. The agencies were also utilizing this definition in the 13 states where the 2015 Rule was enjoined prior to its effective date.⁴⁴

The agencies first provide an overview of the key policies of each baseline and the proposed rule, and then discuss particular categories of waters or exclusions as laid out in each baseline and the proposed rule.

Baseline of the 2015 Rule

Following the August 16, 2018 District Court for the District of South Carolina ruling to enjoin the Applicability Date Rule nationwide, the agencies are currently implementing the 2015 Rule in 22 states, the District of Columbia, and the U.S. Territories.⁴⁵ The baseline of the 2015 Rule defines “waters of the United States” to include:

- TNWs;
- Interstate waters including interstate wetlands;
- Territorial seas;
- Impoundments of jurisdictional waters;
- Tributaries of the above waters;
- Adjacent waters of the aforementioned waters;
- Similarly situated regional waters found to have a significant nexus; and
- Certain waters with a case-specific significant nexus.

⁴³ “Definition of ‘Waters of the United States’ – Clean Water Rule.” 80 FR 37054 (June 29, 2015). Available at <https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states>.

⁴⁴ See *North Dakota v. EPA*, 127 F. Supp. 3d 1047, 1055–56 (D.N.D. 2015).

⁴⁵ In addition, the U.S. District Court for the Western District of Washington vacated the Applicability Date Rule nationwide on November 26, 2018.

The 2015 Rule identifies certain waters that can be “waters of the United States” only where a case-specific determination has found a significant nexus between the water and TNWs, interstate waters, or the territorial seas. The agencies specify five types of waters (prairie potholes, Delmarva and Carolina bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands) that the agencies had determined to be “similarly situated” in a watershed that drains to the nearest TNW, interstate water, or territorial sea, and thus would be considered in combination with waters of the same subcategory within the point of entry watershed in a significant nexus analysis (referred to as (a)(7) waters). In addition, the 2015 Rule specifies that waters located within the 100-year floodplain of a TNW, interstate water, or the territorial seas, and waters located within 4,000 feet from the high tide line or the ordinary high water mark of TNWs, interstate waters, the territorial seas, impoundments, or covered tributaries may be found to have a significant nexus on a case-specific basis, but the agencies would need to make a determination of “similarly situated” waters on a case-by-case basis. These are referred to as (a)(8) waters. The 2015 Rule sets forth nine functions relevant to these case-specific significant nexus analyses.

The agencies exclude specified waters from the definition of “waters of the United States” in the 2015 Rule, carrying forward the existing exclusions for prior converted cropland and waste treatment systems. The 2015 Rule creates additional exclusions from the definition of “waters of the United States,” including for certain waters and features that have been generally considered to not be “waters of the United States” in practice (*e.g.*, exclusion for certain ditches that are not located in or draining wetlands); for additional types of ditches; for groundwater and erosional features; for stormwater control features constructed to convey, treat, or store stormwater; and for cooling ponds that are created in dry land.

In the 2015 Rule, the agencies define a tributary as a water that (1) contributes flow, either directly or through another water (including an impoundment), to a TNW, interstate water, or the territorial seas, and (2) that is characterized by the presence of physical indicators of bed and banks and an ordinary high water mark. All perennial, intermittent, and ephemeral streams that meet the definition of tributary are “waters of the United States” under the 2015 Rule.

Under the 2015 Rule, all adjacent waters, including wetlands, are jurisdictional where the waters are adjacent to a TNW, interstate water, territorial sea, jurisdictional impoundment, or a jurisdictional tributary, and where the water meets that rule’s definition of adjacent. The 2015 Rule carries forward the 1980s regulations’ definition of “adjacent”—waters that are bordering, contiguous, or neighboring the aforementioned waters—and it also defined “neighboring” and included open waters such as lakes and ponds as adjacent. The 2015 Rule defines “neighboring” to mean:

- (i) all waters located within 100 feet of the ordinary high water mark of (1) through (5) water,
- (ii) all waters located within the 100-year floodplain of a (1) through (5) water and not more than 1,500 feet from the ordinary high water mark of such water, and
- (iii) all waters located within 1,500 feet of the high tide line of a (1) or (3) water, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes.

The definition of “adjacent” in the 2015 Rule does not include those waters in which established, normal farming, silviculture, and ranching activities occur. Wetlands and farm ponds in which normal farming activities occur, as those terms are used in section 404(f) of the CWA and its implementing regulations, would not be *per se* jurisdictional as “adjacent” waters. Instead, waters in which normal farming, ranching, and silviculture activities occur would be subject to case-specific review.

Alternative Baseline of Pre-2015 Practice

The agencies are currently implementing the definition of “waters of the United States” under the 1980s regulations as informed by *United States v. Riverside Bayview Homes, SWANCC*, and *Rapanos* decisions, and agency guidance documents in 28 states where three U.S. District Courts have preliminarily enjoined the 2015 Rule.⁴⁶ Interstate waters and the territorial seas were not addressed by these Supreme Court decisions. Consistent with the *Rapanos* Guidance, the agencies determine that a water can meet either the plurality’s or Justice Kennedy’s standard to be a jurisdictional water. RPWs are interpreted in the guidance documents as tributaries⁴⁷ that typically flow year-round or have continuous flow at least seasonally (*e.g.*, typically three months).⁴⁸ Wetlands that have a “continuous surface connection” are those that are directly abutting (*e.g.*, they are not separated by uplands, a berm, dike, or similar feature from the “water of the United States” to which they are adjacent.) The agencies’ *Rapanos* Guidance recognizes that the plurality’s “continuous surface connection” is a “physical-connection requirement” and “does not require surface water to be continuously present between the wetland and the tributary.”⁴⁹

Consistent with the *Rapanos* Guidance, the agencies assert jurisdiction over the following waters without the need for further analysis:

- TNWs;
- Wetlands adjacent to TNWs;
- Non-navigable tributaries of TNWs that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (*e.g.*, typically three months); and
- Wetlands that directly abut such tributaries.

The agencies assess whether the following waters are jurisdictional based on a case-specific analysis to determine whether they have a significant nexus with a TNW:

⁴⁶ See *supra* at footnote 42.

⁴⁷ For purposes of the *Rapanos* Guidance, a tributary includes natural, man-altered, or man-made water bodies that carry flow directly or indirectly into a traditional navigable water.

⁴⁸ The agencies have further clarified that three months for seasonal flow was provided as an example in the guidance, and the agencies have flexibility under the guidance to determine what seasonally means in a specific case. For instance, in one case, the agencies found that two months of continuous flow was seasonal at a particular site in a particular region of the country. See “Memorandum to Assert Jurisdiction for NWP-2007-945,” available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll5/id/1437>.

⁴⁹ See, *e.g.*, *Rapanos* Guidance at n.28.

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and
- Wetlands adjacent to, but that do not directly abut, a relatively permanent non-navigable tributary.

Under the *Rapanos* Guidance, the agencies generally do not assert jurisdiction over certain features, which are described further below. Consistent with the *Rapanos* Guidance, a significant nexus analysis assesses the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary, including consideration of hydrologic and ecologic factors, to determine if they significantly affect the chemical, physical, and biological integrity of downstream TNWs.

Under pre-2015 practice, the agencies interpret TNWs or (a)(1) waters to encompass tidal waters, including tidally-influenced ditches and wetlands. The agencies issued guidance in 2007 regarding which waters the agencies consider to be TNWs.⁵⁰

The agencies' pre-2015 practice includes all wetlands that are bordering, contiguous, or neighboring other jurisdictional waters to be jurisdictional per the 1980s regulations' definition of "adjacent." In the *Rapanos* Guidance, the agencies clarified that they consider wetlands adjacent if they meet one of three criteria: 1) there is an unbroken surface or shallow sub-surface connection to jurisdictional waters; 2) they are physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like; or 3) their proximity to a jurisdictional water is reasonably close, supporting the science-based inference that such wetlands have an ecological interconnection with jurisdictional waters. Non-jurisdictional ditches and other features like swales can contribute to a surface hydrologic connection between a wetland and the water to which it is adjacent.

The *Rapanos* Guidance does not address waters not at issue in the *Rapanos* case, including interstate waters, the territorial seas, and the "(a)(3)" provision for nonnavigable, isolated, intrastate waters. The (a)(3) provision was addressed in the 2001 *SWANCC* decision and the agencies' subsequent 2003 *SWANCC* guidance.⁵¹ Since the 2001 decision in *SWANCC*, the agencies have not asserted jurisdiction over nonnavigable, isolated, intrastate waters using the (a)(3) portion of the regulations.

The 1980s regulations define "waters of the United States" to include interstate waters, including interstate wetlands. Under pre-2015 practice interstate waters are therefore "waters of the United States" even if they are not navigable for purposes of Federal regulation under (a)(1) and do not connect to such waters. In ORM2, these waters are captured under other categories in the AJD form, including categories for TNWs, tributaries (RPWs or non-RPWs), adjacent wetlands (those adjacent to a TNW, directly abutting an RPW, adjacent to but not directly abutting an RPW, or adjacent to non-RPWs), and impoundments of jurisdictional waters.

⁵⁰ See "U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook, Appendix D, 'Traditional Navigable Waters,'" available at <https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2316>.

⁵¹ See 68 FR 1991, 1995 (January 15, 2003).

The CWA and the agencies' 1980s regulations include "the territorial seas" as "waters of the United States." The territorial seas are also considered to be TNWs under pre-2015 practice and are portrayed as such in the ORM2 database.

Under pre-2015 practice, impoundments of jurisdictional waters remain jurisdictional. Impoundments were not addressed by the *Riverside Bayview*, *SWANCC*, or *Rapanos* Supreme Court decisions.

Under pre-2015 practice, certain waters are excluded from the definition of "waters of the United States" in rule language or are generally not considered "waters of the United States" per the *Rapanos* Guidance or preamble language from the 1980s regulations. Excluded waters are non-jurisdictional and not subject to the regulatory programs of the CWA. Prior converted cropland and waste treatment systems have been excluded from the regulatory definition of "waters of the United States" since 1993 and 1979 respectively. In preamble language explaining the 1980s regulations⁵² and in the *Rapanos* Guidance, the agencies have also interpreted certain waters to be generally non-jurisdictional. The 1986 preamble language states that generally the agencies do not consider certain waters, such as artificially irrigated areas which would revert to upland if the irrigation ceased or certain artificial stock water ponds created on dry land, to be "waters of the United States." The *Rapanos* Guidance states that the agencies generally will not assert jurisdiction over the following features: swales or erosional features (*e.g.*, gullies, small washes characterized by low volume, infrequent, or short duration flow) and ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The Corps documents when they find aquatic resources under pre-2015 practice to be non-jurisdictional as a category in ORM2. The database, however, does not record the reason for such determinations.

The Proposed Rule

The agencies now propose that the definition of "waters of the United States" encompasses the following waters:

- TNWs, including the territorial seas;
- Tributaries of TNWs;
- Certain ditches;
- Certain lakes and ponds;
- Impoundments of jurisdictional waters; and
- Wetlands adjacent to the above jurisdictional waters.

The agencies propose to continue to include TNWs (including tidal waters) as "waters of the United States." The proposed rule incorporates "the territorial seas" into the (a)(1) or TNW category to simplify the regulation, but otherwise does not change the text of the prior two categories. This proposal is consistent with how the Corps captures such waters on its *Rapanos* AJD form and in its ORM2 database under pre-2015 practice. The proposed rule eliminates interstate waters as a separate category of jurisdictional waters. Interstate waters would be

⁵² See 51 FR 41206, 41217 (Nov. 13, 1986).

jurisdictional only if they meet another category of jurisdictional waters under the proposal (*e.g.*, if they are TNWs, tributaries of TNWs, adjacent wetlands, etc.).

The agencies' proposal continues to include tributaries of TNWs as "waters of the United States." The proposed rule defines tributary to mean:

A river, stream, or similar naturally occurring surface water channel that contributes perennial or intermittent flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or indirectly through a water(s) identified in paragraphs (a)(2) through (6) of this section or through water features identified in paragraph (b) of this section so long as those water features convey perennial or intermittent flow downstream. The lateral extent of the tributary is established by its ordinary high water mark. A tributary does not lose its status as a tributary if it flows through a culvert, dam, or other similar artificial break or through a debris pile, boulder field, or similar natural break so long as the artificial or natural break conveys perennial or intermittent flow to a tributary or other jurisdictional water at the downstream end of the break. The alteration or relocation of a tributary does not modify its status as a tributary as long as it continues to satisfy this definition.

Perennial is defined as surface water flowing continuously year-round during a typical year. Intermittent is defined as surface water flowing continuously during certain times of a typical year and more than in direct response to precipitation (*e.g.*, seasonally when the groundwater table is elevated or when snowpack melts). Ephemeral is defined as surface water flowing or pooling only in direct response to precipitation (*e.g.*, rain or snow fall). The proposed rule's definition of tributary includes only those rivers and streams with perennial and intermittent flow.

The proposed rule includes ditches that are TNWs (including tidal ditches); ditches constructed in a tributary or that relocate or alter a tributary as long as those ditches also satisfy the conditions of the tributary definition; and ditches constructed in an adjacent wetland as long as those ditches also satisfy the conditions of the tributary definition. The term "ditch" is defined as an artificial channel used to convey water. In both baselines, ditches are not included as a separate category of jurisdiction, but instead are "waters of the United States" where they meet the criteria under one of the categories for jurisdiction (*e.g.*, are TNWs, tributaries, etc.).

The proposed rule includes certain lakes and ponds as a separate category of "waters of the United States." Lakes and ponds are considered "waters of the United States" under the proposal where they are TNWs, contribute perennial or intermittent flow to a TNW in a typical year either directly or indirectly through another jurisdictional water or through water features that are excluded from this proposed rule so long as those water features convey perennial or intermittent flow downstream, or are flooded in a typical year by a TNW, a tributary, a jurisdictional ditch, a jurisdictional lake or pond, or a jurisdictional impoundment.

The agencies propose to include impoundments of jurisdictional waters as "waters of the United States."

The proposed rule includes as “waters of the United States” adjacent wetlands—defining adjacent wetlands as those wetlands that abut or have a direct hydrologic surface connection in a typical year to TNWs, tributaries of TNWs, jurisdictional ditches, jurisdictional lakes or ponds, or impoundments of jurisdictional waters. Abut means to touch at least at one point or side of a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or jurisdictional impoundment. A direct hydrologic surface connection occurs as a result of inundation from a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or jurisdictional impoundment or via perennial or intermittent flow between a wetland and a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or jurisdictional impoundment. Wetlands physically separated from a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or jurisdictional impoundment by upland or by dikes, barriers, or similar structures and also lacking a direct hydrologic surface connection to such waters are not adjacent.

The agencies propose to retain the two pre-existing exclusions for prior converted cropland and waste treatment systems, though with modifications to the regulatory text. The agencies are proposing for the first time to define prior converted cropland in the regulatory text as:

The term *prior converted cropland* means any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. EPA and the Corps will recognize designations of prior converted cropland made by the Secretary of Agriculture. For purposes of the Clean Water Act, an area is no longer considered *prior converted cropland* when the area is abandoned and has reverted to wetland, as defined in paragraph (c)(15) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. For the purposes of the Clean Water Act, the EPA Administrator shall have final authority to determine whether prior converted cropland has been abandoned.

Thus, the agencies are proposing to clarify that a designation of “prior converted cropland” for purposes of the CWA no longer applies if the area has been abandoned and reverted to wetland. The agencies also propose to define waste treatment systems to include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

Also excluded from the definition of “waters of the United States” are waters or water features that are not explicitly included as “waters of the United States;” groundwater, including groundwater drained through subsurface drainage systems; ephemeral features and diffuse stormwater run-off, including directional sheet flow over upland; ditches that are not specifically included as categorical “waters of the United States;” artificially irrigated areas that would revert to upland should artificial irrigation to that area cease, including fields flooded for rice and cranberry growing; artificial lakes and ponds constructed in upland (including water storage reservoirs, farm and stock watering ponds, and log cleaning ponds) which are not jurisdictional lakes, ponds, or impoundments; water-filled depressions created in upland incidental to mining or construction activity, and pits excavated in upland for the purpose of obtaining fill, sand, or gravel; stormwater control features excavated or constructed in upland to convey, treat, infiltrate,

or store stormwater run-off; and wastewater recycling structures constructed in upland, such as detention, retention and infiltration basins and ponds, and groundwater recharge basins.

The proposed rule includes definitions for “high tide line,” “ordinary high water mark,” “snowpack,” “tidal waters and waters subject to the ebb and flow of the tide,” “typical year,” “upland,” and “wetlands.” The definition for “wetlands” remains unchanged from both baselines. The terms “high tide line” and “ordinary high water mark” also remain unchanged from the Corps’ regulation in both baselines, but would be added to the EPA’s regulations as compared to the regulations used under pre-2015 practice (the 2015 Rule also added these definitions to the EPA’s regulations). The term “tidal waters” is in the Corps’ regulation under both baselines, but the proposed rule would add the phrase “and waters subject to the ebb and flow of the tide” to the term being defined and would add this definition to the EPA’s regulations for the first time. The agencies propose to add the term “upland” to their regulations for the first time. “Upland” is defined in the proposal as any land area that under normal circumstances does not satisfy all three wetland delineation criteria (*i.e.*, hydrology, hydrophytic vegetation, hydric soils) identified in the proposed definition of “wetland” and that does not lie below the ordinary high water mark or the high tide line of a “water of the United States” as proposed. Waters identified in the proposed rule as “waters of the United States” are not upland.

Aquatic Resource Analyses

In this section, the agencies describe potential changes to the CWA jurisdictional status of categories of waters that would occur under the proposed rule. The agencies describe these potential changes compared to the 2015 Rule and the alternate baseline of the pre-2015 practice. While the agencies recognize that the legal validity of the 2015 Rule has been called into question by several courts, at this point they cannot speculate on which provisions, if any, might be found to exceed the agencies’ legal authority. However, as the agencies discuss potential changes to CWA jurisdiction it is important to recognize that if the 2015 Rule, or aspects of that rule, were found to exceed the agencies’ authority under the CWA then those *ultra vires* provisions could not be used as a baseline since those provisions would not represent the preexisting legal authority of the agencies.

Traditional Navigable Waters (TNWs)

The agencies propose to continue the regulation of TNWs or (a)(1) waters, including waters subject to the ebb and flow of the tide. The proposed rule does make a modification in the regulatory text as compared to both baselines by adding the territorial seas to the (a)(1) category, but that proposed change in the regulatory text does not otherwise have an effect on which waters would be regulated as TNWs. The agencies generally determine whether a water is a TNW for purposes of a specific AJD (*i.e.*, on a “case-specific” basis) and that determination cannot be relied upon in future determinations. A “case-specific” determination does not designate the upper and lower extents of the TNW; a water is only designated a TNW for that one AJD and only in the specified review area. In addition, under pre-2015 practice some Corps Districts have chosen to document an aquatic resource as a perennial RPW instead of a case-specific TNW for ease of documentation and workload. Some AJDs for RPWs therefore are TNWs, so the ORM2 data on TNWs under pre-2015 practice likely underestimate the number of

TNWs. However, those aquatic resources would be captured in the RPW category described in the “Tributaries” section below. According to ORM2 data for FY13-FY17, 17,630 waters were determined to be jurisdictional as TNWs under pre-2015 practice. This number includes any tidal wetlands that the Corps has determined are (a)(1) waters, but the agencies are unable to parse out how many of these determinations may have been for such wetlands.

TNWs are not mapped as a category in NHD, and the agencies do not have a national map of TNWs. The extent of tidal waters, including ditches and wetlands, regulated as (a)(1) waters under the 2015 Rule and pre-2015 practice also cannot be ascertained from available data. For these reasons and those described in Appendix A, baseline estimates using NHD or NWI are not possible for this category.

Interstate Waters

The agencies propose to remove interstate waters as a separate category of “waters of the United States,” which is a change from both baselines. With this proposed change, interstate waters would be jurisdictional only if they otherwise meet one of the categories under the proposed rule (*e.g.*, if they are TNWs, tributaries of TNWs, etc.). Interstate waters, including wetlands and ephemeral waters, are jurisdictional under the 2015 Rule. Under pre-2015 practice, any waters that are part of a state or international boundary or that cross state or international boundaries may be considered jurisdictional as interstate waters. Under both baselines, an interstate water does not need to meet one of the other categories of “waters of the United States” to be jurisdictional (*e.g.*, it does not need to be both interstate and a TNW, etc.). The proposed rule would reduce the number of waters considered to be jurisdictional as interstate waters as compared to both baselines. This proposed change also would result in potential changes in jurisdiction for wetlands adjacent to interstate waters, tributaries of interstate waters and their adjacent wetlands, and impoundments of the above waters and any adjacent wetlands to those impoundments, where such waters do not otherwise meet the proposed definition of “waters of the United States.” The Corps added “interstate waters” as a category that could be documented for AJDs conducted under the 2015 Rule, but the agencies have not analyzed the 2015 Rule AJDs for the reasons previously discussed. In addition, because the *Rapanos* AJD form does not indicate whether a water is jurisdictional because it is an “interstate water,” the agencies are unable to quantify the potential change in jurisdiction under the proposed rule relative to the pre-2015 baseline with respect to interstate waters.

As previously discussed, interstate waters are not included as their own category of waters in ORM2 under pre-2015 practice, so the agencies have no existing data for that category of waters under the alternative baseline. Instead, these waters are being represented by other ORM2 categories of aquatic resources. “Interstate waters” are also not mapped as a distinct category in either NHD or NWI. Therefore, no data currently exists that indicates the extent of these waters (including any interstate wetlands or interstate ephemeral waters).

The Territorial Seas

The agencies propose to continue the regulation of “the territorial seas” as “waters of the United States,” but propose to combine the territorial seas with (a)(1) waters or TNWs. The agencies

anticipate that there will be no change in the jurisdictional status of these waters as compared to either baseline.

The Corps added “territorial seas” as a category that could be documented for AJDs conducted under the 2015 Rule, but the agencies have not analyzed the 2015 Rule AJDs for the reasons previously discussed. The ORM2 database does not record under pre-2015 practice whether a water is a “territorial sea.” Territorial seas would all be categorized as TNWs in AJDs conducted under pre-2015 practice. The NHD does not specifically map “the territorial seas.”

Impoundments

The agencies propose to continue to include impoundments of jurisdictional waters in the definition of “waters of the United States.” The number of impounded waters that are jurisdictional would change under the proposed rule because certain waters that are impounded would be no longer jurisdictional. For example, impoundments of those ephemeral streams determined to be jurisdictional under the 2015 Rule by virtue of meeting that rule’s tributary definition and/or under pre-2015 practice via a significant nexus analysis would have also been jurisdictional under those two regulations. Such impoundments would not be jurisdictional under the proposed rule. The impoundments of certain interstate waters, their tributaries, and wetlands adjacent to such waters that may have been jurisdictional under both baselines but would no longer be jurisdictional under the proposal, would thus no longer be jurisdictional. In addition, certain other wetlands would no longer be jurisdictional under the proposed rule that may have been jurisdictional under the 2015 Rule and/or pre-2015 practice. Therefore, impoundments of such wetlands would not be jurisdictional under the proposed rule.

As discussed previously, the agencies have not analyzed AJDs for the 2015 Rule and are unable to quantify the potential change in jurisdiction of impoundments as compared to the 2015 Rule baseline.

According to ORM2 data from FY13-FY17, 751 waters were determined to be jurisdictional impoundments under pre-2015 practice. Based on these ORM2 data, 7.5 percent of impoundments were located on non-RPWs. However, non-RPWs as implemented under pre-2015 practice do not directly correlate with ephemeral streams, as previously discussed. Some percentage of non-RPWs are intermittent streams that are not seasonal but that would be included as a jurisdictional water under the proposed rule. ORM2 data are not available for impoundments of interstate waters that might not be jurisdictional under the proposed rule, or for impoundments of tributaries of such interstate waters and wetlands adjacent to such waters. Thus, the agencies cannot quantify at this time the potential change in jurisdiction of impoundments as compared to pre-2015 practice based on ORM2 data.

Many lakes and ponds are mapped in both the NHD and the NWI, but neither dataset explicitly specifies if a waterbody is an impoundment of another waterbody, as described in more detail in Appendix A. The agencies are unable to use the NHD or the NWI to quantify the extent of impoundments across the country that are jurisdictional under either baseline and whose jurisdictional status might change as a result of the proposed rule.

Tributaries

The agencies propose to include “tributaries” as jurisdictional by rule in the proposal. The proposed rule defines “tributary”:

The term *tributary* means a river, stream, or similar naturally occurring surface water channel that contributes perennial or intermittent flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or indirectly through a water(s) identified in paragraphs (a)(2) through (6) of this section or through water features identified in paragraph (b) of this section so long as those water features convey perennial or intermittent flow downstream. The lateral extent of a tributary is established by its ordinary high water mark. A tributary does not lose its status as a tributary if it flows through a culvert, dam, or other similar artificial break or through a debris pile, boulder field, or similar natural break so long as the artificial or natural break conveys perennial or intermittent flow to a tributary or other jurisdictional water at the downstream end of the break. The alteration or relocation of a tributary does not modify its status as a tributary as long as it continues to satisfy the elements of this definition.

As proposed, tributaries may be perennial or intermittent waters, while ephemeral features would not be jurisdictional. Under the proposed rule, such waters must contribute perennial or intermittent flow to a TNW in a typical year either directly or indirectly through other jurisdictional waters or through the proposed excluded waters so long as those water features convey perennial or intermittent flow downstream. This represents a change from both pre-2015 practice and the 2015 Rule with respect to how intermittent and ephemeral streams are considered, as discussed further. Some perennial streams may also no longer be considered “waters of the United States” as compared to both baselines, as discussed further. Because ditches are proposed as a separate category of jurisdictional waters under the proposal, they are discussed in the next section.

Under the 2015 Rule, all streams that meet the definition of tributary (*i.e.*, contribute flow to a TNW, interstate water, or territorial sea and have the physical indicators of a bed and banks and an ordinary high water mark), regardless of flow regime, are jurisdictional without the need for a case-specific significant nexus evaluation. As compared to the 2015 Rule, the proposed rule would not find any ephemeral features jurisdictional, including those ephemeral streams meeting the 2015 Rule’s definition of tributary. In addition, some perennial and intermittent streams would not be considered jurisdictional under the proposed rule that may be jurisdictional under the 2015 Rule if such waters do not convey perennial or intermittent flow to a TNW in a typical year. For example, in some parts of the country, streams may be perennial or intermittent at the headwaters but become ephemeral downstream due to natural conditions (*e.g.*, losing streams) or due to anthropogenic alterations (*e.g.*, water withdrawals). Such perennial or intermittent waters would not be jurisdictional under the proposed rule but would be jurisdictional under the 2015 Rule so long as they are characterized by the presence of the physical indicators of a bed and banks and an [ordinary high water mark](#) and contribute flow to a TNW at some unspecified time.

Under pre-2015 practice, all tributaries that are RPWs and non-RPW tributaries that have a significant nexus with a TNW are jurisdictional. RPWs include waters that are perennial as well

as intermittent waters that are seasonal. Non-RPWs include non-seasonal intermittent tributaries and ephemeral tributaries. Perennial RPWs do not require further analysis. Seasonal RPWs are also jurisdictional under pre-2015 practice, but as a matter of policy the Corps conducts a significant nexus determination for such waters for documentation purposes. Under pre-2015 practice, the unit of analysis of the significant nexus evaluation is the individual tributary (the entire reach of the stream that is of the same order) and any wetlands that are adjacent to that reach of the tributary. As compared to pre-2015 practice, the proposed rule would not regulate any of the ephemeral streams found to be jurisdictional based on a case-specific significant nexus evaluation. The proposed rule would potentially regulate non-seasonal intermittent tributaries that may have been found to be non-jurisdictional after a case-specific significant nexus evaluation. In addition, the proposed rule would not regulate perennial or intermittent streams that flow into ephemeral features before flowing to a TNW, whereas such waters would be jurisdictional under pre-2015 practice if they are RPWs or are non-RPWs that have a significant nexus.

Although the agencies are unable to quantify what the change in jurisdiction for tributaries would be as compared to the 2015 Rule or pre-2015 practice on a national scale due to the lack of information on the extent of ephemeral streams⁵³ and the fact that ephemeral streams are not categorically jurisdictional under pre-2015 practice, the agencies expect that in portions of the country where ephemeral streams are more prevalent (*e.g.*, the arid West), the change might be greater relative to other parts of the country. The agencies are also unable to quantify how many perennial or intermittent streams have ephemeral reaches that would render such waters non-jurisdictional under the proposed rule.

Tributaries evaluated under pre-2015 practice are categorized as either RPWs or non-RPWs. In ORM2, RPWs are not further categorized into seasonal intermittent or perennial RPWs, so separating these two components of RPWs to identify a subset for the baseline would be impracticable. In ORM2 from FY13-FY17, 15,980 waters were determined to be jurisdictional as RPWs under pre-2015 practice. The agencies anticipate that the proposed rule would not change the jurisdictional status of most of these RPWs, and that they would continue to be jurisdictional under the proposed rule. As discussed previously, there may be some RPWs that would no longer be jurisdictional under the proposed rule because they do not convey perennial or intermittent flow to a TNW in a typical year.

Data from ORM2 indicate that many but not all non-RPWs are jurisdictional under pre-2015 practice. From FY13-FY17, 3,776 waters in ORM2 were determined to be jurisdictional non-RPWs after a case-specific significant nexus evaluation, while 2,012 non-RPWs were determined to be non-jurisdictional after a case-specific significant nexus evaluation. The agencies are unable to approximate what percentage of currently jurisdictional non-RPWs are ephemeral streams that would no longer be jurisdictional under the proposed definition of “waters of the United States.” In addition, the agencies are not able to quantify the extent of non-

⁵³ Note that only those ephemeral streams meeting the 2015 Rule’s definition of tributary would be jurisdictional as a tributary under that Rule.

RPWs that are intermittent tributaries that were determined to be non-jurisdictional under pre-2015 practice that could be included as “waters of the United States” under the proposed rule. There may be some intermittent non-RPWs found to have a significant nexus under pre-2015 practice that would no longer be jurisdictional under the proposed rule because they do not convey perennial or intermittent flow to a TNW in a typical year.

As discussed previously and in Appendix A, the NHD cannot be relied upon to represent jurisdictional waters. It does not map many ephemeral streams outside of the arid West. In addition, RPWs and non-RPWs cannot be neatly split into the categories of perennial, intermittent, and ephemeral flow regime that the NHD uses, and the proposed rule’s definition of intermittent and ephemeral do not align with the NHD’s definition of those terms. Thus, it is not possible to use the NHD to describe the potential change in CWA jurisdiction from both the 2015 Rule and from pre-2015 practice. Because the NHD is the most comprehensive national stream dataset, the agencies are providing a summary of the stream types that are mapped in the dataset, with the caveat that these statistics cannot simply be translated into CWA jurisdiction under either baseline or the proposed rule.

In the NHD at high resolution, 30 percent of streams are mapped as perennial, 52 percent are mapped as intermittent, and 18 percent are mapped as ephemeral.⁵⁴ However, the actual percentage of ephemeral streams across the country is likely higher than 18 percent since many are not mapped or are mapped as intermittent. In the arid West (Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming), 13 percent of streams (by stream length) are mapped as perennial, 48 percent are mapped as intermittent, and 39 percent are mapped as ephemeral. Note that these numbers are not meant to reflect potential changes in CWA jurisdictional under either baseline as compared to the proposed rule.

Ditches

The proposed rule differs from both the 2015 Rule and pre-2015 practice with regard to ditches, as the agencies are proposing a category of jurisdictional ditches. Ditches that would be jurisdictional under the proposed rule include ditches that satisfy any of the conditions to be an (a)(1) water (*e.g.*, ditches that are traditional navigable waters, including tidal ditches); ditches constructed in a tributary or that relocate or alter a tributary as long as those ditches also satisfy the conditions of the tributary definition; and ditches constructed in an adjacent wetland as long as those ditches also satisfy the conditions of the tributary definition. All other ditches are proposed to be excluded from the definition of “waters of the United States.”

Under the 2015 Rule, a ditch is jurisdictional if it is a TNW (including tidal ditches), an interstate water, or a tributary (so long as it is not excluded). The 2015 Rule excludes ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary; ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands; and ditches that do not flow, either directly or through another water, into a TNW, interstate water, or the territorial seas. Under pre-2015 practice, a ditch is jurisdictional if it is a TNW (including tidal ditches), an interstate water, a relatively permanent tributary, or a non-relatively

⁵⁴ These percentages do not account for artificial paths, unclassified streams, ditches/canals, and other flowlines that are mapped in the NHD.

permanent tributary that has a significant nexus and is not constructed in dry land (*e.g.*, is constructed in a wetland or another aquatic resource). Under pre-2015 practice, ditches are not explicitly excluded in rule text; however, ditches (including roadside ditches) excavated wholly in and draining only upland and that do not carry a relatively permanent flow of water are generally not jurisdictional.

The proposed rule's inclusion of ditches that are TNWs (including tidal ditches) does not represent a change from either baseline.

Under the proposed rule, interstate ditches would not be jurisdictional unless they meet one of the proposal's three criteria for jurisdictional ditches. Interstate ditches under both baselines would be jurisdictional. There may be some interstate ditches or ditches that contribute flow to interstate waters that would be jurisdictional as tributaries under the 2015 Rule or pre-2015 practice that would not be jurisdictional under the proposed rule. In addition, there may be some ditches that drain wetlands that would be considered jurisdictional under the 2015 Rule or pre-2015 practice that would not be jurisdictional under the proposed rule, where the wetlands do not meet the criteria to be adjacent under the proposal and/or where those ditches do not satisfy the conditions of the proposal's tributary definition. There may be some perennial or intermittent ditches that would be jurisdictional under the 2015 Rule that would not be jurisdictional under the proposed rule if such ditches do not convey perennial or intermittent flow to a TNW in a typical year.

Under the proposed rule, ditches constructed in tributaries, that alter or relocate a tributary, or that are constructed in the proposed rule's definition of adjacent wetlands would be jurisdictional, so long as such ditches also satisfy the conditions of the tributary definition under the proposal. Such waters are also jurisdictional under the 2015 Rule. Under pre-2015 practice such ditches are jurisdictional if they are an RPW or if they have a significant nexus to a TNW. Similar to the proposed definition of tributaries, there may be some non-RPW intermittent ditches that alter or relocate a tributary or are constructed in tributaries or adjacent wetlands and meet the conditions of the proposed rule's definition of tributary that would be jurisdictional under the proposal but are not jurisdictional under pre-2015 practice because they do not have a case specific significant nexus. However, the agencies are unable to quantify this potential change. In addition, some perennial and intermittent ditches would be jurisdictional under pre-2015 practice (*e.g.*, where they are RPWs or have a significant nexus) that would not be jurisdictional under the proposed rule if such ditches do not convey perennial or intermittent flow to a TNW in a typical year.

Under both baselines, the agencies do not consider if a ditch is constructed in a water that meets the definition of "waters of the United States" when determining if it is jurisdictional, but under the proposed rule, the agencies would need to make such a consideration. For example, if a ditch is draining a wetland, that wetland would not need to meet the definition of adjacent for the ditch to be considered jurisdictional under pre-2015 practice, so long as the ditch is either an RPW or is a non-relatively permanent tributary that has a case-specific significant nexus.

Finally, under the proposed rule, no ephemeral ditches would be jurisdictional, which is a change from both baselines. The agencies are not able to quantify these differences, however, for reasons already discussed.

The agencies are unable to estimate the potential change in jurisdiction for ditches using either the ORM2 data or the NHD and NWI data. As previously discussed, the agencies have not analyzed ORM2 data for the 2015 Rule AJDs. ORM2 does not track ditches separately as a category for jurisdiction, so the data cannot be used to determine which ditches the agencies have found to be jurisdictional under pre-2015 practice that would not be jurisdictional under the proposed rule. Because the NHD does not map all ditches and canals and does not assign a hydrologic permanence category to the ditches and canals it does map, the dataset cannot be used to estimate the proposed change in jurisdiction of ditches. As previously mentioned, the NWI cannot be used to determine which wetlands would meet the proposed rule's definitions of adjacent wetlands.

Lakes and Ponds

Under the proposed rule, the following lakes and ponds would be jurisdictional:

- 1) lakes and ponds that are TNWS;
- 2) lakes and ponds that contribute perennial or intermittent flow to a TNW in a typical year⁵⁵ either directly or indirectly through tributaries, jurisdictional ditches, other jurisdictional lakes and ponds, jurisdictional impoundments, or adjacent wetlands or through water features identified in the proposed rule as exclusions so long as those water features convey perennial or intermittent flow downstream; and
- 3) lakes and ponds that are flooded by a TNW, tributary, jurisdictional ditch, other jurisdictional lake or pond, or jurisdictional impoundment in a typical year.

Under the 2015 Rule, lakes and ponds that are TNWs, interstate, or adjacent are jurisdictional. TNWs and interstate waters are discussed previously. Adjacent is defined in the 2015 Rule to mean "bordering, contiguous, or neighboring." Lakes and ponds that would be jurisdictional under the proposed rule would also be jurisdictional as adjacent waters under the 2015 Rule. However, the 2015 Rule would also include as jurisdictional additional lakes and ponds that do not meet the proposed rule's definition of "waters of the United States." The 2015 Rule would include as "adjacent" ephemeral lakes and ponds as well as lakes and ponds that are not flooded by a jurisdictional water in a typical year, so long as those waters meet that rule's definition of "adjacent." In addition, certain lakes and ponds would be jurisdictional under the 2015 Rule that would not be jurisdictional under the proposed rule if such waters do not convey perennial or intermittent flow to a TNW in a typical year. Thus, the proposed rule would include fewer lakes and ponds as jurisdictional than the 2015 Rule, but this change cannot be quantified.

Under pre-2015 practice, TNW lakes and ponds, interstate lakes and ponds, and all relatively permanent lakes and ponds that are considered tributaries are regulated as "waters of the United States," and most would continue to be jurisdictional under the proposed rule. TNWs and interstate waters are discussed previously. The agencies anticipate that relatively permanent lakes and ponds that are considered tributaries would be jurisdictional under the proposed rule because

⁵⁵ The term *typical year* means within the normal range of precipitation over a rolling thirty-year period for a particular geographic area.

they contribute perennial or intermittent flow either directly to a TNW or indirectly through an otherwise jurisdictional water or through an excluded feature that conveys perennial or intermittent flow downstream. In addition, under pre-2015 practice, non-relatively permanent lakes and ponds that are considered tributaries undergo a case-specific significant nexus evaluation to determine their jurisdictional status. These non-RPW lakes and ponds would include both non-seasonal intermittent waters as well as ephemeral waters. Some but not all ephemeral lake and pond tributaries are found to be jurisdictional under pre-2015 practice. Those ephemeral lakes and ponds that are tributaries under pre-2015 practice would be non-jurisdictional under the proposed rule. Non-seasonal intermittent lakes and ponds that are tributaries would be considered jurisdictional under the proposed rule. Some but not all of these non-seasonal intermittent lake and pond tributaries are found to be jurisdictional under pre-2015 practice. Thus, the agencies assume that there may be a change in jurisdiction between pre-2015 practice and the proposed rule for such non-seasonal intermittent lakes and ponds that are tributaries, but this change cannot be quantified. In addition, certain lakes and ponds would be jurisdictional under the pre-2015 practice (*e.g.*, where they are RPWs or have a significant nexus) that would not be jurisdictional under the proposed rule if such waters do not convey perennial or intermittent flow to a TNW in a typical year.

Available data from ORM2 on the status of lakes and ponds that are tributaries under pre-2015 practice is discussed in the “Tributaries” section above. The agencies are not able to easily parse out from the available AJD data under pre-2015 practice if the tributary at issue is a lake, a pond, or a stream, as there is no field in ORM2 for the project manager to denote such. Thus, the agencies are not able to estimate the percentage of non-relatively permanent lake and pond tributaries which are deemed jurisdictional under pre-2015 practice. Furthermore, as discussed above in the “Tributaries” section, the agencies do not further indicate if a non-RPW is a non-seasonal intermittent water or ephemeral, further complicating any quantification of potential change for this category of waters. The agencies are also unable to quantify how many lakes and ponds are connected to TNWs through ephemeral reaches that would render those lakes and ponds non-jurisdictional under the proposed rule.

As discussed in Appendix A, the agencies are unable to use NHD or NWI to estimate the potential change in CWA jurisdiction for lakes and ponds under the proposed rule, as compared to either baseline.

Adjacent Wetlands

Under the proposed rule, adjacent wetlands are wetlands that abut or have a direct hydrologic surface connection to a TNW (including the territorial seas), a tributary, a jurisdictional ditch, a jurisdictional lake or pond, or a jurisdictional impoundment in a typical year. These are wetlands that are among those that are contiguous and/or bordering under the 2015 Rule and are directly abutting under pre-2015 practice. The proposed rule would exclude most wetlands that are “neighboring” per the 2015 Rule and most that are not directly abutting per pre-2015 practice. The proposal also does not include wetlands separated from “waters of the United States” by dikes or barriers, natural river berms, beach dunes, and the like as adjacent wetlands, except where such wetlands have a direct hydrologic surface connection to a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or jurisdictional impoundment in a typical year.

The proposed rule differs from both baselines by defining the term “adjacent wetlands,” while the 2015 Rule and the pre-2015 regulation both define the term “adjacent.”

The agencies are proposing to include as “waters of the United States” wetlands that are separated from the waters to which they are adjacent by berms, levees, and the like if there exists a direct hydrologic surface connection in a typical year to the waters to which they are adjacent. Such a direct hydrologic surface connection in a typical year can occur as a result of inundation from a TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or a jurisdictional impoundment to a wetland or via perennial or intermittent flow between a wetland and TNW, tributary, jurisdictional ditch, jurisdictional lake or pond, or a jurisdictional impoundment. Such a direct hydrologic surface connection may occur due to regular flooding of a wetland by a jurisdictional water. A direct hydrologic surface connection may also occur due to a wetland overtopping a berm during periods of elevated surface water, or through features like culverts or tide/flood gates so long as perennial or intermittent flow occurs between the wetland and the jurisdictional water.

Under the 2015 Rule, all waters, including wetlands, adjacent to a TNW, interstate water, territorial sea, a tributary (as defined in that rule), or impoundment of a jurisdictional water are considered “waters of the United States.” The 2015 Rule defines adjacent as bordering, contiguous, or neighboring. The 2015 Rule includes more streams as tributaries than the proposed rule as well as more ditches as “waters of the United States,” and therefore, also covers more wetlands adjacent to those 2015 Rule tributaries. Under the 2015 Rule, wetlands that are part of an ongoing farming, ranching, or silvicultural operation are not “adjacent,” but may be jurisdictional based on a case-specific significant nexus analysis. In addition, the 2015 Rule’s definition of adjacent would include more wetlands as adjacent than the proposed definition of adjacent. Some wetlands considered neighboring under the 2015 Rule would have a direct hydrologic surface connection to jurisdictional waters to in a typical year, but many other neighboring wetlands would not have a direct hydrologic surface connection as defined in the proposed rule. The 2015 Rule also includes wetlands separated from jurisdictional waters by dikes, berms, barriers, or similar structures as adjacent, without regard as to whether the wetlands have a direct hydrologic surface connection to those jurisdictional waters. Thus, the proposed rule would include fewer wetlands as “waters of the United States” than the 2015 Rule. The agencies are unable to quantify the proposed rule’s reduction in jurisdiction of adjacent wetlands compared to the 2015 Rule.

Under pre-2015 practice, wetlands that are adjacent include wetlands that are bordering, contiguous, or neighboring a “water of the United States” per the 1980s regulations, including wetlands behind a berm, constructed barriers, and the like. Not all adjacent wetlands are jurisdictional under pre-2015 practice. The *Rapanos* Guidance states that adjacent wetlands are evaluated differently depending on the water to which they are adjacent (TNWs, RPWs, and non-RPWs). Under pre-2015 practice, wetlands adjacent to RPWs are analyzed in different ways, depending on whether or not they are directly abutting. Adjacent wetlands that directly abut an RPW are jurisdictional without the need for further analysis under pre-2015 practice. Wetlands adjacent to but not directly abutting an RPW require a case-specific significant nexus analysis to determine their jurisdictional status. Similarly, all wetlands adjacent to non-RPWs require a case-specific significant nexus evaluation to determine their jurisdictional status. Pre-2015 practice includes more streams as tributaries than the proposed rule as well as more ditches as “waters of

the United States,” and therefore, also covers more wetlands adjacent to those pre-2015 practice tributaries. Pre-2015 practice also includes wetlands separated from jurisdictional waters by dikes, berms, barriers, or similar structures as adjacent, without regard as to whether the wetlands have a direct hydrologic surface connection to those jurisdictional waters. Under pre-2015 practice such wetlands that are adjacent to TNWs are *per se* jurisdictional, while such wetlands that are adjacent to RPWs and non-RPWs are jurisdictional when they have significant nexus. Thus, the proposed rule would include fewer wetlands as “waters of the United States” than the 2015 Rule. The proposed rule would potentially regulate wetlands adjacent to non-seasonal intermittent tributaries that may have been found to be non-jurisdictional under pre-2015 practice after a case-specific significant nexus evaluation.

The agencies analyzed data in ORM2 from FY13-17 for AJDs for adjacent wetlands conducted under pre-2015 practice. The ORM2 database under pre-2015 practice includes the following categories of adjacent wetlands: wetlands adjacent to TNWs, wetlands that directly abut RPWs, wetlands adjacent to but that do not directly abut RPWs, and wetlands adjacent to non-RPWs. Although the agencies did not analyze ORM2 data for AJDs conducted under the 2015 Rule, for comparative purposes the agencies do narratively describe the differences between the proposed rule and both baselines for each previous mentioned category of adjacent wetlands.

Data in ORM2 from FY13-FY17 indicate that 5,261 waters were determined to be jurisdictional as wetlands adjacent to TNWs under pre-2015 practice. For these AJDs, the agencies cannot parse out directly from available data whether a wetland is abutting or not abutting, because for TNWs Corps staff are only required to record that the wetland is adjacent and do not specify which type of adjacency. To better assess the potential effect of the proposed rule on the CWA jurisdiction of wetlands adjacent to TNWs under pre-2015 practice, 25 of the 38 Corps Districts examined specific AJD ORM2 data for wetlands adjacent to TNWs (all but 38 of the 5,261 wetlands adjacent to TNWs were completed in those 25 Corps Districts) to assess whether the wetlands are abutting or not abutting a TNW. Some Corps Districts examined all AJDs for this wetland category from FY13-FY17, while other Corps Districts analyzed a random sample of AJDs. The Corps examined 3,581 of the 5,261 wetlands adjacent to TNWs in the analysis.⁵⁶ The Districts used AJD hard copies, information in the administrative file, remote tools, as well as experience with regional resources and the specific review area in this analysis to determine whether the wetlands were adjacent and abutting, or whether they were considered neighboring or were behind a berm or similar feature. Finally, the determinations of whether wetlands were abutting or not abutting were compiled in spreadsheets and the agencies used this raw data to calculate the following statistics. The Corps Districts found that 55 percent of wetlands adjacent to TNWs in the AJDs that were evaluated were abutting (*i.e.*, touching) and 45 percent of wetlands adjacent to TNWs in the AJDs that were evaluated were not abutting.⁵⁷ According to the analysis of the wetlands adjacent to TNWs reviewed by the Corps Districts, about 10 percent of wetlands adjacent to TNWs that do not abut the TNW have a surface connection to the TNW via a culvert or tide gate. Such wetlands would most likely have a direct hydrologic surface connection under the proposed rule and would thus presumably meet the agencies’ proposed

⁵⁶ See Appendix A.

⁵⁷ The agencies have placed in the docket as a “Supporting Document” a table of the Corps wetlands adjacent to TNW determinations that were evaluated listed by their Department of Army (DA) Number. Docket materials are available at <https://www.regulations.gov/> (Docket ID: EPA-HQ-OW-2018-0149).

definition of adjacent. The agencies do not have additional information to estimate how many of the other wetlands adjacent to TNWs would be found jurisdictional under the proposed rule due to a direct hydrologic surface connection where they otherwise do not abut. Because the proposed rule would include as adjacent wetlands only those non-abutting wetlands that have a direct hydrologic surface connection, fewer wetlands adjacent to TNWs would be considered jurisdictional as compared to both baselines. The agencies are unable to quantify this change.

Under pre-2015 practice, from FY13-FY17, 11,203 waters were determined to be jurisdictional wetlands directly abutting an RPW. These wetlands would also be jurisdictional under the 2015 Rule. The agencies do not anticipate that the proposed rule would change the jurisdictional status of these wetlands as compared to either baseline.

Under pre-2015 practice, the agencies' data indicate that most wetlands that are adjacent to but that do not directly abut RPWs are found to be jurisdictional following a significant nexus analysis. In ORM2 from FY13-FY17, there were 3,939 adjacent wetlands that do not directly abut an RPW, and thus required additional jurisdictional analysis. Of these, 3,834 waters were determined to be jurisdictional because they had a significant nexus, and 105 were found non-jurisdictional because they lacked a significant nexus – meaning approximately 97 percent of such wetlands were determined to be jurisdictional under pre-2015 practice. Under the 2015 Rule, wetlands that meet the definition of adjacent, which is broader than the proposed definition, would be considered as “waters of the United States.” As compared to the proposed rule, these wetlands would not be jurisdictional unless they have a direct hydrologic surface connection to the jurisdictional water in a typical year. The agencies have no additional information about the extent of such wetlands but anticipate that many such wetlands would lack such a connection. Thus, compared to both baselines, fewer wetlands would be jurisdictional under the proposed rule for this category of wetlands where they do not abut the RPW and lack a direct hydrologic surface connection to the RPW in a typical year.

Available data from AJDs indicate that under pre-2015 practice, most wetlands adjacent to non-RPWs have been determined to be jurisdictional after a case-specific significant nexus analysis that considered both the non-RPW and its adjacent wetlands. In ORM2 from FY13-FY17, 1,681 waters were determined to be jurisdictional wetlands adjacent to a non-RPW⁵⁸ and 152 wetlands adjacent to a non-RPW were determined to be non-jurisdictional – 92 percent of wetlands adjacent to non-RPWs were determined to be jurisdictional. The agencies are not able to further parse out which of these non-RPWs were intermittent or ephemeral or to parse out which adjacent wetlands are abutting. Thus, the agencies are unable to quantify what the change in jurisdiction would be for this category of wetlands as compared to the proposed rule. Wetlands abutting intermittent non-RPWs or that have a direct hydrologic surface connection to intermittent non-RPWs in a typical year would be jurisdictional under the proposed rule. Wetlands adjacent to ephemeral non-RPWs and wetlands that do not have a direct hydrologic surface connection to intermittent non-RPWs in a typical year would not be jurisdictional under the proposed rule. Thus, compared to both baselines, fewer wetlands would be considered jurisdictional under the proposed rule for this category of wetlands.

⁵⁸ The non-RPWs were also determined to be jurisdictional in these cases, as under pre-2015 practice the agencies evaluate the tributary along with any adjacent wetlands for a case-specific significant nexus.

Although the ORM2, NHD, and NWI datasets provide some useful information about the potential effects of the proposed rule, as described above, they cannot be used to quantify with precision potential changes to the jurisdictional status of wetlands under the proposed rule as compared to the two baselines. For the reasons discussed above, however, the agencies anticipate that there would be fewer wetlands subject to the CWA as “waters of the United States” under the proposed rule compared to both baselines.

Nonnavigable, Isolated, Intrastate Waters

Nonnavigable, isolated, intrastate waters would not be considered “waters of the United States” under the proposed rule. They would expressly fall into the proposed rule’s first exclusion for waters not identified in the proposal’s categories of “waters of the United States.” As noted previously, since the Supreme Court’s decision in 2001 in *SWANCC*, the agencies have not determined jurisdiction based on the (a)(3) category of the 1980s regulations. Some of these waters that have been determined to be non-jurisdictional under pre-2015 practice would be determined jurisdictional under the 2015 Rule either because they meet that rule’s definition of adjacent or under a case-specific nexus analysis under the (a)(7) (for similarly situated regional waters) or (a)(8) categories.

In ORM2 from FY13-FY17, 20,353 waters were determined to be non-jurisdictional non-navigable, intrastate, “isolated” waters under pre-2015 practice. As compared to pre-2015 practice, the agencies do not anticipate that there will be a change in jurisdiction for nonnavigable, isolated, intrastate waters. There may be a change as compared to the 2015 Rule baseline, but the agencies are not able to quantify that change and have not analyzed data from ORM2 for AJDs conducting using the 2015 Rule. These features are not mapped in NHD/NWI as their own category. The agencies have not attempted to assess them further.

Waters Excluded from the Definition of “Waters of the United States”

The proposed rule would explicitly exclude waters that are not included in the definition of “waters of the United States.” The prior sections of this chapter discuss the potential effects of the proposal’s definition of “waters of the United States” on waters that may have been determined to be jurisdictional under one or both baselines that may not be jurisdictional under the proposed rule. This section addresses potential effects of the proposed rule’s exclusions compared to exclusions under each of the baselines. Where the agencies assume no changes or limited changes when comparing the exclusions identified in paragraph (b) of the proposal and those of pre-2015 practice or the 2015 Rule, there is no further discussion. For example, many of the water features that the 2015 Rule specifically excludes and that are generally not considered “waters of the United States” under current implementation would not be included in the proposed definition of “waters of the United States” and therefore would be excluded under (b)(1) of the proposed definition. In addition, groundwater, including groundwater drained through subsurface drainage systems, is excluded in the both the proposed rule and the 2015 Rule, and such groundwater, though not specifically excluded in the regulatory text, is not considered a “water of the United States” under pre-2015 practice.

Under pre-2015 practice, the agencies do not record in the ORM2 database if a water is excluded from the definition of “waters of the United States” due to one of the regulatory exclusions. Such

waters may be entered into the database as “uplands.” However, other aquatic resources or features that the Corps determines to not meet the regulatory definition of “waters of the United States” are also categorized as “uplands” in the database. The Corps conducted 14,357 upland determinations in FY13-17 under pre-2015 practice. The agencies are unable to query ORM2 to determine how many waters have been determined to meet an exclusion from the definition of “waters of the United States” under pre-2015 practice. After the 2015 Rule was finalized, the ORM2 database was updated to track when waters were determined not to be “waters of the United States” due to the exclusions under the 2015 Rule, but the agencies have not analyzed the 2015 Rule AJDs for the reasons previously stated.

The agencies are unable to use the NHD or the NWI to estimate the extent of excluded waters under pre-2015 practice, the 2015 Rule, or the proposed rule, as described in Appendix A.

Ephemeral Features and Diffuse Stormwater Run-off

The proposed rule would exclude ephemeral features and diffuse stormwater water run-off, including directional sheet flow over upland from the definition of “waters of the United States.” As previously discussed, the exclusion for all ephemeral features represents a change from both pre-2015 practice and the 2015 Rule. For example, pre-2015 practice includes those ephemeral streams that contribute flow to downstream TNWs as jurisdictional where they have a case-specific significant nexus, and the 2015 Rule includes as jurisdictional ephemeral streams that meet that rule’s definition of tributary. The agencies are unable to estimate the change in jurisdiction from either baseline due to this portion of the exclusion in the proposed rule. The exclusion for diffuse stormwater runoff does not represent a change, as diffuse stormwater water run-off (including directional sheet flow over upland) is not considered jurisdictional under either baseline.

Ditches

In terms of the exclusions for ditches, all ditches that are not identified in the ditch category of “waters of the United States” are excluded in the proposed rule. The discussion of the change from both baselines is included in the “Ditch” section above; the agencies are unable to quantify potential changes as a result of the proposed ditch exclusion.

Prior Converted Cropland

The agencies anticipate that there could potentially be a change from both baselines for the exclusion for prior converted cropland but are unable to quantify what that potential change could be. Not all prior converted cropland which has been officially designated by U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) has been mapped throughout the country. In addition, all land that qualifies by statute as prior converted cropland may not have been formally designated as such. Further, the agencies note that NRCS is statutorily prohibited from sharing data and information on program participants and their land, even with other federal agencies.⁵⁹ Therefore, the agencies cannot obtain information from

⁵⁹ Section 1619 of the Food, Conservation, and Energy Act of 2008 prohibits USDA, its contractors, and cooperators, from disclosing information provided by an agricultural producer or owner of agricultural land

NRCS, which would help in identifying any potential effects or changes in jurisdiction. Estimates of the acreage of prior converted croplands have been made (*e.g.*, 53 million acres⁶⁰) in the past, but the agencies cannot verify the accuracy of these estimates. In addition, the agencies do not document in ORM2 when waters meet the prior converted cropland exclusion under pre-2015 practice, so no agency data exist to provide estimates on the current extent of prior converted cropland.

Finally, in order to establish a baseline and estimate any potential effect of the proposed rule language, the agencies would need to have estimates of the acreage of prior converted cropland that would lose the prior converted designation if it were subject to the “abandonment” principles versus the acreage of prior converted cropland that would lose the designation if it were subject to the “change in use” principles. To establish a baseline, the agencies would need data on how frequently the agencies applied these two principles in the field. In addition to being “abandoned” or having a “change in use,” such areas would also need to meet the federal regulatory definition of wetland as well as the definition of “waters of the United States.”

The agencies’ 2015 and 1980s regulations do not define “prior converted croplands,” nor do they explain when cropland can lose the prior converted designation. However, the preamble to the EPA and the Corps’ 1993 regulations provided that land would lose its prior converted status if it is abandoned and it exhibits wetland characteristics (abandonment).⁶¹ Subsequently, a 2005 Memorandum to the Field issued by the Corps and USDA states that a certified prior converted cropland determination remains valid as long as the area is devoted to an agricultural use.⁶² The memorandum further states that if the land changes to a non-agricultural use, the prior converted determination no longer applies and a new JD is required (change in use). Under that memorandum, the status of prior converted cropland that lies fallow is not clear. The change in use policy from the 2005 memorandum was later declared unlawful by one district court because it effectively modified the 1993 preamble language without any formal rulemaking process.⁶³

To establish a baseline and estimate any potential effect of the proposed rule language, the agencies would need to have estimates of the acreage of prior converted cropland that would lose the prior converted designation if it were subject to the abandonment principles and, of such abandoned prior converted cropland, how much has reverted to wetlands. The agencies would then need to establish the acreage of the abandoned prior converted cropland that has reverted to wetlands, and the acreage of the wetlands that would meet the proposed definition of adjacent wetlands. Because fewer wetlands would likely be jurisdictional under the proposed rule

concerning the agricultural operation, farming or conservation practices, or the land itself, in order to participate in a USDA program, as well as geospatial information maintained by USDA with respect to such agricultural land or operations, subject to certain exceptions and authorized disclosures. Covered information may only be shared with other federal agencies outside USDA for specific purposes under a cooperative program, *i.e.*, not for general regulatory or enforcement purposes. Available at <https://www.agriculture.senate.gov/imo/media/doc/110-246%20-%20Food,%20Conservation,%20And%20Energy%20Act%20Of%202008.pdf>.

⁶⁰ See the 1993 report entitled, “Protecting America’s Wetlands: A Fair, Flexible, and Effective Approach.”

⁶¹ 58 FR 45034 (August 25, 1993), available at <https://www.loc.gov/item/fr058163/>.

⁶² “Memorandum to the Field: Guidance on Conducting Wetland Determinations for the Food Security Act of 1985 and Section 404 of the Clean Water Act,” February 25, 2005. Available at https://prod.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_007869.pdf.

⁶³ *New Hope Power Co. v. U.S. Army Corps of Eng’rs*, 746 F. Supp. 2d 1272, 1282 (S.D. Fla. 2010).

compared to both baselines, it is therefore likely that there would be fewer wetlands that would now be considered “abandoned” and also subject to the CWA under the proposed rule.

Under both baselines, prior converted cropland loses its status as an excluded water under the CWA if it is either abandoned or if it is subject to a change in use. The proposed rule would clarify that the only way for prior converted cropland to lose its status as an excluded water under the CWA is when the area is abandoned and has reverted to a wetland meeting the regulatory definition of “wetlands.” The proposal further clarifies that prior converted cropland is abandoned if it is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. The agencies note that most prior converted cropland should not regain wetland status since it is generally manipulated to such a degree that wetland conditions would not return. As is the practice under both baselines, where wetland conditions do not return, the area would not be subject to the CWA. However, where wetland conditions do return, a new JD would be required. Since the agencies would no longer apply the change in use provision as used under both baselines to prior converted cropland, fewer wetlands may be identified as jurisdictional under the proposed rule compared to both baselines. Under both baselines, “change in use” did not require that the area not be used for agricultural purposes at least once in the immediately preceding five years (this time requirement was only in place for the abandonment provision); change from an agricultural to a non-agricultural use could occur immediately.

Artificially Irrigated Areas, Artificial Lakes and Ponds, and Water-Filled Depressions

The proposed rule includes an exclusion for artificially irrigated areas, including fields flooded for rice and cranberry growing, that would revert to upland should artificial irrigation to that area cease. The text of the exclusion changes somewhat from that of the 2015 Rule’s exclusion and the 1986 preamble language used under pre-2015 practice by combining factors from two of the 2015 Rule’s exclusions and from two of the 1986 preamble’s categories of waters that are generally not jurisdictional into one category and by adding fields flooded for cranberry growing.⁶⁴ In spite of the differences in the language for the proposed exclusion, the agencies anticipate that there will be no or little change as compared to both baselines.

The proposed rule includes an exclusion for artificial lakes and ponds constructed in upland, such as water storage reservoirs, farm and stock watering ponds, and log cleaning ponds, and that are not jurisdictional lakes and ponds or jurisdictional impoundments under the proposal. The proposed rule differs from the 2015 Rule and pre-2015 practice by identifying water storage reservoirs as an additional excluded type of artificial lakes and ponds, and does not specifically include cooling ponds this this exclusion. Cooling ponds are specifically included in the definition of waste treatment systems in the proposed rule, which are discussed below. The proposed rule text also differs somewhat from pre-2015 practice where these features are to be used exclusively for the stated purposes. Artificially water storage reservoirs are not specifically excluded in the 2015 Rule and are not specifically listed as a category of water that is generally not jurisdictional in the 1986 preamble. Therefore, there could be waters excluded under the

⁶⁴ “Fields flooded for rice growing” under pre-2015 practice would likely be considered features that are generally non-jurisdictional, as they would be “[a]rtificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as...rice growing.” 51 FR 41217 (November 13, 1986). Such fields are explicitly excluded in the 2015 Rule.

proposed rule that would not be excluded under either baseline. The agencies are unable to quantify that change.

The proposed rule's exclusion for water-filled depressions created in upland incidental to mining or construction activity, and pits excavated in upland for the purpose of obtaining fill, sand, or gravel is not appreciably different from the 2015 Rule's exclusion for water-filled depressions, and the agencies anticipate no change from the 2015 Rule for this exclusion. The proposed exclusion differs from the text of the 1986 preamble language used under pre-2015 practice for waters that are generally not jurisdictional, as the 1986 preamble includes additional specifications that such waters are generally non-jurisdictional unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of "waters of the United States." Therefore, there could be waters excluded under the proposed rule that would not be excluded under pre-2015 practice. The agencies are unable to quantify that change.

Stormwater Control Features

The proposed rule's exclusion for stormwater control features differs from the 2015 Rule's exclusion in that the 2015 Rule limited such exclusions to features that convey, treat, or store stormwater run-off, while the proposal's exclusion added the term "infiltrate." There is no such exclusion for stormwater control features under pre-2015 practice, though some stormwater features may be considered and found non-jurisdictional on a case-specific basis. The agencies are unable to quantify the magnitude, if any, of such a change.

Wastewater Recycling Structures

The proposed rule excludes wastewater recycling structures constructed in upland, such as detention, retention and infiltration basins and ponds, and groundwater recharge basins. The 2015 Rule contains a similar exclusion for wastewater recycling structures constructed in dry land that does not specifically include basins and ponds used for infiltration but does specify that the exclusion applies to percolation ponds built for wastewater recycling and water distributary structures built for wastewater recycling. The agencies anticipate that there would be no practical difference between the two exclusions, as the exclusions generally apply to wastewater recycling structures constructed in upland. Such waters are likely not considered jurisdictional under pre-2015 practice unless they are connected to the tributary network, and even then, some such waters could be considered as excluded under the exclusion for waste treatment systems.

Waste Treatment Systems

The agencies propose to continue the exclusion for waste treatment systems but with textual changes from both baselines. The agencies propose to revise the text in the waste treatment system exclusion to read just "waste treatment systems" and propose to define waste treatment systems for the first time to include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge). The agencies do not intend for this proposed rule to change pre-2015 practice or

application under the 2015 Rule regarding the waste treatment system exclusion. Thus, the agencies anticipate no change from either baseline for the exclusion for waste treatment systems.

Conclusion

As discussed in this chapter, the agencies' ability to make quantitative estimates of potential changes in CWA jurisdiction under the proposed rule relative to either baseline is severely limited by available data. That said, the agencies anticipate that the largest potential effects associated with the proposed rule policies would be to ephemeral streams and to wetlands. The agencies note that not all ephemeral streams would be "waters of the United States" under either or both baselines, but where they would be found jurisdictional under either or both baselines, they would be considered ephemeral features and non-jurisdictional under the proposed rule. Similarly, not all wetlands are jurisdictional under either pre-2015 practice or the 2015 Rule, but certain wetlands found jurisdictional under both baselines would not be jurisdictional under the proposed rule. This includes certain wetlands that are jurisdictional under either or both baselines that are adjacent to but that do not abut or have a direct hydrologic surface connection in a typical year to the waters to which they are adjacent, and wetlands adjacent to those ephemeral streams considered jurisdictional under either or both baselines. Some intermittent and perennial streams may also no longer be jurisdictional under the proposed rule that may be jurisdictional under the 2015 Rule and pre-2015 practice, if such streams do not convey perennial or intermittent flow to a TNW in a typical year. In addition, there could be a subset of interstate waters, their tributaries, their adjacent wetlands, and impoundments of the above waters that were jurisdictional under both baselines that would not be jurisdictional under the proposed rule due to the proposed elimination of interstate waters as a separate category of jurisdictional waters.

The proposed rule would not affect the scope of jurisdictional TNWs, nor the jurisdictional status of most perennial and many intermittent streams relative to either baseline. As discussed above, the agencies anticipate that the proposed rule would decrease the number of jurisdictional wetlands and impoundments, and the scope of lakes and ponds that are jurisdictional would likely be smaller when compared with either baseline.

The agencies recognize that some of the waters that would not be subject to the CWA under the proposed rule would be otherwise covered under state or tribal authorities and programs. This is discussed further in the following chapter and the Economic Analysis.

II. THE ROLE OF STATES AND TRIBES

Introduction

The Clean Water Act (CWA) provides that “[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States . . . to plan the development and use . . . of land and water resources.”⁶⁵ In addition, section 518 of the CWA authorizes the U.S. Environmental Protection Agency (EPA) to treat eligible Indian tribes with reservations in a manner similar to states (TAS) for a variety of purposes, including administering each of the principal CWA regulatory programs. Congress has also expressed a preference for tribal regulation of surface water quality on Indian reservations to ensure compliance with the goals of the CWA.⁶⁶

States and tribes have inherent sovereign authority to establish more protective standards or limits than the federal CWA, and many, though not all CWA programs, can be authorized or assumed under state or tribal law. In addition, states and tribes may implement, establish, or modify their own programs under state or tribal law to manage and regulate “waters of the state” or “waters of the tribe” outside of CWA delegated authorities.

The proposed rule would preserve the exclusive authority of states and tribes over more waters than under either baseline definition of “waters of the United States.” The following chapter describes existing state and tribal authorities and programs, recognizing that under pre-2015 practice states and tribes may already address waters potentially affected by a revised definition; may want to develop programs to cover certain waters the CWA does not regulate; and may choose to leave some waters unregulated. Further information about the CWA programs can be found in the programmatic section of this document. (The Economic Analysis separately evaluates the way in which states and tribes may respond to a change in the scope of CWA jurisdiction to assess costs and benefits.)

Summary of Programs in States, Territories, and the District of Columbia

Introduction

States and territories play an important role co-managing aquatic resources and implementing CWA programs. This chapter discusses existing programs and authorities that govern aquatic resources and their relationship to the definition of “waters of the United States.” This chapter and Appendix B present individual overviews of current state programs, including the District of Columbia and the U.S. Territories, regarding CWA programs, definitions of state waters, the scope of state jurisdiction, and additional information on state-level regulations and/or policies that affect “waters of the state.” The U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) (“the agencies”) compiled this information to describe the

⁶⁵ 33 U.S.C. 1251(b).

⁶⁶ See 33 U.S.C. 1377; 56 FR 64876, 64878–79 (Dec. 12, 1991).

breadth of state authorities and to provide a current picture of federal and state regulatory management of aquatic resources.

The CWA programs outlined in this chapter, including the section 303(c) water quality standards (WQS) program and 303(d) impaired waters program; the section 311 oil spill and response program; the section 401 water quality certification program; the section 402 National Pollutant Discharge Elimination System (NPDES) permit program; and the section 404 permit program for the discharge of dredged or fill material all rely on the definition of “waters of the United States” to establish the CWA scope of jurisdiction for program implementation. A revised definition of “waters of the United States” could have some effects on all of these CWA programs as implemented at the state level, as described further. However, any future effects would vary from state to state based on a state’s independent legal authority to regulate aquatic resources beyond the scope of the CWA following a revised definition.

Methodology

This summary draws on information from multiple sources, as well as from previous analyses undertaken by independent associations and institutions. Definitions for state and territorial waters, including wetlands, were drawn from online directories of state laws. Information on state and territorial water laws and programs was found through state and territorial agency websites, and information on the various CWA programmatic areas (sections 303, 311, 401, 402, and 404) was drawn from EPA staff and websites, various publications, and maps.

Wetland-specific data on state authorities were compiled using publications from the Association of State Wetland Managers and the Environmental Law Institute. These refer to state assessments of wetland programs. Information on state restrictions and legal constraints was drawn from an Environmental Law Institute report,⁶⁷ as well as from states themselves. Summaries of state programs provided to the agencies by the Western States Water Council and from the Association of Clean Water Administrators provided additional information on state laws and authorities, water quality-related policies, and definitions.

These summaries were shared with state and territorial agencies for corrections.⁶⁸ A list of references cited is included as an appendix. The agencies welcome additional feedback, potential corrections, and comment on the information contained in this chapter and in the state snapshots found in Appendix B of this document.

⁶⁷ While the ELI report is the best readily available summary of potential limitations imposed by state law that could constrain states to regulate waters in the absence of federal regulation, commenters on the then-proposed 2015 Rule have identified numerous shortcomings and inaccuracies of the analysis and results that may affect the degree to which the agencies rely upon it. *See, e.g.*, Comments of the Waters Advocacy Coalition on the Environmental Protection Agency’s and U.S. Army Corps of Engineers’ Proposed Rule to Define “Waters of the United States” Under the Clean Water Act EPA-HQ-OW-2011-0880 (November 13, 2014) at 7-11. Docket ID: EPA-HQ-OW-2011-0880-14568. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-2011-0880-14568>.

⁶⁸ The agencies have received responses to the summaries from 24 states and two territories. Of those responses, 25 were from environment or natural resources agencies and one was from a department of public health.

The summary in this section was compiled by the agencies from publicly available information sources. The summarized information does not change or substitute for any legal requirements. While the agencies have tried to ensure the accuracy of the information in this chapter, the obligations of the regulated community are determined by the relevant statutes, regulations, or other legally binding requirements.⁶⁹

State Responses to Past Jurisdictional Clarifications

Throughout the history of the CWA, court decisions as well as agency interpretations have re-interpreted the scope of “waters of the United States. Some states have responded to changes in jurisdictional scope of the CWA by adjusting their state laws and regulations. Some states have adjusted their laws to be consistent with the scope of CWA jurisdiction based on requirements in their own laws that they cannot be more stringent than federal regulations. Other states have increased regulatory requirements to address aquatic resources that were no longer regulated under the CWA.

Examples of state actions in response to court decisions can be seen following the Supreme Court decision in *Solid Waste Agency of Northern Cook County. v. Army Corps of Engineers, et al. (SWANCC)*. The Supreme Court in *SWANCC* held that CWA jurisdiction does not extend to certain nonnavigable, isolated, intrastate waters, which many states wished to still cover. Prior to the *SWANCC* decision, fifteen states specifically addressed isolated waters. Within the year following that decision, two states passed laws regulating isolated waters within their states. In that same year, several other states issued new regulations or reinterpreted their existing regulations to also extend coverage over isolated waters. The agencies recognize that these specific actions are not indicative of how states would respond to a change in the scope of CWA jurisdiction and that the actions of states following any revision of the “waters of the United States” definition is difficult to predict. However, these past state actions, in addition to the information on how states currently manage aquatic resources can be useful in helping the agencies understand how aquatic resources could be regulated at a state level under a revised “waters of the United States” definition.

Waters of the State

Each state has its own definition of “waters of the state,” and many states define similar areas and aquatic resources as waters of the state. A few states also reference “waters of the United States” within their definitions of “waters of the state.” All state definitions are more inclusive than past and current definitions of “waters of the United States” in at least one way; most states do so by encompassing some combination of groundwater and artificial waters in their definitions of “waters of the state.” As described in the state snapshots in Appendix B, states typically have very broad definitions which include waters that are not “waters of the United States” under the CWA, *i.e.* groundwater.⁷⁰ Many states choose to then limit their regulations to

⁶⁹ In the event of a conflict between the discussion in this document and any statute or regulation, this document would not be controlling.

⁷⁰ For example, Illinois defines their “waters of the state” as “All accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or

fewer waters, even though the definition itself is broader in scope. Few states that use the phrase “artificial waters” define it in their definition of “waters of the state,” though it may be explained further in regulation.

Very few states mention flow requirements in their definitions, but the ones that do define “waters of the state” as those waters which flow perennially, seasonally, and intermittently. Some states may choose not to regulate all waters within the scope of their definition of “waters of the state,” often including exemptions in their regulations for certain types of waters of the state, for certain industries, or for certain types of permits. Effectively, about half of the states regulate at least some waters beyond the current scope of federal CWA requirements.

All states have a definition of wetlands in their state laws and regulations. While these definitions also vary widely in exact language, they all either recite, reference, incorporate, or outline similar factors as the federal definition of wetlands. Some are more inclusive than the federal definition, while others incorporate the exact federal factors of a wetland. Many states have different wetland definitions for tidal, nontidal, coastal, and freshwater wetlands. Isolated waters and wetlands are rarely specified under these definitions; however, at least 21 states have programs to cover all or some isolated wetlands.⁷¹ The agencies do not have sufficient information at this time to conclude that only those 21 states regulate some or all isolated wetlands and solicit comment to improve their estimate.

Additional State Conditions and Requirements

States retain authority under the CWA to determine what kinds of aquatic resources need to be regulated under state law in order to protect the interests of the state and their citizens. State environmental agencies and some local governments may use existing state legal authorities to address certain water resources that do not meet the definition of “waters of the United States.” As noted above, about half of states regulate at least some waters beyond the scope of federal CWA requirements. There are some state laws that constrain a state’s authority to regulate more broadly than the federal “floor” set by the CWA. Whether or not a state actually regulates more broadly is not necessarily controlled by the presence or absence of state determinations that federal standards are sufficient.

Thirteen states have adopted laws that require their state regulations to parallel federal CWA regulations. Not all of these laws focus solely on geographic jurisdiction. For example, some state laws limit the application of state regulations to certain industries, certain types of permits, or certain types of resources. Such narrowly applicable requirements exist in six states. Three of these states with narrow requirements regulate some waters that are not considered within the scope of “waters of the United States.” The remaining three states with narrow requirements do

border upon this State” 415 Ill. Comp. Stat. section 5/3.550, and Nevada defines their “waters of the state” as “All waters situation wholly or partly within or bordering upon the state, including but not limited to: all streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems, and drainage systems; and all bodies or accumulations of water, surface and underground, natural or artificial” Nev. Rev. Stat. section 445A.415.

⁷¹ This count includes the 20 states that regulate the discharge of dredged and fill programs into isolated wetlands and one additional state (Hawaii) that only regulates point source discharges to isolated wetlands. *See* footnote 70.

not regulate waters beyond the scope of federal regulation. Seven states have enacted more broadly applicable requirements that no environmental state agencies can promulgate state regulations beyond what is required under federal regulations.⁷² These broader requirements include limits on geographic jurisdiction of state regulations to match CWA jurisdiction. Notwithstanding these broad limitations, in practice two of the seven states with broad legal requirements still regulate waters beyond the scope of “waters of the United States,” while the other five states do not.⁷³

Twenty-three states have adopted laws that require extra steps or findings of benefits in order to impose state regulations beyond federal requirements. The effects of these laws vary widely, depending on their exact requirements and how they are implemented in a given state. Some of these regulations effectively restrict state authority to regulate waters more strictly than federal CWA requirements; other “extra step” laws appear to have no noticeable effect on state regulations that are broader in scope than federal CWA requirements. Eight of these 23 states are also included in the 13 states above that have determined that federal standards are sufficient. Of the 15 states that only have the “extra step” requirements, nine regulate some waters that are not covered by the federal CWA. The other six states with these requirements have not established regulations for waters outside the scope of the CWA.

The remaining 22 states and the District of Columbia do not appear to have any laws that address state regulations outside the scope of CWA jurisdiction. Eleven of these states regulate waters beyond the scope of the CWA, while the other eleven states and the District of Columbia do not.

Some states may adjust their current practices in light of a revised definition of “waters of the United States.” However, the agencies are not able to predict what changes might result from the proposed rule. Additionally, the agencies are aware that there are currently, and have been in the past, bills before state legislatures to either add or repeal laws that address the scope of state regulation compared to federal requirements. While this could have an effect on the regulation of waters that are not “waters of the United States” in the future, the agencies will not speculate on the outcomes of these efforts and instead are focused in this chapter on the information that is available to the agencies at this time.

State Authorized Programs

The following summaries of CWA programs describe the status of state authorized programs and note where independent state programs are known. Additional information on these CWA programs are described in the respective program sections.

⁷² The analysis of possible state responses to a revised definition of “waters of the United States” in the Potential State and Tribal Regulator Response section of the Economic Analysis focuses solely on these broader requirements that are likely to make it more difficult for states with such requirements to readjust their regulation of state waters if this rule is finalized.

⁷³ It is beyond the scope of this Resource and Programmatic Assessment to analyze how states with broad legal limitations (*e.g.*, North Carolina and Wisconsin) may, in fact, regulate beyond the scope of CWA jurisdiction. However, the agencies’ research indicates that their broader regulation does occur, either because of specific exceptions in the original requirements or through action of the state legislature.

Section 303(c) Water Quality Standards and 303(d) Impaired Waters Listing and Total Maximum Daily Load Program

All states have federal WQS under CWA section 303(c). Under CWA 303(d) and the EPA's implementing regulations, states are required to assemble and evaluate all existing and readily available water quality-related data and information and to submit to the EPA every two years a list of impaired waters that require total maximum daily loads (TMDLs). For waters identified on a 303(d) list, states must establish TMDLs for all pollutants preventing or expected to prevent attainment of WQS.

State Oil Spill Response Programs

All states have a program that covers at least some of the areas included in the section 311 program. These programs vary from state to state in their requirements, coverage, and process. All states have some mechanism to allow for reimbursement for oil spill cleanup from responsible parties, while most states have mechanisms for clean-up cost recovery, civil penalties, and/or trust funds to aid in cleanup.

Section 401 Water Quality Certification Programs

All 50 states, the District of Columbia, and the U.S. Territories have adopted section 401 programs which provide the authority to approve, disapprove, or conditionally approve federal permits and licenses issued within their state.

State Pollutant Discharge Permitting Programs

Forty-seven states and the U.S. Virgin Islands have authority to administer the NPDES program and permits issued for "waters of the United States." States may be approved for all or some of the major components of NPDES: biosolids, pretreatment, federal facilities, industrial, basic municipal, and general permits.

Many states issue their own discharge permits under state law that are separate from the NPDES program permits issued in their state. These state programs may regulate state waters that are not also "waters of the United States." Should federal CWA jurisdiction change, a state may continue to regulate, under state law, waters that are no longer jurisdictional as "waters of the United States." Alternatively, if the discharge is no longer into a "water of the United States," states may terminate the permit, or modify the permit to recognize that the discharge requiring an NPDES permit is farther from a "water of the United States" that would set the applicable WQS with which the permit limits would have to comply.

State Dredged and Fill Permit Programs

To date only two states, New Jersey and Michigan, have assumed the section 404 program, meaning that EPA has approved their administration of a state dredged and fill program in lieu of the federal section 404 program administered by the U.S. Army Corps of Engineers (Corps) and EPA for certain "waters of the United States." In addition to the section 404 program, 35 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, and the U.S.

Virgin Islands have some form of dredged and fill permitting programs for state waters, which vary in scope and do not necessarily address waters subject to section 404 permitting. Thirty of those states and the District of Columbia have dredged and fill permitting for at least some inland waters,⁷⁴ while the other five states and the territories have programs that only cover coastal or tidal waters.⁷⁵ Of those states with inland dredged and fill programs, 20 have permit requirements for isolated wetlands.⁷⁶ The balance of states rely exclusively on the section 401 certification program to address water quality concerns related to dredged and fill activities permitted by the Corps in both inland and coastal waters.

States and territories that do not have state dredged and fill permitting programs at all tend to rely on CWA section 401 certification programs to address water quality concerns related to dredged and fill activities permitted by the Corps in both inland and coastal waters. Those states with state permit programs will still tend to rely on 401 certification programs for dredged and fill activities permitted by the Corps in those waters not covered by the state permitting program. Potential effects of the proposed rule on 401 certifications are discussed in a later section.

About one-third of states have expressed some level of interest regarding assumption of the federal section 404 dredged and fill permit program. Some of those states have contacted the EPA and begun action at the state level to initiate the assumption process. The EPA is aware that more states may be interested in assuming the section 404 program and will work with any state that wishes to begin the process to do so.

No-Net-Loss Goals for Wetlands

Thirty-seven states have goals to protect and preserve wetlands.⁷⁷ Twenty-three states have a formal no-net-loss goal in regulation, and nine states have an informal no-net-loss goal in policy. Five states have a formal net gain/net increase goal, meaning that their wetland policies go beyond a no-net-loss goal and seeks to increase wetlands within their states. The remaining thirteen states have no such goals in place.

⁷⁴ While some of these state dredged and fill programs cover all types of inland waters of the state, including wetlands, some are limited to certain waters, such as streams, floodplains, lakes, and waters of the state which are not jurisdictional under the CWA. The thirty states that have explicit authority to issue permits for dredged and fill activities in inland waters—whether through a state program or through state assumption of the 404 permitting program – are California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, Washington, and Wisconsin.

⁷⁵ The five states with coastal or tidal wetlands programs are Alabama, Delaware, Georgia, Hawaii, and South Carolina.

⁷⁶ This number is referring to the states that regulated the discharge of dredged and fill material in isolated wetlands, while the count above of 21 states that regulate some or all isolated wetlands includes one state that only regulates point source discharges to isolated wetlands.

⁷⁷ President George H.W. Bush established a national goal of no net loss of wetlands in 1989. The Corps and EPA help implement that goal within the section 404 program by ensuring that appropriate and practicable steps are taken to avoid, minimize, and compensate for authorized impacts to wetlands.

Conservation and Restoration Programs

Some states rely on conservation and restoration programs in lieu of or to complement CWA programs for water resource protection and management, choosing which tools to use to address different resources in different ways. Many states have noted the effectiveness of such programs at protecting aquatic resources in their state. In the comments and federalism letters that the agencies have received to date, multiple states mentioned that programs such as best management practices, conservation plans, and cost share programs for industries such as agriculture and forestry are effective and efficient ways to ensure aquatic resources are protected without the necessity for intensive permit programs. The extent to which these programs address waters that are outside of the scope of CWA jurisdiction is unknown.

Pre-Proposal State Comments

Much like the individual state programs, the comments and information provided by states on their impressions of potential effects on their programs associated with a revised definition of “waters of the United States” vary widely. Most states that have commented on what might be potential effects to their state programs under a revised definition have stated that state laws and regulations allow them to address aquatic resources that are not subject to CWA jurisdiction. A few states have said the opposite, expressing concerns about the potential effects to their programs and would have to re-evaluate their programs to consider addressing waters in their state should they no longer be regulated under the CWA. However, based on the limited pre-proposal information the agencies provided, most states were generally unsure of the potential impacts to their programs. Comment letters from states that were sent to the agencies as part of the federalism consultation and a summary of the agencies’ March 2018 workshop with state co-regulators are available in the docket for the proposed rule at <https://www.regulations.gov/> (Docket ID: EPA-HQ-OW-2018-0149). In addition, several states provided pre-proposal recommendations to the agencies’ public recommendations docket (Docket ID No. EPA-HQ-OW-2017-0480) that opened August 28, 2017, and closed November 28, 2017. These recommendations are available on Regulations.gov at <https://www.regulations.gov/docket?D=EPA-HQ-OW-2017-0480>.

Summary of Programs on Indian Reservations

Introduction

This chapter discusses existing federal CWA programs and authorities, as well as tribal inherent regulatory authority, that together govern a federally recognized tribe’s aquatic resources and their relationship to the definition of “waters of the United States.”⁷⁸ In addition, this document

⁷⁸ This summary focuses on Indian reservation lands as defined at 18 U.S.C. 1151(a), which are a subset of the broader geographic area that comprises Indian country as a whole. *See* 18 U.S.C. 1151 (a)-(c). As reflected in the summary, eligible tribes may administer CWA regulatory programs on reservation lands. Section 518 of the CWA authorizes the EPA to treat eligible Indian tribes with reservations in a manner similar to states (TAS) for a variety of purposes, including administering each of the principal CWA regulatory programs. Therefore, tribes cannot obtain TAS under the CWA pertaining to any non-reservation Indian country or any other type of non-reservation

identifies comments about the federal government’s trust responsibility and tribes’ treaty rights received during tribal consultation and engagement. This summary, as well as Appendix C, provides a snapshot of the current status of tribes authorized to administer CWA programs, and definitions of tribal waters, as well as additional information on tribal regulations and/or policies that affect “waters of the tribe.”

The agencies compiled this information to provide a current picture of federal and tribal regulatory management of aquatic resources and to understand the potential effects of a change in scope of “waters of the United States.” The EPA and the Corps directly implement most of the programs under the CWA in the vast majority of Indian country. Some tribes implement CWA programs and some tribes operate aquatic resource programs under tribal law.

The CWA programs outlined in this chapter include the section 303(c) WQS program; the section 303(d) impaired water listing and TMDL programs; the section 311 oil spill and response program; the section 401 certification program; the section 402 NPDES permit program; and the section 404 permit program for the discharge of dredged or fill material. All of these programs rely on the definition of “waters of the United States” to establish the CWA jurisdictional scope for program implementation. A revised definition of “waters of the United States” could have some effects on all of these CWA programs, as described below. The agencies cannot predict the precise way individual tribes may be affected by a revised definition of “waters of the United States.”

Methodology

For the purpose of this summary, information on tribal programs was drawn from multiple sources including federal and tribal sources. Information on the various CWA programmatic areas (sections 303, 311, 401, 402, and 404) was drawn from EPA staff, websites, and numerous publications. These summaries were shared with tribes and tribal organizations for corrections. A list of references cited is included in Appendix D. The agencies welcome additional feedback, potential corrections, and comment on the information contained in this chapter and in Appendix B of this document.

The summary in this section was compiled from publicly available information sources and has not been independently verified by the agencies. The summarized information does not change or substitute for any legal requirements. While the agencies have tried to ensure the accuracy of the discussion in this document, the obligations of the regulated community are determined by the relevant statutes, regulations, or other legally binding requirements.⁷⁹

land. Civil regulatory jurisdiction in Indian country generally lies with the federal government and tribes, not with the state.

⁷⁹ In the event of a conflict between the discussion in this document and any statute or regulation, this document would not be controlling.

Waters of the Tribe or Reservation Waters

Under well-established principles of federal Indian law, a tribe retains attributes of sovereignty over both its lands and its members.⁸⁰ Further, tribes retain the “inherent power necessary to tribal self-government and territorial management,” and there is a significant territorial component to tribal power.⁸¹ Thus, tribes may choose to establish or define “reservation waters” under tribal law. Although the agencies are aware that some tribes have such definitional law for reservation waters, we have not compiled a complete list of tribes that have done so at this time. The agencies are interested in developing a more comprehensive list of tribes that have established tribal law or regulations defining reservation waters. The agencies have found examples of tribes that have defined reservation waters, highlighted below, but generally the content and scope of tribal laws vary widely, as do tribes’ capacity to develop, implement, and enforce those laws. In order to enforce tribal water pollution control laws against non-Indian owned facilities under tribal law, tribes generally must establish their inherent authority over those facilities. The following examples illustrate tribes that have formally defined tribal or reservations waters:

- The Blackfeet Nation has defined “reservation waters” in their Aquatic Lands Protection Ordinance as: “(1) All naturally occurring bodies of water within the exterior boundaries of the Reservation regardless of alteration by man, including but not limited to lakes, rivers, streams (including intermittent streams), mudflats, wetlands, springs, sloughs, potholes and ponds, and any bodies of water classifiable as ‘waters of the United States’ under federal law; (2) Tributaries of waters identified in subpart (1) above; and (3) Wetlands.”⁸²
- The Confederated Salish and Kootenai Tribes of the Flathead Reservation have defined “reservation waters” in their Aquatic Lands Conservation Ordinance as: “(1) All naturally occurring bodies of water with the exterior boundaries of the Reservation regardless of alteration by man, including but not limited to lakes, rivers, streams (including intermittent streams) mudflats, wetlands, sloughs, potholes and ponds from which fish and wildlife are or could be taken, but does not include wholly manmade water bodies; (2) Tributaries of waters identified in subpart (1) above; (3) Wetlands adjacent to Reservation waters.”⁸³ The tribe’s definitions of “adjacent” and “wetlands” mirror the EPA and Corps’ 1980s regulations.

⁸⁰ See, e.g., *California v. Cabazon Band of Mission Indians*, 480 U.S. 202, 207 (1987); *U.S. v. Mazurie*, 419 U.S. 544, 557 (1975).

⁸¹ *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 141-142 (1982). See also *White Mountain Apache Tribe v. Bracker*, 448 U.S. 136, 151 (1980) (significant geographic component to tribal sovereignty).

⁸² Blackfeet Aquatic Lands Protection Ordinance (Ordinance 90-A-amended). 2012. Available at http://www.blackfeetenvironmental.com/ordinance90/blackfeet_aquatic_land_protection_ordinance90a.pdf.

⁸³ The Confederated Salish and Kootenai Tribes Aquatic Lands Conservation Ordinance, Ordinance No. 87-A (December 5, 1986). Available at <http://nrd.csktribes.org/component/rsfiles/download?path=EP%252F87areg.pdf>.

Federally Recognized Tribes

The relationship between the federal government and federally recognized tribal governments is a “government-to-government” relationship. Federal departments and agencies recognize the federal government’s trust responsibility, which derives from the historical relationship between the federal government and Indian tribes as expressed in certain treaties and federal Indian law.

There are 573 federally recognized Indian tribes within the United States, including 229 native tribes within the state of Alaska.⁸⁴ Over 300 of these tribes have reservation lands. Many tribes have lands that the United States holds in trust for the tribes, known as trust lands. Under the EPA’s longstanding approach, and consistent with relevant judicial precedent, trust lands validly set aside for Indian tribes are considered informal reservations and have the same status as formal reservations for purposes of the Agency’s programs.⁸⁵ In the aggregate, the land and waters of Indian reservations comprise over 70 million acres, or 3.7 percent of the area of the contiguous 48 states (about the size of Arizona). The largest 25 tribes account for over 80 percent of the 70 million acres.⁸⁶

Federal Trust Responsibility

The agencies are committed to maintaining their long-standing work with federally recognized Indian tribes on a government-to-government basis. Indeed, one of the key principles of the *EPA Policy for the Administration of Environmental Programs on Indian Reservations* (1984) is that, “The Agency, in keeping with the federal trust responsibility, will assure that tribal concerns and interests are considered whenever its actions and/or decisions may affect reservation environments.”⁸⁷ During tribal engagement at the pre-proposal stage of this proposed rule, many tribes provided feedback that a revised definition of “waters of the United States” could potentially affect tribal interests and that the federal government has a trust responsibility to tribes. Consistent with the federal government trust responsibility, the agencies, in consultation with tribes, are implementing the CWA by clarifying the definition of “waters of the United States.”

Several tribes noted that they would continue to protect the chemical, physical, and biological integrity of water on their reservation lands to the maximum extent possible, adopting holistic definitions for “tribal waters” in their own tribal ordinances (see below). Some tribes, however,

⁸⁴ See “Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs,” Jan. 30, 2018, 83 FR 4235; and Thomasina E. Jordan Indian Tribes of Virginia Federal Recognition Act of 2017, Pub. L. No. 115-121 (To extend federal recognition to the Chickahominy Indian Tribe, the Chickahominy Indian Tribe-Eastern Division, the Upper Mattaponi Tribe, the Rappahannock Tribe, Inc., the Monacan Indian Nation, and the Nansemond Indian Tribe).

⁸⁵ See, e.g., 81 FR 30183, 30192 (May 16, 2016); 56 Fed. Reg. 64876, 64881 (December 12, 1991); 63 FR 7254, 7257-58 (February 12, 1998); *Oklahoma Tax Comm’n v. Citizen Band Potawatomi Indian Tribe of Oklahoma*, 498 U.S. 505, 511 (1991).

⁸⁶ Source: EPA analysis of 2010 Census information at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_GCTPH1.US03&prodType=table.

⁸⁷ See “EPA Policy for the Administration of Environmental Programs on Indian Reservations” (1984 Indian Policy), November 8, 1984. Available at <https://www.epa.gov/tribal/epa-policy-administration-environmental-programs-indian-reservations-1984-indian-policy>.

expressed concerns that they face economic and resource challenges that could limit their ability to enforce tribally-adopted water quality protections, and many tribes, due to similar resource constraints, have not yet developed an aquatic resource program.

Tribal Treaty Rights

Throughout the pre-proposal tribal consultation and engagement process, many tribes expressed concern about the proposed rule's potential effects on water quality, especially in off-reservation areas where some tribes have natural resource related-treaty rights (such as fishing, hunting, or gathering rights). Tribal input noted that the condition of waters in such areas affects off-reservation natural resources that many tribes depend upon for cultural lifeways and in which they have subsistence rights. With this proposed rule, the agencies are interpreting the authority granted by Congress in the CWA to clarify the definition of "waters of the United States." The EPA and the Army recognize that treaty rights constitute federal law, but treaty rights do not expand the authority granted to agencies by Congress.

Treatment in a Similar Manner as a State

Section 518(e) of the CWA authorizes the EPA to grant eligible Indian tribes treatment in a similar manner as a state for a variety of purposes, including receiving certain categorical grants under several CWA funding authorities, and administering each of the principal CWA regulatory programs.⁸⁸ Section 518(e) is commonly known as the "TAS" provision, for treatment in a similar manner as a state.

Section 518(e) establishes eligibility criteria for TAS, including requirements that an Indian tribe have a governing body carrying out substantial governmental duties and powers; that the functions to be exercised by the tribe pertain to the management and protection of water resources within the borders of an Indian reservation; and that the tribe can be reasonably expected to be capable of carrying out the functions to be exercised in a manner consistent with the terms and purposes of the Act and applicable regulations. Section 518(h) defines "Indian tribe" to mean any Indian tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a federal Indian reservation. It also defines "federal Indian reservation" to mean all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

The EPA has established application processes for six CWA programs: section 303(c) WQS; section 303(d) impaired water listing and TMDL programs; section 401 water quality certification programs; section 402 NPDES permitting and other provisions; section 405 sewage sludge management programs; and section 404 dredged or fill permitting.⁸⁹ Tribes that have EPA-approved WQS are generally also approved for administering 401 certifications. To date, tribes have TAS approvals for the development of WQS, water quality certification, and grant

⁸⁸ Section 518(e) specifically identifies these programs as those specified in sections 104, 106, 303, 305, 308, 309, 314, 319, 401, 402, 404, and 406 of the CWA.

⁸⁹ The application processes for these four programs are specified in 40 CFR 131.8, 40 CFR 130.16, 40 CFR 131.4(c), 40 CFR 123.31-123.34, 40 CFR 233.60-233.62, and 40 CFR 233.60-233.62 respectively.

programs (sections 106 and 319 grant programs). No tribes have TAS for any CWA permitting programs (e.g., sections 402 and 404) or section 303(d) impaired water listing and TMDL programs.

Any changes or clarifications to federal CWA jurisdiction would not necessarily affect tribes' eligibility for TAS under any of these programs should they choose to pursue this option. Changes or clarifications could, however, affect tribes' ability to implement certain programs for certain waters on reservation lands.

For reservation lands where tribes do not have TAS for a CWA regulatory program, the EPA (or the Corps for section 404) is generally responsible for administering those programs. Any changes to federal CWA jurisdiction over waters on reservation lands could affect where the EPA or the Corps could administer the relevant program. For example, because no tribe has an approved section 404 program, the Corps is generally responsible for writing permits for discharges of dredged and fill materials to any reservation waters that are "waters of the United States." A change in CWA geographic jurisdiction could affect where discharges require CWA 404 permits and where discharges may be subject to Corps or EPA enforcement if they lack a required permit.

Tribal Programs and Participation in Authorized Clean Water Act Programs

The following summaries of CWA programs capture the status of tribal authorized programs and note where independent non-CWA programs, including programs under tribal law, are known. Because of their reliance on federal programs, the potential effects on tribes will vary depending on changes to federal programs resulting from a change in the definition of "waters of the United States." Additional information on the CWA programs and potential effects of changes in jurisdiction on implementation of these programs are described in the respective program sections.

Water Quality Standards Programs

Currently, 60 tribes have obtained TAS authority to adopt WQS under CWA section 303(c) (*see* Appendix C). The EPA has approved WQS adopted by 44 of these tribes. In addition, the EPA promulgated federal WQS for one tribe that only recently received TAS for 303(c). The agencies know of 75 to 80 tribes that have the capability to develop and administer WQS for non-jurisdictional waters: the 60 tribes that have TAS for WQS and up to two dozen tribes without TAS⁹⁰ that have independently developed WQS for their waters under tribal law. These tribes have at least general protections for certain reservation waters—including many with specific designated uses and criteria and including ephemeral and intermittent streams—in their WQS, which could be implemented at their discretion. Some tribes have developed unique designated uses for WQS, such as cultural and traditional uses, and uses appropriate for local species.

⁹⁰ Information about tribes with TAS and EPA-approved WQS came from <https://www.epa.gov/wqs-tech/epa-approvals-tribal-water-quality-standards-and-contacts/>. Information about tribes that have adopted WQS only under tribal law was provided by EPA regional office staff familiar with tribal WQS activities.

Impaired Water Listing and Total Maximum Daily Load Programs

While several tribes have expressed interest in obtaining 303(d) TAS authority,⁹¹ none have submitted applications for 303(d) TAS to date.⁹² Under CWA 303(d) and EPA's implementing regulations, an authorized tribe would be required to assemble and evaluate all existing and readily available water quality-related data and information and to submit to EPA every two years a list of impaired waters that require TMDLs. For waters identified on a 303(d) list, an authorized tribe would then be required to establish TMDLs for all pollutants preventing or expected to prevent attainment of the applicable WQS. As far as the agencies are aware, no tribes have similar programs authorized under tribal law.

Tribal Oil Spill Prevention, Planning and Response Programs

Implementation of the 311 regulatory programs cannot be delegated to the states or tribes. The EPA coordinates with states and tribes and implements the program from EPA headquarters and Regional offices. Only a few tribes, such as the Navajo Nation, have an oil spill prevention program similar to the EPA's spill prevention, control, and countermeasure (SPCC) program. Most tribes do not currently have the expertise or resources to create an aboveground storage tank program and typically rely on the EPA to inspect above ground storage tanks at facilities subject to the rule, particularly oil exploration and production facilities located on remote reservation lands.

The EPA has authority to respond to and conduct enforcement of oil spills into and on "waters of the United States" on reservation lands. If there is an oil spill into or on non-jurisdictional waters on reservation lands, the response, if any, would be determined by the tribal government.

Section 401 Water Quality Certification Programs

Section 401 certification provides authorized tribes with a tool to help protect water quality by giving them an opportunity to review federally-issued permits and licenses and ensure they comply with federally-approved WQS on reservations and other appropriate requirements of state or tribal law. Authorized tribes can request 401 certification authority and at present most of the 60 tribes that have TAS for WQS are also authorized to administer a 401 certification program. For those lands and waters where the tribe has not received 401 certification authority the EPA Regional offices have the authority to administer the 401 program.

Tribal Pollutant Discharge Elimination System

At this time, no tribe has received authorization to implement the section 402 NPDES permitting program. As a result, in almost all cases, the EPA is the NPDES authority for dischargers on reservation lands; there are a few exceptions (*e.g.*, due to specific federal and state statutory provisions in the Maine Settlement Act, the state of Maine issues NPDES permits in parts of

⁹¹ For more information on TAS status, see the "Tribal Participation in Clean Water Act Programs" section of this chapter and <https://www.epa.gov/tmdl/final-rule-treatment-indian-tribes-similar-manner-states-purposes-section-303d-clean-water-act>.

⁹² Note that the process for attaining TAS for 303(d) was finalized in September 2016.

Indian country). The agencies are not currently aware of any tribes with non-CWA tribal pollutant discharge regulatory programs under tribal law.

Tribal Dredged and Fill Material Permit Programs

Currently, no tribes have received TAS authority to assume administration of the section 404 program, and the Corps administers the program on tribal lands. However, the agencies are aware of at least three tribes that independently administer their own dredged or fill permitting program under tribal law (*i.e.*, a non-delegated program).⁹³ The agencies are interested in identifying other tribes that have promulgated a dredged or fill or similar program under tribal law for reservation waters.

Tribes have raised concerns during pre-proposal consultation and engagement about the potential for decreased section 404 permitting upstream of tribal lands and on ceded lands where they have treaty protected rights but no responsibility for implementing permitting programs.

As with states, tribes also rely on 401 certification programs to address water quality concerns related to dredged and fill activities permitted by the Corps in both inland and coastal waters. Potential effects of the proposed rule on 401 certifications are discussed in a later section.

CWA Tribal Financial Assistance Programs

Funding is available to tribes with TAS eligibility under several CWA funding authorities, including sections 104, 106, and 319. Currently, 276 tribes have TAS authority for the section 106 grant program. In addition, 199 tribes have TAS authority for the section 319 grant program. Tribes have expressed concerns about the potential effects of the proposed rule on CWA financial assistance programs. The agencies believe that there would not be significant effects on CWA financial assistance programs due to a change in the definition of “waters of the United States,” as further discussed in Chapter IV, Section H.

⁹³ See Bad River Reservation Wetland and Watercourse Protection Ordinance (Resolution No. 12-16-09.138). 2009; Blackfeet Aquatic Lands Protection Ordinance (Ordinance 90-A-amended). 2012. Blackfeet Aquatic Lands Protection Ordinance (Ordinance 90-A-amended). 2012. Available at http://www.blackfeetenvironmental.com/ordinance90/blackfeet_aquatic_land_protection_ordinance90a.pdf (in addition, the tribe has a wetlands program that performs homesite lease reviews for tribal members to identify potential impacts to wetlands and floodplains, and preconstruction site reviews for any projects that may affect wetlands); The Confederated Salish and Kootenai Tribes Shoreline Protection Ordinance, Tribal 64(A); and The Confederated Salish and Kootenai Tribes Aquatic Lands Conservation Ordinance, Ordinance No. 87-A (December 5, 1986). Available at <http://nrd.csktribes.org/component/rsfiles/download?path=EP%252F87areg.pdf>. See also “Fiscal Year 2016-2020 Confederated Salish and Kootenai Tribes Wetland Program Plan (WPP)” (February 9, 2016). Available at https://www.epa.gov/sites/production/files/2016-03/documents/final_cskt_wetland_program_plan_2016-2020_feb_9_submit_feb_10_2016_-1.pdf.

Related Statutes

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) does not require tribes to implement source water protection on tribal lands, nor does it confer regulatory authority to tribes to protect surface water. Most tribes maintain source water protection as a non-regulatory program; therefore, the level of programmatic activity and investment in implementing protections varies from tribe to tribe.

Approximately 98 percent of the roughly 1,000 tribal public water systems (PWSs) are small (each serving fewer than 10,000 people), collectively providing service to nearly 1 million people. While approximately 95 percent of tribal PWSs draw water primarily from groundwater sources,⁹⁴ where surface waters supply tribal drinking water systems they are critical to the communities they serve.

State, EPA, and tribal primacy agencies have the authority to fund source water assessments through their allotments of the EPA Public Water System Supervision fund. Source water protection capacity development activities may also be supported through the Indian Environmental General Assistance Program (GAP) or as part of other environmental protection efforts such as watershed management, pesticide management, or nonpoint source reduction, and is completed through CWA programs, such as the section 106 Water Pollution Control program, section 319 nonpoint source program, or other environmental programs.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) directs federal agencies to take into account the effect of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment. Several tribes have raised concerns throughout the pre-proposal consultation and engagement process about the potential impacts to the applicability of the NHPA as a result of a revised definition of “waters of the United States.” Tribes note that a change in the scope of CWA jurisdiction could potentially result in a change in the number of projects that are considered a federal undertaking, as a CWA permit or approval may no longer be required and could result in fewer opportunities for tribes to be involved in the section 106 consultation process. If the project has no other federal requirement, the federal government would not be required to comply with the NHPA. The agencies note that some projects may still qualify as federal undertakings even if a CWA permit or approval is no longer required, if, for example, federal funding is involved. The project proponent would still need to comply with any applicable state, tribal, or local regulations.

⁹⁴ Information derived from Safe Drinking Water Information System-Federal Version, 2017, Fourth Quarter.

Pre-Proposal Input on Draft Tribal Programs Summary

The agencies provided an opportunity for tribes to offer feedback on a draft summary of tribal water programs authorized under the CWA or tribal law, which the agencies have attempted to reflect in this Resource and Programmatic Assessment (RPA).

III. CWA PROGRAMMATIC ANALYSES

Introduction

The Clean Water Act (CWA) prohibits the discharge of pollutants to “navigable waters,” defined as “waters of the United States,” except in compliance with specific sections of the Act. Thus, many CWA programs—including water quality standards (WQS), state and tribal 401 certification programs, discharge permits, and oil spill prevention and planning programs—apply only to “waters of the United States.” In the following sections, the agencies have done their best to indicate where proposed changes in the definition of “waters of the United States” might affect CWA programs and programs authorized under other statutes. These changes are typically discussed qualitatively, both because of limitations in data availability and quality, and due to uncertainties in the way in which states or tribes might respond following a revised definition.

The agencies confronted another limitation in a critical dataset as well. As discussed in Chapter I: Aquatic Resource Analyses, even the most comprehensive and nationally consistent geospatial data available for rivers and streams, the National Hydrography Dataset (NHD),⁹⁵ do not differentiate between waterbody types at a sufficiently refined level nationally to accurately make policy-relevant distinctions, such as those related to flow, on a waterbody specific level. The National Wetlands Inventory (NWI) also has limitations and does not map all wetlands, nor does it use the federal regulatory definition of “wetlands.” A systematic analysis of available national datasets would not closely mimic the potential effects of the proposed definition as the data limitations prevent a comprehensive quantitative national assessment of the impacts of the proposed rule, though the agencies have attempted in Chapter I to describe potential changes at a higher level.

Section 303(c) Water Quality Standards

Introduction

Water Quality Standards (WQS) are provisions of state, territorial, authorized tribal, or federal law approved by the U.S. Environmental Protection Agency (EPA) that describe the desired condition of a waterbody or the level of protection or mandate for the way a desired condition will be expressed or established for such waters in the future. The core components of WQS are designated uses, water quality criteria that support the uses, and antidegradation requirements. Designated uses establish the environmental objectives for a waterbody, and water quality criteria define the minimum conditions necessary to achieve those environmental objectives. The antidegradation requirements provide a framework for maintaining and protecting water quality that has already been achieved.

WQS are the foundation for a wide range of programs under the CWA. They serve multiple purposes including establishing the water quality goals for a specific waterbody, or portion thereof, and providing the regulatory basis for establishing water quality-based effluent limits beyond the technology-based levels of treatment required by CWA sections 301(b) and 306.

⁹⁵ United States Geological Survey (USGS), <https://nhd.usgs.gov/>.

WQS also serve as a basis for water quality assessment and a target for CWA restoration activities such as total maximum daily loads (TMDLs).

The CWA requires states and authorized tribes to establish WQS for navigable waters (*i.e.*, “waters of the United States”). The EPA has not defined “waters of the United States” separately for WQS but, instead, relies on the established definitions, interpretations, and decisions in administering the WQS program. States and tribes may choose to expand their coverage of WQS beyond “waters of the United States” to include other waters as “waters of the state” or “waters of the tribe.” For example, a state or tribe may specifically designate ephemeral streams (even those that do not meet the definition of “waters of the United States” under pre-2015 practice) as waters to which state or tribal WQS apply.

Section 303(c) of the Act requires that states and authorized tribes hold a public hearing to review their standards at least once every three years (*i.e.*, triennial review), and that the EPA review and approve or disapprove any new or revised state and authorized tribal standards for “waters of the United States.” State and tribal WQS go into effect for CWA purposes upon EPA approval. If the EPA disapproves a state’s or authorized tribe’s WQS, or if the Administrator determines that a new or revised WQS is necessary to meet the requirements of the CWA, the EPA must propose and promulgate federal standards for a state or authorized tribe, unless the state or authorized tribe develops its own and the EPA approves.

Potential Effects

States and authorized tribes usually develop WQS for broad categories of designated uses or broad classifications of waters. States and authorized tribes also have developed broad statements of general protection in narrative form that apply to all their jurisdictional waters. In some cases, states and authorized tribes develop waterbody-specific WQS. Waterbody-specific WQS have been developed for larger, complex systems that are unique, such as the Chesapeake Bay and the Everglades, and for some individual lakes with respect to nutrients. For wetlands, states and authorized tribes generally rely on a broad set of narrative WQS, although a few states and authorized tribes have developed more robust quantitative WQS for wetland categories. For ephemeral and intermittent streams, states and authorized tribes generally apply the same WQS that would apply to perennial streams.

While states and tribes have the option of adopting site-specific criteria, WQS are typically written broadly to apply to types of waters. State WQS are comprehensive and flexible enough to cover a broad or narrow interpretation of the definition of “waters of the United States,” and no further investment or disinvestment of WQS development and adoption is necessary with changes in interpretation. Regardless of the extent of jurisdiction of the federal CWA, state and tribal WQS can provide coverage for all types of waters. Therefore, the agencies do not anticipate effects of a revised “waters of the United States” definition to significantly change the development and adoption of state and tribal WQS under state or tribal law.

Should they choose, states and tribes may apply standards under state or tribal law for waters that are not “waters of the United States,” but they would not be in effect for CWA purposes. In such federally-non-jurisdictional waters, states could apply their WQS as a matter of state law, and authorized tribes could apply their WQS to the extent their authority under tribal law would

allow. The question that arises in assessing potential effects is whether states and tribes will continue to apply and enforce WQS that are no longer federally enforceable for waters that are newly excluded from CWA jurisdiction. Therefore, while the development and adoption of state and tribal WQS may not change significantly, impacts could occur for CWA implementing programs, such as establishing water quality-based effluent limits and TMDLs.

Section 303(d) Listing and Total Maximum Daily Load (TMDL) Programs

Introduction

CWA section 303(d) requires that states identify waters within their boundaries for which technology-based regulations and other required controls are not stringent enough to implement applicable WQS (referred to as the 303(d) list or the list of impaired waters). For such waters, states must establish TMDLs, which calculate the maximum amount of a pollutant that can be loaded into a waterbody consistent with that waterbody's applicable WQS. Each state is required to assemble and evaluate all existing and readily available water quality-related data and information in order to submit a list of impaired and threatened waters to the EPA by April 1st of even-numbered years. The EPA is required to approve or disapprove the state's 303(d) list within 30 days of submission. If the EPA disapproves a state's list, the EPA is required to identify for inclusion any additional impaired waters. In September 2016, the EPA published a rule to establish regulatory procedures for eligible tribes to obtain treatment in a similar manner as states (TAS) for the section 303(d) program, including issuing lists of impaired waters and developing TMDLs, as states routinely do.⁹⁶ To date, no tribes have obtained TAS authority to administer the section 303(d) listing and TMDL program.

For waters identified on a 303(d) list, states must establish TMDLs for all pollutants preventing or expected to prevent attainment of WQS. TMDLs must be set at levels necessary to attain and maintain the applicable WQS, with seasonal variation and a margin of safety. TMDLs must also account for critical conditions (*e.g.*, stream flow, temperature, storm events). The TMDL allocates pollutant loads to point and nonpoint sources. States use these allocations to set permit limits for point sources and develop restoration strategies for nonpoint sources. States submit their TMDLs to the EPA for review, and the EPA must either approve or disapprove the TMDL within 30 days of receipt; if the EPA disapproves a state TMDL, the EPA must establish a TMDL for that waterbody.

Analysis of Potentially Affected Waters

The EPA receives most of its information on impaired waters from ongoing monitoring and assessment programs conducted by the states. States categorize waters based on type, such as

⁹⁶ Final Rule: Treatment of Indian Tribes in a Similar Manner as States for Purposes of Section 303(d) of the Clean Water Act. 81 FR 65901 (September 26, 2016). Available at <https://www.gpo.gov/fdsys/pkg/FR-2016-09-26/pdf/2016-22882.pdf>. See also: <https://www.epa.gov/tmdl/final-rule-treatment-indian-tribes-similar-manner-states-purposes-section-303d-clean-water-act>.

lakes, streams, or wetlands,⁹⁷ but do not always explicitly differentiate between stream types (e.g., perennial, intermittent, ephemeral) in their CWA reports to the EPA. Based on a preliminary analysis, a significant portion of waters monitored and assessed under CWA 303(d) and 305(b) could be considered intermittent or ephemeral, particularly in the arid West.⁹⁸ Estimating the potential effects of any jurisdictional change on the CWA 303(d) program is not possible because the NHD at high resolution does not accurately and separately identify intermittent and ephemeral streams in most of the country,⁹⁹ while such features are treated differently in the proposed rule. In addition, intermittent and ephemeral streams are not per se jurisdictional under pre-2015 practice. The agencies attempted to analyze the potential effects by comparing the locations of streams currently listed as impaired as well as the locations of established TMDLs to categories of streams mapped in the NHD at high resolution. However, due to data limitations of the NHD, the agencies have concluded that such an analysis does not appropriately or accurately assess the potential effects of the proposed rule on the 303(d) and TMDL programs. The attempted analysis and its limitations are described in greater detail in Appendix A. The agencies solicit comment and data to better assess potential effects and how states and tribes may respond to a change in the definition.

Potential Effects

As discussed below, changes in CWA jurisdiction could affect state and federal 303(d) programs in several ways, including by:

- Changing the total number, stream miles, or acres of waters assessed under CWA 303(d) and the number of TMDL restoration plans developed under the CWA;
- Changing the scope of CWA pollution controls provided by impaired waters lists and TMDL restoration plans for publicly-used waters, thereby potentially reducing public awareness of impaired waters no longer considered jurisdictional;
- Raising uncertainty regarding the legal validity of waste load allocations (point source) (WLA) and load allocations (nonpoint sources) in existing, EPA-approved or established TMDLs;
- Raising uncertainty regarding the legal validity of existing NPDES permit limits that are based on a current TMDL WLAs;
- Prompting states to evaluate the jurisdictional status of impaired waters as part of their listing cycles and TMDL submissions; and

⁹⁷ States typically focus their monitoring efforts on rivers, streams, lakes, and ponds. Wetlands, shorelines, and coastal waters only comprise approximately 2 percent of 303(d) listed waters.

⁹⁸ CWA section 305(b) requires states to report on the “water quality of all navigable waters in such State[s] . . .” Under 303(d) and 305(b), states have collected enough information to assess the condition of about a third of rivers and streams nationwide, and less than half of the lake acres.

⁹⁹ Outside of the arid West and the limited areas where state and Federal data stewards have specifically mapped ephemeral streams, ephemeral streams are often mapped in the intermittent category. In addition, many ephemeral streams are not mapped in the dataset. The NHD datasets are regularly updated and maintained through stewardship partnerships with states and other collaborative bodies, such as Federal agencies. An agency in each state manages the maintenance activities within the state, and updates are made available in the national dataset. For example, the U.S. Forest Service and the Bureau of Land Management were some of the first data stewards to add ephemeral streams within certain federal lands to the NHD.

- Prompting public comments on draft 303(d) lists or TMDLs about the jurisdictional status of the relevant waters.

However, the agencies do not have sufficient information to indicate how states or tribes would respond to a change in the scope of CWA jurisdiction.

Water Quality Impacts

For future 303(d) actions, a change in the scope of CWA jurisdiction could cause “non-jurisdictional” waterbodies to not be assessed or otherwise identified as impaired pursuant to section 303(d); TMDL restoration plans would not be developed and implemented for those waters. This could result in reduced protection for aquatic ecosystems if other mechanisms for restoration are not available or utilized (*e.g.*, CWA section 319 program watershed plans). Absent the application of the CWA to certain waters following a revised definition of “waters of the United States,” states may apply their own state law-based programs to identify and restore impaired waters, although this would not be required under the CWA. All states have WQS in some form or another, as well as monitoring and assessment programs. They also have existing laws and programs that they may choose to utilize to address any water quality challenges. If states do not require public notice and participation components in state regulations and policies for “waters of the state,” and impaired waters were not identified via the current CWA 303(d) public notice requirements, the public could be less likely to be aware of impairments or less likely to become involved in restoration action for waters that do not fall within the definition of “waters of the United States.” States will continue to have access to section 319 funds (appropriations permitting) for nonpoint source watershed restoration, which would be expected to continue independent of a water’s jurisdictional status.

Technical and Economic Effects

TMDLs for impaired waters consist of WLAs for point sources, load allocations for nonpoint sources, and a margin of safety. Changes in jurisdiction could prompt questions regarding the validity of WLAs and load allocations in existing TMDLs, as well as water quality-based effluent limits in existing NPDES permits that are based on a current TMDL WLA. This has the potential to prompt requests for TMDL revisions that could shift additional pollutant reduction responsibility to those sources discharging to jurisdictional waters downstream. In addition, some states and NPDES permittees may request review and revision of existing permits and TMDLs to account for these jurisdictional changes, with a corresponding increase in both state and EPA workload from revisions and approval/disapproval actions. As there are currently more than 73,000 completed TMDLs nationwide, requests to revise even a small percentage of them would require significant resources to complete.

Section 311 SPCC and Oil Spill Programs

Introduction

Section 311 of the CWA prohibits discharges or substantial threats of discharges of oil or hazardous substances in harmful quantities into or upon the navigable waters of the United States

and adjoining shorelines.¹⁰⁰ It also requires immediately reporting spills of harmful quantities to the federal government and gives authority to the federal government to respond to and enforce penalties for discharges into “waters of the United States.” In 1990, Congress enacted the Oil Pollution Act (OPA)¹⁰¹ to help prevent major oil spills and ensure efficient, effective responses to spills when they occur. The jurisdictional scope of the OPA is the same “navigable waters” as the CWA.¹⁰² OPA amends CWA section 311 to set up a system of contingency planning under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Oil spill response plans must be adequate to remove a worst-case discharge, not just a likely discharge. OPA also authorizes the national spill response system and a program to fund oil response expenses, claims, and damage assessment, as well as seek reimbursement from the party responsible for the spill.

Spill prevention and preparedness under CWA section 311 and OPA

The regulation of discharges of oil and hazardous substances under CWA section 311 and OPA is complex, involving multiple potential dischargers and multiple federal agencies. Implementation of CWA section 311 programs cannot be assumed by states or tribes. The EPA coordinates with states and tribes and implements the program from EPA headquarters and regional offices. Under delegated authority, the EPA regulates non-transportation-related onshore facilities; the Department of Transportation (DOT) regulates transportation-related onshore facilities; the U.S. Coast Guard (USCG) regulates marine-transportation-related facilities and vessels; and the U.S. Department of the Interior regulates other offshore facilities, including associated pipelines.¹⁰³ Note that responsibility for non-transportation-related offshore facilities that are landward of the coastline (*e.g.*, oil production facilities located in the Louisiana bayous) has been delegated to the EPA, and the EPA shares regulatory jurisdiction with the DOT

¹⁰⁰ 33 U.S.C. 1321(b)(1) provides that there shall be no discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act [43 U.S.C. § 1331 et seq.] or the Deepwater Port Act of 1974 [33 U.S.C. § 1501 et seq.], or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act [16 U.S.C. § 1801 et seq.].

¹⁰¹ OPA 90, Public Law 101-380

¹⁰² 33 U.S.C. 2701(21). While CWA section 311(b) uses the phrase “navigable waters of the United States,” EPA and the courts have historically interpreted it to have the same breadth as the phrase “navigable waters” used elsewhere in section 311, and in other sections of the CWA. *See United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th Cir. 1979); *United States v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1324–25 (6th Cir. 1974). EPA also has historically interpreted “navigable waters of the United States” in CWA section 311(b), in the pre-2002 regulations, and in the 2002 rule to have the same meaning as “navigable waters” in CWA section 502(7). In 2002, EPA revised its regulatory definition of “navigable waters” in 40 CFR part 112 to ensure that the language of the rule was consistent with the regulatory language of other CWA programs. Oil Pollution Prevention & Response; Non-Transportation-Related Onshore & Offshore Facilities, 67 FR 47042, July 17, 2002; see also 56 FR 54612, October 22, 1991. A district court vacated the rule for failure to comply with the Administrative Procedure Act and reinstated the prior regulatory language. *American Petroleum Ins. v. Johnson*, 541 F. Supp. 2d 165 (D. D.C. 2008).

¹⁰³ *See* Executive Order (E.O.) 12777, Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as Amended, and the OPA of 1990 (October 18, 1991), at section 2(b)(1).

at certain pipeline breakout facilities.^{104,105} A 1994 Memorandum of Understanding¹⁰⁶ details the regulatory jurisdiction among these three agencies.

Under CWA section 311 and OPA, the USCG established requirements to prevent and contain discharges of oil from vessels¹⁰⁷ and marine-transportation-related¹⁰⁸ facilities. The DOT Office of Pipeline Safety, which is part of the Pipeline and Hazardous Materials Safety Administration (PHMSA), established requirements for many onshore pipelines and breakout facilities,¹⁰⁹ as well as for railroads or “rolling stock.” Some facilities include a combination of transportation-related and non-transportation-related components subject to the jurisdiction of more than one federal agency under CWA section 311(j); these facilities are called “complex” facilities. The EPA, DOT, and USCG spill preparedness and prevention programs are described in more detail below.

EPA CWA 311 Programs and OPA

The EPA’s Spill Prevention, Control, and Countermeasure (SPCC) Rule¹¹⁰ establishes spill prevention procedures, methods, and equipment requirements for non-transportation-related onshore and offshore facilities with aboveground oil storage capacity or completely buried underground oil storage capacity that meet certain threshold criteria.¹¹¹ Facilities with oil storage capacity greater than 1,320 gallons (except farms¹¹²) that have a reasonable expectation of an oil discharge to navigable waters of the United States or adjoining shorelines are required to prepare and implement SPCC plans.¹¹³

SPCC Plans are designed to prevent discharges from reaching navigable waters or adjoining shorelines and require measures to contain, clean up, and mitigate the effects of discharged oil. In addition, some SPCC facilities are also required to submit Facility Response Plans (FRPs) if they meet certain criteria; these plans address worst case discharges that may present substantial harm as a result of a discharge of oil.

The EPA estimates that there are approximately 540,000 facilities subject to SPCC requirements in the U.S.¹¹⁴ SPCC-subject facilities are not required to notify or register with the EPA, or required to submit SPCC plans to the EPA. FRP-subject facilities are required to submit plans to

¹⁰⁴ An earlier Memorandum of Understanding between the Secretary of Transportation and the EPA Administrator, dated November 24, 1971 (36 FR 24080), provided the agreed upon definitions of non-transportation-related facilities and transportation-related facilities.

¹⁰⁵ As described in the joint memorandum “Jurisdiction over Breakout Tanks/Bulk Storage Tanks (Containers) at Transportation-Related and Non-Transportation-Related Facilities” (February 4, 2000).

¹⁰⁶ Memorandum of Understanding dated February 3, 1994 (59 FR 34102, July 1, 1994).

¹⁰⁷ See 33 CFR part 155.

¹⁰⁸ See 33 CFR part 154.

¹⁰⁹ See 49 CFR part 194.

¹¹⁰ The SPCC rule was originally promulgated on December 11, 1973, at 38 FR 34164 at 40 CFR 112.1 through section 112.12, under the authority of section 311(j)(1)(C) of the CWA.

¹¹¹ See section 112.1.

¹¹² Farms are exempt under two circumstances: (1) if the farm has less than 6,000 gallons of aboveground storage and no reportable oil discharge history; or (2) has 2,500 gallons or less of aboveground storage, regardless of reportable oil discharge history).

¹¹³ SPCC requirements are codified in 40 CFR part 112, Subparts A through C.

¹¹⁴ See EPA ICR No. 0328.15, OMB No. 2050-0021.

the EPA. EPA reviews submitted plans to ensure consistency with the regulatory requirements. The EPA has received FRPs from approximately 3,800 facilities in the U.S.

DOT CWA 311 Programs

At DOT, PHMSA develops and enforces regulations for the nation's 2.6-million-mile pipeline transportation system and the nearly one million daily shipments of hazardous materials by land, sea, and air. PHMSA's requirements for oil spill response plans to reduce the environmental impact of oil discharged from onshore oil pipelines are codified at 49 CFR part 194. This part applies to an operator of an onshore oil pipeline that, because of its location, could reasonably be expected to cause substantial harm, or significant and substantial harm to the environment by discharging oil into or on any navigable waters of the United States or adjoining shorelines.¹¹⁵ The regulation requires operators to submit a response plan to PHMSA before oil can be transported. If PHMSA has not approved an onshore oil pipeline response plan, an operator may submit a certification that it has obtained sufficient response resources to respond to a worst-case discharge and may operate up to two years without approval. PHMSA has approximately 530 FRPs from pipeline operators.

PHMSA's oil spill planning requirements for rolling stock and motor vehicles are found in the Hazardous Materials Regulations at 49 CFR part 130. The regulation on response plans at 49 CFR 130.31 currently requires "comprehensive written plans" for rail cars that comply with the CWA for the transportation of oil in a quantity greater than 1,000 barrels or 42,000 gallons per package, since a spill while in transit might potentially affect a "water of the United States."¹¹⁶

USCG CWA 311 Programs

The USCG Office of Marine Environmental Response Policy serves as program manager for planning and preparedness for oil spills and hazardous substance pollution incidents and other threats to public safety, the marine environment, or marine transportation and commerce. Marine Environmental Response implements the FRP requirements for marine-transportation-related facilities at 33 CFR part 154. Marine-transportation-related facilities are typically located on traditional navigable waters (TNWs) where oil is transferred to and from vessels.

Spill Notification and Response

Oil spills can occur in a wide variety of places and from a wide variety of sources, and dozens of federal, state, tribal, and local agencies may play roles in spill notifications and responses. As discussed in the introduction, NCP is a federal regulation that identifies and implements the key federal response authorities for oil/chemical incidents under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)¹¹⁷ and CWA section 311

¹¹⁵ See CWA 311(b)(1) for full jurisdictional scope.

¹¹⁶ On July 29, 2016, PHMSA, in consultation with the Federal Railroad Administration, published a Notice of Proposed Rulemaking (NPRM) proposing updated requirements for comprehensive oil spill response plans for a single train carrying either 20 or more loaded tank cars of liquid petroleum oil in a continuous block or 35 or more loaded tanks cars of liquid petroleum oil throughout the train. (81 FR 50068). Information about this rulemaking is available at the Federal e-Rulemaking portal (<http://regulations.gov>) under Docket Number PHMSA-2014-0105.

¹¹⁷ CERCLA authorizes response to releases or substantial threats of releases to the environment of (1) hazardous substances and (2) pollutants or contaminants which may present an imminent and substantial danger to the public

and OPA.¹¹⁸ The NCP established a National Response System (NRS), comprised of organizations that routinely and effectively prepare for and respond to a wide range of oil and hazardous substance releases. The NRS is a multi-layered system of individuals and teams from state, local, tribes, and territories and federal agencies, industry, and other organizations that share expertise and resources to ensure that oil spill and chemical release response activities are timely and efficient and that they minimize threats to human health and the environment. All agencies tasked under the NCP with carrying out these regulations are potentially affected by changes to the definition of “waters of the United States.”

The CWA/OPA authorizes response to discharges or threatened discharges of oil and CWA hazardous substances. Section 311(c) of the CWA further states that the response authority is for a discharge or substantial threat of discharge (1) into or on navigable waters, (2) on the adjoining shorelines to the navigable waters, (3) into or on the waters of the exclusive economic zone, or (4) that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States. Federal On-Scene Coordinators (FOSCs) have the authority to conduct, direct, and coordinate response efforts at the incident scene to protect the environment, public health, as well as worker safety and health. They are also responsible for determining whether there is a need for federal involvement.

Funding emergency responses is critical, because actions must often be taken before clear liability or actors are identified.¹¹⁹ The Oil Spill Liability Trust Fund (OSLTF) (see details below) administered by the National Pollution Funds Center (NPFC), operated by the USCG, is used to fund the response to oil discharges and substantial threats of discharges per CWA 311(c). In general, responsibility for payment lies with the polluter, or responsible party (RP), when the RP can be identified and is financially viable. Reimbursement from the RP will be sought even when oil response expenses, claims, and damage assessment initiation are paid from funds. There are two primary components to the OSLTF, the Emergency Fund and the Principal Fund.

USCG’s Oil Spill Liability Trust Fund

The OSLTF was established as a funding source to pay removal costs and damages resulting from oil discharges or substantial threats of oil discharges to “navigable waters,” adjoining shorelines, or the exclusive economic zone. The OSLTF is used for costs not directly paid by the RP. The fund is also used to pay costs to respond to “mystery spills,” for which the source has not been identified.

health or welfare. EPA promulgates and maintains a list of hazardous substances. Pollutants or contaminants include substances that upon exposure will or may reasonably be anticipated to cause certain specified harmful health effects. Definitions of hazardous substance and pollutant or contaminant exclude petroleum. While the NCP addresses spills regulated by the CWA/OPA and CERCLA, the definition of “waters of the United States” only sets the scope of the CWA/OPA and so issues related primarily to CERCLA are described at a high level in the rest of this document.

¹¹⁸ 40 CFR part 300; The NCP serves as an operational supplement to the National Response Framework (NRF).

¹¹⁹ The Superfund Trust Fund is used to fund responses to releases and threats of releases of CERCLA hazardous substances, not including oil as provided by the petroleum exclusion found at 42 USC 9601(14) and (33). The EPA administers the Superfund Trust Fund. Superfund removal actions are capped at \$2 million/12 months unless certain findings described in the law are made to allow expenditures greater than \$2 million or a time frame of longer than 12 months.

Limitations to Accessing the OSLTF

In order to access the OSLTF, the FOSC must show the discharge (or substantial threat of discharge) is into or on the navigable waters of the United States or adjoining shorelines. The fund cannot be utilized for spills that do not reach or have the threat of reaching “waters of the United States.” The discharge (or substantial threat of discharge) must be an oil, which can include petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil; however, it cannot include any substance which is specifically listed or designated as a hazardous substance under CERCLA.

Natural Resources Damage Assessment Under the OPA and the OSLTF

The Superfund (CERCLA) and Oil Pollution Act (OPA) Programs require the cleanup for contaminants that are released and pose a threat to human health and the environment. In addition, they require that natural resources be restored to the state that they were at before injury from environmental contaminants. If natural resources are not restored, then compensation for the injury will be sought from the party responsible for the release of the contaminants. Under both CERCLA and OPA, responsibility for protection of natural resources lies with federal, state, and tribal Trustees. This is because no one individual “owns” a natural resource; rather, they are held in trust for the public.

One of the primary responsibilities of Trustees under both CERCLA and OPA is to assess the extent of injury to a natural resource and determine appropriate ways of restoring and compensating for that injury. A Natural Resource Damage Assessment (NRDA) is the process of collecting, compiling, and analyzing information to make these determinations.¹²⁰ Trustees have the option of using the methodologies prescribed by the Department of the Interior (DOI), 43 CFR Part 11, or the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA), 15 CFR Part 990. The DOI regulations are used to conduct NRDA’s under CERCLA, while the NOAA methodologies are applicable for NRDA’s under OPA.

The OSLTF may be used for limited purposes. These include, but are not limited to, the payment of costs incurred by Trustees in carrying out their functions under OPA Section 1006 for conducting NRDA’s and for developing and implementing plans for the restoration, rehabilitation, replacement or acquisition of the equivalent of injured resources, as well as the payment of removal costs, including the costs of monitoring removal actions [26 U.S.C. §9509(c)(1)(A)].

Because the agencies have historically interpreted the jurisdictional scope of the OPA to be the same as “navigable waters” under the CWA, changes to the definition of “waters of the United States” could potentially limit where NRDA’s could be conducted under the OPA, as well as the abilities of Trustees to use the OSLTF to fund restoration work.

¹²⁰ A NRDA determines the extent of injuries to natural resources from hazardous substance releases or oil discharges and determines appropriate ways of restoring and compensating for those injuries. 43 CFR 11; 15 CFR 990. The measure of damages under CERCLA and OPA is the cost of restoring injured natural resources to their baseline condition, compensation for the interim loss of injured resources pending recovery, and the reasonable costs of a damage assessment. CERCLA Sections 107(a)(4)(C); 107(f)(1); OPA Sections 1001(5); 1002(b)(2); 43 CFR 11.15; 15 CFR 990.62.

Methodology

In an exploratory effort to estimate potential effects of the proposed rule on EPA-regulated facilities under section 311, the agencies first estimated the potentially affected universe of regulated facilities. The agencies estimate that approximately 540,000 facilities may be regulated by the SPCC rule. Oil production facilities (43 percent), electric utilities (12 percent), real estate rental and leasing (6 percent), and farms (4 percent), account for the majority of SPCC-regulated facilities.¹²¹ The current inventory of FRP-subject facilities that have submitted and are currently maintaining an FRP as of January 2018 is approximately 3,800 facilities nationally, inclusive of governmental facilities.

The agencies used the EPA's FRP universe in an attempt to estimate the number of facilities potentially affected by the proposed change in jurisdictional waters. The agencies anticipate that an FRP-subject facility could initially file a reconsideration request per 40 CFR 112.20(i) that the potentially impacted waterbody is no longer jurisdictional under the CWA. In an attempt to assess the magnitude of the potential changes, the agencies overlaid the location of FRP facilities, based on geographical coordinates from EPA's Oil Program Database,¹²² with stream features mapped in the high resolution NHD. Before finalizing the results of this exploratory analysis, however, the agencies determined that this estimate cannot be used to extrapolate the number of SPCC-subject facilities nationally that could potentially be affected by the proposed change in the definition of "waters of the United States" because the NHD even at high resolution does not sufficiently map ephemeral streams nationwide so as to support an estimate of potential jurisdictional change.

For purposes of the Economic Analysis, the agencies also conducted three case studies to assess the potential impacts of changes in CWA jurisdiction on the FRP program by analyzing the proximity of FRP facilities to NHD high resolution waters in three selected regions. *See* the Economic Analysis for additional information on these case studies.

The agencies do not have sufficient information at this time to evaluate the impacts to DOT-PHMSA regulated facilities or the potential effects on emergency response in the inland zone.

Potential Effects

Potential Implications on Oil Spill Prevention and Preparedness (EPA-regulated facilities)

For oil storage facilities that may be required to prepare and implement SPCC plans, whether there is a reasonable expectation of an oil discharge reaching "waters of the United States" or adjoining shorelines is an important factor in determining applicability. This determination must be based solely upon consideration of the geographical and locational aspects of the facility, such as proximity to navigable waters or adjoining shorelines; topography; or drainage. An owner or

¹²¹ *See* the latest SPCC Information Collection Request (ICR) renewal (EPA ICR No. 0328.17, OMB No. 2050-0021).

¹²² The Oil Program Database is an internal EPA database that expands on the information available through EPA's Facility Registry Service (FRS) and other publicly available data systems.

operator may not consider constructed features, such as containment dikes, equipment, or other manmade structures that prevent, contain, hinder, or restrain a discharge as described in 40 CFR 112.1(b), when making this determination.

Factors to be considered by the facility owner/operator for this evaluation are described in Section 2.6 of EPA's SPCC guidance document.¹²³ For example, the guidance states, "An owner or operator should consider the location of the facility in relation to a stream, ditch, gully, or storm sewer; the volume of material likely to be spilled; drainage patterns; and soil conditions."¹²⁴ If a water that could be impacted by an oil spill from the facility would no longer be jurisdictional under the proposed rule, federal spill prevention and preparedness plans may no longer be required.

Proposed changes in CWA jurisdiction that could exempt a facility from SPCC because the facility no longer has a reasonable potential of a discharge as described in section 112.1(b) similarly exempts the facility from FRP requirements. Planholders with waters or features that may become non-jurisdictional under the proposed rule could potentially reconsider the applicability of the FRP (and perhaps SPCC) requirements to their facilities. Facility owners or operators would still need to evaluate whether there is a reasonable expectation of an oil discharge as defined in section 112.1(b) reaching jurisdictional waters in the immediate proximity to the facility, after accounting for potential conveyance of spilled oil via non-jurisdictional waters, such as non-jurisdictional ditches or certain stormwater conveyance systems. In this case, a facility may still be subject to SPCC requirements.

Potential Effects on Other Programs

Spill preparedness requirements also exist for transportation-related facilities such as pipelines and railcars. These programs derive their authority from CWA section 311 as amended by the OPA of 1990 and therefore may be similarly affected by potential changes in the scope of jurisdictional waters.

Potential Implications for Emergency Response

As discussed above, the OSLTF is available to reimburse costs of assessing and responding to oil spills in "waters of the United States." Availability of the OSLTF allows an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities. Quick response is critical for minimizing impacts of a spill. If a water is not jurisdictional, costs incurred by states or tribes to clean up the spill and costs related to business impacts associated with spills into that water would not be reimbursed by the OSLTF.

The agencies conducted research to identify states with statutory authority similar to CWA section 311 and Title 1 of the Oil Pollution Act (OPA) that would provide for cost recovery, civil penalties, and trust funds, which may allow them to alleviate potential financial burden from state cleanup of oil spills to non-jurisdictional waters. This research found that all states, with a

¹²³ See SPCC Guidance for Regional Inspectors, December 16, 2013. Available at <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors>.

¹²⁴ *Id.* at 2-34.

large variety of approaches, have some form of mechanism for oil spill cleanup reimbursement from responsible parties, with 46 states providing for clean-up cost recovery, 45 states allowing for some form of civil penalties, and 34 with funds to aid in cleanup.¹²⁵ The statutes allowing for these measures vary greatly. For example, most coastal states have statutes specifically focused on oil spills in state waters. However, for many interior states reimbursement comes from statutes prohibiting discharge of pollutants into state waters generally, rather than from a specific oil spill cost recovery law.¹²⁶

The types of damages that states are allowed to seek cost recovery for varies greatly. In general, the OPA creates liability of damages for many more activities than most state statutes. Damages provided for in the OPA, but usually not included in state statutes, include loss of subsistence use, loss of revenue profits and earning capacity, and loss of public services.¹²⁷ Only California goes beyond OPA standard.¹²⁸ Every other state lacks recovery for at least one form of damage allowed under the OPA. Common in state statutes is language that allows for recovery of “reasonable expenses” from the state cleanup, Conn. Gen. Stat. section 22a-452 (explaining Connecticut’s cost recovery), or “costs of cleanup work”, K.S.A. section 65-171v (explaining Kansas’s cost recovery). How these general statutes are interpreted by courts in each state likely varies but nevertheless may potentially result in recovery of fewer damages than provided for by OPA.

Most states allow for unlimited cost recovery. Only five states have caps on the amount the state may be reimbursed through cost recovery.¹²⁹ At least seven states have strict liability¹³⁰ for cost recovery,¹³¹ whereas the majority of states do not include a standard of liability.¹³² Every state allows for either cost recovery of cleanup expenses, civil penalties for oil spills, or both.¹³³ As with most activities regulated by state law, there is a great degree of variability among the different states. The agencies have found that a reduction in waters subject to the OPA could potentially affect states in two ways: (1) fewer damages available for cost recovery, and, (2) for nearly a third of the states, lack of a trust fund in the absence of the OSLTF.

States that do allow for cost recovery could potentially still have increased costs if they are not able to utilize the OPA because the damages recoverable under state statutes are not as extensive as under the OPA. States with statutes generally prohibiting discharges of pollutants into state waters, as opposed to those with specific oil spill cost recovery laws and regulations, are those with the most uncertainty over the exact damages able to be recovered.

¹²⁵ See State Statutes Attachment.

¹²⁶ *Id.*

¹²⁷ See State Statutes Attachment.

¹²⁸ See Cal Gov Code section 8670.56.5.

¹²⁹ Florida, Louisiana, New Jersey, New York, and Texas. See State Statutes Attachment.

¹³⁰ Strict liability means intent and/or negligence is not a factor in determining liability. If the action occurred, then the party is liable regardless of intent and/or negligence.

¹³¹ Arizona, Hawaii, Missouri, New Jersey, North Carolina, Oregon, and South Dakota. See State Statute Attachment.

¹³² Absent a defined standard of liability, it is up to the courts to decide whether liability is strict, or whether liability is based on intent and/or negligence.

¹³³ *Id.*

The agencies did not conduct an analysis of tribal statutory authority similar to the OPA that would provide for cost recovery, civil penalties, and trust funds.

Conclusions

The scope of the CWA section 311 and OPA programs is tied to federal determinations of the extent of “waters of the United States.” The EPA, DOT, and the USCG all implement oil spill prevention and preparedness programs linked to these statutes. Federal, state, and tribal Trustees may conduct NRDA under the OPA.

Funding from the OSLTF allows for an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities in “waters of the United States.” The OSLTF is not available to reimburse costs incurred by states or tribes to clean up spills and costs related to business and citizen impacts (*e.g.*, lost wages and damages) for spills to inland waters not subject to CWA jurisdiction.

States and tribes cannot be authorized to implement the CWA section 311 and OPA programs. The agencies do not have sufficient information at this time to assess how state and tribal programs and funding mechanisms might respond following potential changes in federal programs linked to a revised definition of “waters of the United States.” The agencies solicit comment and data to better assess potential effects and how states and tribes may respond to a change in the definition.

Section 401 State/Tribal Water Quality Certification Programs

Introduction

CWA section 401 provides that a federal agency cannot issue a permit or license for an activity that may result in a discharge to “waters of the United States” until the state or tribe where the discharge would originate has granted or waived water quality certification.¹³⁴ As a result, section 401 certification provides states and authorized tribes with TAS status an important tool to help protect water quality, by giving them an opportunity to address the aquatic resource impacts of federally issued permits and licenses.

Permits, Licenses, and Activities Subject to Section 401

To be subject to section 401 certification, the permit or license must be issued by a federal agency. If the permit is issued by a state or tribe through an authorized CWA program, it is not considered “federal” for purposes of section 401. Examples of federal licenses and permits subject to section 401 certification include:

- CWA section 402 NPDES permits issued by the EPA in states that do not administer a state permit program in lieu of the federal program (currently, New Hampshire, Massachusetts, and New Mexico), and NPDES permits issued by EPA on tribal lands.

¹³⁴ CWA 401(a)(1); 40 CFR part 121.

- CWA section 404 permits for discharges of dredged or fill material issued by the U.S. Army Corps of Engineers (Corps). At present, the Corps issues all section 404 permits in 48 states, and section 404 permits for discharges into non-assumed waters in Michigan and New Jersey.
- Federal Power Act licenses for non-federal hydroelectric dams issued by the Federal Energy Regulatory Commission for construction and operation.
- Rivers and Harbors Act sections 9 and 10 permits issued by the Corps for activities that have a potential to discharge in “navigable waters of the United States.”

This is not necessarily a complete list. To determine if a license or permit is subject to section 401, it is necessary to evaluate whether it (1) would be issued by a federal agency, (2) has the potential to result in a discharge, and (3) whether that discharge would be into “waters of the United States.” If all three elements are present, the permit or license likely is subject to section 401 certification. Note that the Ninth Circuit Court of Appeals has held that for a federal permit or license to be subject to section 401 certification, the potential discharge also must be from a “point source” (defined in the CWA as any discrete conveyance such as a pipe, ditch, channel, or vessel).¹³⁵

Extent of State and Tribal Involvement

With the CWA, Congress granted section 401 authority directly to all fifty states and territories and at present no state or territory has expressly rejected the authority. Tribes with TAS status can request section 401 certification authority, and at present most of the 60 tribes that have TAS for WQS are also authorized to administer a section 401 certification program. For those lands where the tribe has not received certification authority, the applicable EPA regional office administers section 401.

Under section 401, a state or authorized tribe has four options in response to a request for certification. The state or tribe may decide to grant certification, at which time the federal agency proceeds to process the permit or license consistent with its applicable regulations. The state or tribe may decide to grant certification with conditions, which allows the federal agency to process the permit or license but every condition in the 401 certification must become a term of the resulting permit or license. The state or tribe may decide to deny certification, which means the federal agency cannot issue the permit or license. Finally, the state or tribe may waive its opportunity for 401 certification, which allows the federal agency to proceed with processing the permit or license without state or tribal section 401 input.¹³⁶

¹³⁵ “We hold that certification under § 1341 is not required for grazing permits or other federal licenses that may cause pollution solely from nonpoint sources.” *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 7 (9th Cir.(Or.) 1998).

¹³⁶ See EPA, Clean Water Act Section 401 Water Quality Certification: A Water Quality Protection Tool for States and Tribes (2010) for a discussion of potential section 401 decisions, as well as a discussion of other elements of section 401. Available at <https://www.epa.gov/cwa-404/clean-water-act-401-handbook-2010>.

States or tribes determine whether to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with EPA-approved WQS developed under CWA section 303. In addition, section 401 certifying agencies consider whether the activity leading to the discharge will comply with any applicable effluent limitations under CWA sections 301 and 302, new source performance standards under section 306, toxic pollutant restrictions under section 307, and other appropriate requirements of state or tribal law.¹³⁷

When Congress enacted the water quality certification provisions in 1970, its legislative history indicated Congress wanted to ensure that no federal license or permit would be issued “for an activity that through inadequate planning or otherwise could in fact become a source of pollution.”¹³⁸ As incorporated into the 1972 CWA, section 401 water quality certification was intended to ensure that no federal license or permits would be issued that would prevent states or tribes from achieving their water quality goals, or would violate the listed CWA provisions or appropriate requirements of state or tribal law.¹³⁹

Many states and tribes rely on section 401 certification as their primary tool for ensuring that federal permits or licenses do not cause unacceptable water quality impacts and sufficiently protect aquatic resources including wetlands.¹⁴⁰ Some states frequently grant section 401 certification unconditionally, while other states have a set of basic conditions involving Best Management Practices that are attached to most permits or licenses. For example, Georgia considers a suite of state regulations under its section 401 certification review including compliance with the state Erosion and Sedimentation Act for buffer integrity, construction and post-construction stormwater management, and the adequacy of mitigation. In addition, the Georgia water quality certification authority also coordinates with the Coastal Resources Division to ensure project compliance with coastal protection regulations. Similarly, Virginia has established a goal of “no net loss” of wetland acreage and function in statute, and the state often relies on the goal when certifying projects to require avoidance, minimization, and compensatory mitigation measures.

Section 401 certification conditions must relate to water quality. In its 1994 decision *Jefferson County v. Washington Department of Ecology*, the U.S. Supreme Court held that, once the threshold of a discharge is reached (necessary for section 401 certification to be applicable), the conditions and limitations included in the certification may address the permitted activity as a whole.¹⁴¹ Certification therefore may address concerns related to the integrity of the aquatic

¹³⁷ CWA sections 401(a)(1), 401(d).

¹³⁸ 115 Cong. Rec. H9030 (April 15, 1969) (House debate); 115 Cong. Rec. S28958-59 (Oct. 7, 1969) (Senate debate).

¹³⁹ CWA section 401(d).

¹⁴⁰ See Environmental Law Institute, *State Wetland Program Evaluation: Phase I* (2005), available at <https://www.eli.org/research-report/state-wetland-program-evaluation-phase-i>; State Wetland Program Evaluation: Phase II (2006), available at <https://www.eli.org/research-report/state-wetland-program-evaluation-phase-ii>. Because states and authorized tribes implement section 401 without EPA oversight and supervision, EPA does not collect statistics on how and where certification is used, or what type of certification conditions are most common. Case law and anecdotal information suggests common conditions include those specifying necessary compensatory mitigation under CWA section 404 and minimum instream flow conditions for Federal Energy Regulatory Commission hydroelectric dam licenses.

¹⁴¹ *Jefferson County PUD v. Washington Dept. of Ecology*, 511 U.S. 700, 711-712 (1994).

resource and need not be specifically tied to a discharge. As a result, the *Jefferson County* case upheld section 401 certification conditions that required minimum stream flows to support spawning salmon, that must become a term of the Federal Energy Regulatory Commission license for the proposed hydroelectric dam in Washington State. Protection of the cultural or religious value of waters expressed in state or tribal law can also be relevant to a certification decision, even when not included as part of a water quality standard.¹⁴²

In addition, under section 401(a)(2), if the EPA determines a federal license or permit in a state or Indian country may affect the quality of the waters of “any other State” (*e.g.*, downstream or adjacent) or federally recognized tribe, the Agency shall notify the potentially affected state or authorized tribe. This good neighbor provision gives the potentially affected state or tribe an opportunity to raise concerns and request a public hearing. The EPA also submits its evaluation and recommendations. After the hearing and based on the information provided, the licensing agency shall condition the license as necessary to ensure compliance with applicable water quality requirements. Changes to the existing scope of the “water of the United States” could modify the availability of this provision.

Potential Effects

Although section 401 certification can be an effective tool for protecting water quality, its applicability is limited in scope to situations involving a federal permit or license that may result in a discharge to “waters of the United States.” As a result, a change in the definition of “waters of the United States” such as that contemplated in this proposed rulemaking would change both where federal permits are required and where section 401 certification applies. If, for example, a reduction in the scope of jurisdictional waters reduces the number of federal permits, availability of section 401 as a water quality tool similarly will be reduced.

Section 402 NPDES Programs

Introduction

Section 402 of the CWA provides that a National Pollutant Discharge Elimination System (NPDES) permit is required for the discharge of pollutants from any point source into a “water of the United States.”

Discharges Covered by the NPDES Program

EPA estimates that the NPDES program requires permit coverage for discharges from approximately 727,200 facilities or activities. The NPDES program addresses a wide range of discharges, including discharges from: publicly owned treatment works (POTWs),¹⁴³ combined

¹⁴² For example, ceremonial use standards were upheld by the Tenth Circuit Court of Appeals in *Albuquerque v. Browner*, 97 F.3d. 415, 423 (1996).

¹⁴³ Federal regulations at 40 CFR 403.3(q) provide that:

The term Publicly Owned Treatment Works or *POTW* means a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This

sewer systems (CSS),¹⁴⁴ sanitary sewer systems (SSS),¹⁴⁵ stormwater activities (municipal separate storm sewer systems (MS4s), industrial, and construction),¹⁴⁶ industrial facilities,¹⁴⁷ commercial facilities,¹⁴⁸ cooling water intake structures,¹⁴⁹ concentrated animal feeding operations (CAFOs),¹⁵⁰ concentrated aquatic animal production (CAAP) facilities,¹⁵¹ and vessels.¹⁵²

Types of NPDES Permits (General and Individual Permits)

The two basic types of NPDES permits are individual and general permits. These permit types share many of the same components but are used under different circumstances and involve different permit issuance processes. An individual permit is a permit specifically tailored to an individual facility. General permits are issued to a category or class of facilities or activities, and are used to cover the vast majority (680,500 or 94 percent) of discharges requiring NPDES permits.¹⁵³ Individual permits typically incorporate more site-specific limits and conditions and are issued to a relatively small percentage (46,700 or 6 percent) of the more complex facilities or activities regulated by the NPDES program. The universe of individual permits comprises

definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

¹⁴⁴ A combined sewer system (CSS) collects rainwater runoff, domestic sewage, and industrial wastewater into one pipe. Combined sewer overflows (CSOs) contain untreated or partially treated human and industrial waste, toxic materials, and debris as well as stormwater.

¹⁴⁵ Sanitary sewer systems collect and transport domestic, commercial, and industrial wastewater and limited amounts of stormwater and infiltrated ground water to treatment facilities for appropriate treatment. Occasionally, sanitary sewers will release raw sewage. These types of releases are called sanitary sewer overflows (SSOs).

¹⁴⁶ The NPDES stormwater program regulates some stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities to prevent/reduce the discharge of stormwater pollutants.

¹⁴⁷ Wastewater discharges from industrial and commercial sources may contain pollutants at levels that could affect the quality of receiving waters or interfere with publicly owned treatment works (POTWs) that receive those discharges. The NPDES permitting program establishes discharge limits and conditions for industrial and commercial sources with specific limitations based on the type of facility/activity generating the discharge.

¹⁴⁸ See footnote 138.

¹⁴⁹ The federal regulations state that a cooling water intake structure “means the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the U.S. The cooling water intake structure extends from the point at which water is withdrawn from the surface water source up to, and including, the intake pumps.” 40 CFR 125.83.

¹⁵⁰ Animal Feeding Operations (AFOs) are agricultural operations where animals are kept and raised in confined situations and meet other specified criteria. AFOs that meet the regulatory definition of a concentrated animal feeding operation (CAFO) are regulated under the NPDES permitting program.

¹⁵¹ NPDES permits are required for discharges associated with Aquaculture Projects and Concentrated Aquatic Animal Production Facilities (CAAP). Effluent guidelines have been developed for CAAP facilities producing 100,000 pounds or more of aquatic animals per year.

¹⁵² Regulated discharges include those incidental to the normal operation of a commercial (*i.e.*, non-military, non-recreational) vessel when operating as a means of transportation (*i.e.*, “incidental discharges”). This includes a broad range of incidental discharges such as ballast water, bilgewater, graywater (*e.g.*, water from sinks, showers), and deck washdown and runoff.

¹⁵³ See 40 CFR 122.28.

approximately 14,200 Publicly-owned Treatment Works (POTWs), 855 large and medium (*i.e.*, populations > 100,000) Municipal Separate Storm Sewer Systems (MS4s) and 31,500 non-POTW (*i.e.*, industrial, commercial) facilities or activities.

The EPA classifies some NPDES permittees as “major facilities.” Major facilities include POTWs with design flows of greater than one million gallons per day and facilities with pretreatment programs approved by the EPA or an authorized state. Major industrial facilities are identified based on ratings developed by EPA or an authorized state.¹⁵⁴ Facilities that are not classified as major facilities are ‘minor facilities.’ There are approximately 6,600 major facilities, comprising 4,300 POTWs and 2,300 non-POTWs.¹⁵⁵ Nearly all of these facilities are covered by individual NPDES permits. There are an additional 42,000 minor facilities, made up of approximately 10,000 POTWs and 32,000 non-POTWs, covered by individual NPDES permits. There are approximately 72,000 vessels, 365,000 pesticide applications, and an additional 93,000 other non-stormwater minor facilities¹⁵⁶ covered by general NPDES permits. Approximately 181,200 stormwater facilities are covered by general permits. This estimate includes stormwater discharges from Phase II MS4s,¹⁵⁷ construction activities, and industrial activities.

Who Issues an NPDES Permit?

Dischargers obtain an NPDES permit from either the EPA or a state or tribe authorized to administer its own NPDES program. If the EPA approves a state or tribal program, the state or tribe assumes permitting authority responsibilities in lieu of the EPA. Most states are authorized to implement some or all of the NPDES program through a process defined by CWA section 402(b) and NPDES regulations in 40 CFR part 123. Forty-seven states and the U.S. Virgin Islands are currently authorized to administer the NPDES program under state authorities for some or all of five categories (Basic Municipal and Industrial, Pretreatment, Federal Facilities, General Permits, and Sewage Sludge (Biosolids)). State permitting authorities issue approximately 90 percent of the NPDES permits and EPA issues approximately 10 percent. The EPA is currently the permitting authority for some components of the Idaho NPDES program. The state was recently authorized to administer the NPDES program, effective July 1, 2018; however, Idaho’s administration of each of the program components will be phased in over a four-year period. The EPA is the permitting authority for Massachusetts, New Hampshire, New Mexico; Indian country; federal facilities (e.g., military bases, national parks, federal lands); and

¹⁵⁴ See 40 CFR 122.2

¹⁵⁵ All of the estimates are based on data from the Integrated Compliance Information System (ICIS-NPDES) in December 2017.

¹⁵⁶ These are facilities that are not “major” facilities, as defined under 40 CFR 122.2, and are not stormwater dischargers. See NPDES Permit Writers’ Manual at 2-17 (September 2010). See generally, Memo from James Elder, Director, Office of Water Enforcement and Permits, New NPDES Non-Municipal Permit Rating System (June 27, 1990). Available at <https://www3.epa.gov/npdes/pubs/own0116.pdf>.

¹⁵⁷ Phase II MS4s are those “small MS4s” (*i.e.*, MS4s not already covered by a Phase I MS4 program, located within the urbanized area boundary as determined by the latest U.S. Decennial Census, or designated by the permitting authority) that were designated under the “Phase II” stormwater rule as requiring NPDES permit coverage. See 64 FR 68722, December 8, 1999. Most Phase II MS4s are covered by state or EPA-issued general permits. By contrast, Phase I MS4s include “medium” (serving populations of 100,000 to 250,000) and “large” (serving populations of 250,000 or more) sized MS4s that were designated as requiring NPDES permit coverage under the “Phase I” stormwater rule. See 55 FR 47990, November 16, 1990.

U.S. Territories (including Washington, D.C.), except the U.S. Virgin Islands. The EPA cannot issue NPDES permits for discharges that are not to “waters of the United States.”

Waters of the State

State NPDES programs can be broader in scope or more stringent than the federal program.¹⁵⁸ However, where state programs have a broader scope of NPDES program coverage than what is required for the federal program, the additional coverage is not considered part of the federally-approved program.¹⁵⁹

Many states issue their own discharge permits under state law that are not managed as part of the authorized NPDES program.

Tribal Permits

Under the CWA, tribes can be authorized to administer the NPDES program.¹⁶⁰ Thus far, no tribes have requested and obtained authorization. As a result, the EPA issues permits for discharges in Indian country.

There are approximately 255¹⁶¹ individual NPDES permits in Indian country,¹⁶² including 15 majors, in six EPA Regions, as shown below in Figure 1.¹⁶³ The permits include tribal-owned POTWs, other tribal industrial and commercial facilities, state and federal facilities, as well as non-tribal facilities in Indian country.

¹⁵⁸ See 40 CFR 123.1(i)(1).

¹⁵⁹ See 40 CFR 123.1(i)(2).

¹⁶⁰ See CWA sections 402(b), 518(e); 40 CFR 123(d)(2).

¹⁶¹ The number of individual permits in Indian country was derived from data in the Permit Management Oversight System (PMOS) database, which reported a total of 266 such facilities. When reviewing the permitting data on those 266 facilities in EPA’s ECHO system, 11 of the facilities identified had insufficient data to allow an analysis of these systems and were removed.

¹⁶² “NPDES permits in Indian country” refer to facilities with NPDES permits that discharge to tribal waters.

¹⁶³ Data derived from the Office of Water’s Permit Management Oversight System (PMOS) database in May 2017.

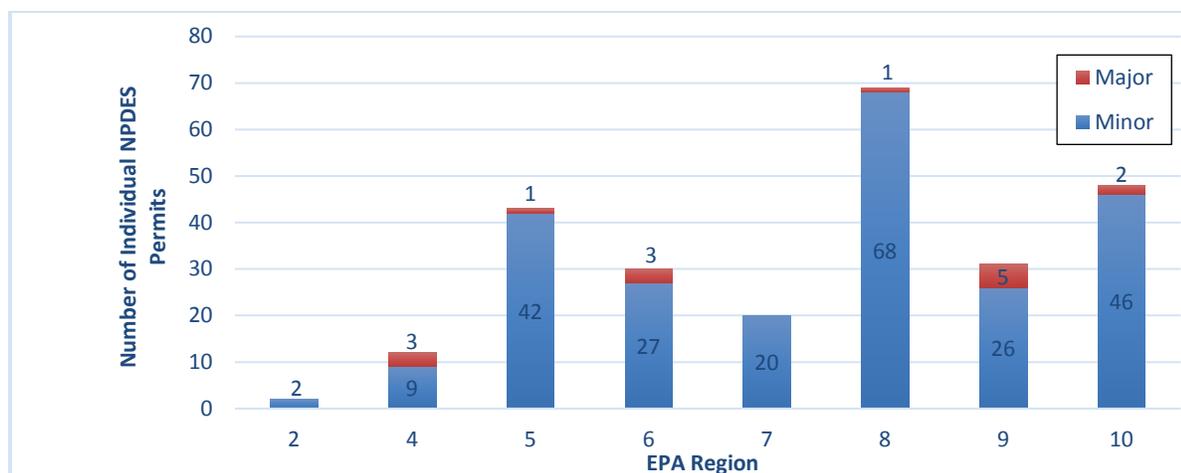


Figure 1: Number of Individual NPDES Permits for Major and Minor Facilities in Indian Country, by Region.

There are facilities in Indian country that are covered by general permits. For the permits issued by the EPA, the EPA has estimated data.

- **Pesticide General Permit (PGP):** Data from the most recently issued 2016 PGP indicate that a total of 25 operators discharge in Indian country. However, because most PGP permittees are not required to file a Notice of Intent, or NOI, and are automatically covered under the PGP, the Agency does not have complete data on the universe of permittees covered under the PGP.
- **Construction General Permit (CGP) for stormwater discharges from certain construction activities:** Based on historical data from 2012 to 2016, approximately 425 facilities/sites on tribal land are covered by the EPA’s construction general permit (CGP) at a given time.
- **Multi-Sector General Permit (MSGP) for stormwater discharges from certain industrial activities:** Data from the current MSGP, issued in 2015, indicate that there are 43 facilities on tribal land covered by the EPA’s MSGP.

This assessment does not include further analysis of the above permits with respect to the accuracy of the permit universe or compliance or enforcement data relating to those permits. Once EPA’s NPDES program e-reporting requirements are phased in, the agency will have more complete access to information relating to the coverage of facilities under general permits and be better able to assess compliance and enforcement data for such permits.

Certain EPA Regions also issue general permits that cover facilities in Indian country. Estimates from April 2018 indicate that approximately 158 facilities are covered by these permits. The vast majority are covered by permits issued by the EPA’s Region 8 for lagoon systems.¹⁶⁴ Region 10

¹⁶⁴ “Facultative waste stabilization ponds, sometimes referred to as lagoons or ponds, are frequently used to treat municipal and industrial wastewater in the United States. The technology associated with facultative lagoons has

issues a general permit for tribal net pen enhancement facilities¹⁶⁵ in Washington that covers three facilities, and a general permit for seafood processing facilities, which includes one tribal facility.

Permit Conditions

NPDES permits typically include effluent limitations that restrict the type and amount of specific pollutants that can be discharged to waters of the United States, as well as requirements for monitoring and reporting. In addition, all NPDES permits are required to include standard conditions which delineate the legal, administrative, and procedural requirements of the permit.¹⁶⁶ There are two general categories of effluent limitations that are included in permits: technology-based effluent limits (TBELs) and water quality-based effluent limitations (WQBELs). TBELs require a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants into waters of the United States. TBELs are developed independently of the potential impact of a discharge on the receiving water.

WQBELs are developed to protect water quality by ensuring that WQS are met in the receiving water. The NPDES regulations provide that a WQBEL should be included in a permit for any pollutant in a discharge that “causes, has the reasonable potential to cause, or contribute” to an excursion above a state WQS.¹⁶⁷ Many state WQS have general provisions allowing some consideration of mixing of effluent and receiving water when determining the need for and calculating WQBELs. Depending on the state’s WQS and implementation policy, such considerations could be expressed in the form of a dilution allowance or regulatory mixing zone. WQBELs may be based on the criteria in the applicable WQS, and consideration of effluent and receiving water critical conditions, including any dilution allowances or mixing zones that are allowed by the WQS.¹⁶⁸

WQBELs may be based on an applicable wasteload allocation (WLA) of a total maximum daily load (TMDL). A TMDL is a calculation of the maximum amount of a single pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the sources of the pollutant. The portions of the TMDL assigned to point sources are WLAs. Permitting authorities must ensure WQBELs are consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of a TMDL.¹⁶⁹

been in widespread use in the United States for at least 90 years....” US EPA, Office of Water, Wastewater Technology Fact Sheet: Facultative Lagoons (September 2002), <https://www3.epa.gov/npdes/pubs/faclagon.pdf>

¹⁶⁵ A “net pen enhancement facility” is a stationary, suspended or floating system of nets, screens, or cages in open waters of the State and located within the boundaries of a lease granted by the Department of Marine Resources. Net pen systems typically are located along a shore or pier or may be anchored and floating offshore. 40 CFR 451.2(j). A net pen enhancement facility is a finfish rearing operation that releases fish to supplement the native fish populations.

¹⁶⁶ See 40 CFR 122.41.

¹⁶⁷ See 40 CFR 122.44(d)(1).

¹⁶⁸ See CWA 301(b)(1)(C); 40 CFR 122.44(d)

¹⁶⁹ See 40 CFR 122.44(d)(1)(vii)(B).

Potential Effects

A permittee currently discharging to a jurisdictional water that becomes non-jurisdictional under a definitional change of “waters of the United States” could remain subject to the requirements of the Act. As noted in the plurality opinion in *Rapanos*, an unpermitted discharge “likely violates [section] 1311(a),” and therefore an NPDES permit is required, “even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.”¹⁷⁰ As a result, depending on individual circumstances, the change in jurisdictional status of the immediate receiving water could cause permit requirements to change. Alternatively, a newly non-jurisdictional waterbody (*e.g.*, certain ditches) could become a point source that discharges pollutants to a “water of the United States.”

The EPA’s Integrated Compliance Information System (ICIS-NPDES) database¹⁷¹ includes 250,040 unique permit numbers, including individual and general permits.¹⁷² In an exploratory effort, the agencies conducted a geospatial analysis of outfall coordinates from the ICIS-NPDES database and high resolution NHD water feature location in an attempt to estimate the potential effects of the proposed rule on the section 402 program. Intermittent streams that meet the proposed definition of “tributary” would remain “waters of the United States” under the proposal. However, discharges to ephemeral features would be potentially affected (mainly because of the change in applicable WQS) by changes to the definition of “waters of the United States.” Because the NHD does not distinguish intermittent from ephemeral streams at a national level and because ephemeral streams are not *per se* jurisdictional under pre-2015 practice, however, the agencies determined that such an analysis was not appropriate for estimating the potential effects of the proposed rule on the section 402 program at a national level.

For purposes of the Economic Analysis, the agencies also conducted three case studies to assess the potential impacts of changes in CWA jurisdiction on the NPDES program by analyzing the location of NPDES permitted outfalls to NHD high resolution waters in three selected regions. See the Economic Analysis for additional information on these case studies.

Stormwater

Over the years, some municipalities and some other public entities that operate municipal separate storm sewer systems (MS4s) and stormwater management programs expressed concern that various stormwater control measures—such as some stormwater treatment systems, and some flood control systems—could be considered “waters of the United States” because of their proximity and potential connection to surface waters. These concerns emphasized that any definitional change to what is a “water of the United States” for these control features should acknowledge the appropriate jurisdictional status relating to these systems. For instance, certain

¹⁷⁰ See *Rapanos*, 547 U.S. at 745 (Scalia, J., plurality opinion) (citations omitted).

¹⁷¹ ICIS-NPDES is an information management system maintained by the EPA’s Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES program under the CWA. ICIS-NPDES data are available for download from EPA’s Enforcement and Compliance History Online website at <https://echo.epa.gov/tools/data-downloads>.

¹⁷² This estimate includes both active and expired permits in ICIS-NPDES since facilities with expired permits can still operate. It excludes “terminated” permits that are no longer binding. It also excludes permits that did not have valid latitude/longitude coordinates or that were not truly NPDES permits (*see* Appendix A for detail).

features, such as curbs and gutters, may be features of stormwater collection systems, but have never been considered “waters of the United States.”

The proposed rule would exclude stormwater control features excavated or constructed in upland to convey, treat, infiltrate, or store stormwater runoff. The agencies’ longstanding practice is to view stormwater control measures that are not built in a “water of the United States” as non-jurisdictional. Conversely, the agencies have viewed some waters, such as certain channelized or piped streams, as jurisdictional even where used as part of a stormwater management system. For example, portions of the Los Angeles River in Los Angeles County, California, and the Rio Grande in the City of Albuquerque, New Mexico, are considered part of the municipal separate storm sewer system. Nothing in the proposed rule is intended to change that practice.

The proposed language is intended to address engineered stormwater control structures in municipal or urban environments. Stormwater control features are designed to address runoff that occurs during and shortly after precipitation events; as a result, stormwater features that solely convey runoff are expected to only carry ephemeral flow.

Pesticide General Permit

An NPDES permit is required for point source discharges of biological pesticides, and chemical pesticides that leave a residue, to a “water of the United States.” The EPA issues an NPDES Pesticide General Permit (PGP) that is available in areas where the EPA is the NPDES permitting authority and covers these types of discharges. Forty-six¹⁷³ states and the U.S. Virgin Islands have NPDES permitting authority and have developed their own PGPs. NPDES permits are not required for non-point source discharges or for discharges to non-jurisdictional waters, and the CWA exempts discharges of agricultural stormwater or irrigation return flow from needing NPDES permits.¹⁷⁴ The proposed rule would not itself establish any new requirements regarding the use of pesticides. As a result, the proposed rule would not change NPDES requirements regarding application of pesticides to waterbodies.

Water Transfers Rule

The NPDES regulations exempt water transfers from the requirement to obtain an NPDES permit and define a water transfer as an activity that conveys or connects two “waters of the United States” without subjecting the transferred water to an intervening industrial, commercial or municipal use. In order to constitute a “water transfer” under the regulation, “the water being conveyed must be a water of the United States prior to being discharged to the receiving waterbody. If the water that is being conveyed is not a water of the United States prior to being discharged to the receiving body, then that activity does not constitute a water transfer.”¹⁷⁵ Therefore, to the extent the jurisdictional status of a water being conveyed as part of a water transfer is affected by a revision to the definition of “waters of the United States,” the change could affect the status of such activities.

¹⁷³ Idaho is an approved program but will not be administering the general permits program until 2020; until that time, Region 10 will be responsible for the PGP.

¹⁷⁴ 33 U.S.C. 1342(l).

¹⁷⁵ See 73 FR 33697, 33699 (June 13, 2008).

Conclusions

The agencies assume that the proposed rule would not greatly affect NPDES permitted facilities and solicit comment and information on this conclusion.

Section 404 Permit Programs and other Dredged and Fill Programs

Introduction

Section 404 of the CWA requires a permit for discharges of dredged and/or fill material from a point source into “waters of the United States” unless the discharge is associated with an activity exempt from 404 permitting requirements under section 404(f). Regulated discharges include return water from dredged material disposed of on dry land; any addition, including redeposit other than incidental fallback, of dredged material into “waters of the United States;” and generally any fill material (*e.g.*, rock, sand, dirt) placed in “waters of the United States” which has the effect of replacing any portion of “waters of the United States” with dry land or changing the bottom elevation of any portion of “waters of the United States.” Such discharges may be associated with activities such as site development, roadway construction, erosion protection, linear projects (such as utility crossings), shoreline stabilization, and restoration projects.

The Corps manages the day-to-day administration of the CWA 404 permitting program in 48 states and all tribal lands and U.S. Territories. Two states, New Jersey and Michigan, have assumed the section 404 program, pursuant to section 404(g), meaning that they have been approved by the EPA to administer a state dredged and/or fill program consistent with the CWA but in lieu of the federal section 404 program administered by the Corps and EPA (with the exception of waters over which the Corps must retain jurisdiction as specified in the CWA).

The basic premise of the 404 program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the discharge would cause waters of the United States to be significantly degraded.¹⁷⁶ In other words, when applicants request a permit, they must first show that steps have been taken to avoid effects on “waters of the United States”; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts.

Proposed activities are regulated through a permit review process. An individual permit is required for potentially significant impacts. Individual permits are reviewed by the permitting agency (Corps or approved state or tribe), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA section 404(b)(1) Guidelines, regulations that are established by the EPA.¹⁷⁷

For most discharges that will have only minimal adverse effects to the aquatic environment, a general permit may be suitable. General permits are issued on a nationwide, regional, or

¹⁷⁶ See 40 CFR part 230.

¹⁷⁷ *Id.*

programmatic basis for particular categories of activities. The general permit process allows certain activities to proceed with little or no delay, provided that the general or special conditions for the general permit are met. For example, a general permit can authorize minor road activities and utility line backfill. The Corps develops, issues, and reissues nationwide permits every five years, with the most recent issued in 2017.¹⁷⁸

Assumed 404 programs

By assuming administration of the CWA section 404 regulatory program under section 404(g), a state or eligible tribe takes on the primary responsibility of permitting discharges of dredged and/or fill material into certain “waters of the United States” within its borders. Prior to assuming the CWA 404 permitting program, a state or tribal program must be approved by the EPA to be consistent with and at least as stringent as the requirements of the CWA and its implementing regulations. For section 404 permitting purposes, the approved state or tribal program must exercise jurisdiction over all waters subject to the CWA program except those waters retained by the Corps. States or tribes with assumed programs can also regulate waters that are not “waters of the United States” under state or tribal law.

Assumed state or tribal dredged or fill permit programs can be broader in scope or more stringent than the federal program. Where state programs have a broader scope of program coverage than what is required by the CWA section 404 program, the additional coverage is not considered part of the EPA-approved program.¹⁷⁹

Michigan was approved to administer the CWA section 404 program in 1984, and New Jersey was approved in 1994. No tribes have yet assumed the section 404 program. About one-third of states have expressed some level of interest to the EPA regarding their assumption of the federal section 404 dredged and fill permit program.

State and tribal independent dredged and fill permitting programs

Even without an assumed program, any state or tribe may use state or tribal authorities to regulate discharges of dredged or fill materials into any waters of their state or reservation waters. Where such waters are considered “waters of the United States” the Corps would also implement the section 404 program unless it was assumed by the state or tribe.

As discussed above, 35 states administer a dredged and fill permitting program under state law for state waters. Of those states, 20 have permit requirements for isolated wetlands. Some of these state programs overlap with the Corps’ dredged and fill permitting requirements under the CWA, and some address waters or activities that the Corps does not cover. Following a proposed change in the jurisdictional scope of the CWA, states with a dredged and fill program may already regulate newly non-jurisdictional waters or may choose to expand their programs to address them.

¹⁷⁸ 82 FR 1860 (January 6, 2017).

¹⁷⁹ See 40 CFR 233.1(c) and 40 CFR 233.1(d).

The agencies are aware of at least three tribes that administer a dredged and fill permitting program under tribal law. These tribes may already address features proposed to be non-jurisdictional or may choose to expand their programs in order to address them.

Although discussed more thoroughly in another section, many states, territories, and tribes rely heavily on the CWA section 401 certification program for ensuring WQS are met when the Corps issues dredged and fill permits under the CWA on state, territorial, or reservation lands. Tribes in particular often draw on the support of EPA regional offices for completing the 401 certification process under the CWA when the Corps issues such federal permits.

Potential Effects

Federal programs

Proposed changes in the definition of “waters of the United States” under the CWA would affect some federal permitting operations. The agencies expect that fewer 404 permits would be issued by the Corps because certain waters would no longer be jurisdictional, and the agencies have estimated national avoided costs and forgone benefits for the section 404 program associated with the proposed rule in the Economic Analysis yet acknowledge that this analysis required a number of assumptions. Therefore, the agencies are uncertain of the actual number of permits that would no longer be required following a change in the definition of “waters of the United States.” The agencies note that the jurisdictional status of many individual waters would remain unaffected under the proposed rule.

There are two possible approaches to looking at potential effects of a proposed definition of “waters of the United States.” One is to look at existing data for permits issued by the Corps. The other is to look at existing determinations of whether a water is considered to be a jurisdictional “water of the United States,” which may be a first step in the permitting process. Both approaches have limitations. The agencies at this time have not conducted the same type of overlay analysis of Corps 404 permit data and jurisdictional determination data with the NHD and NWI as they have with other programs in an attempt to estimate the potential effects of the proposed rule. An overlay analysis of the section 404 program data with the NHD and NWI poses a variety of challenges as discussed in Chapter II and Appendix A.

As discussed further in the Economic Analysis (EA), the agencies examined permitting data (for both individual and general permits) and the extent of mitigated impacts to anticipate how the proposed rule could affect future section 404 permit actions. During fiscal years (FY) 2011 to 2015,¹⁸⁰ 248,688 permits were issued under the federal 404 program. Based on the authorized impact areas of 404 permits issued over this time period, Florida, Louisiana, Alaska, and Texas had the largest areas of authorized permanent impacts for permitted activities on non-ocean and non-tidal water resources. States with large mitigation requirements, whether in terms of acres, linear feet, or credits—including Florida, Louisiana, South Carolina, Indiana, and Texas—would

¹⁸⁰ Calendar year 2015 was the most recent complete year available at the time the agencies accessed data for use in this analysis. Note that the dates of the Corps’ section 404 permit data from ORM2 examined for the EA are different from the dates of the Corps’ approved jurisdictional determination data from ORM2 examined for the aquatic resource assessment discussed in this document.

likely experience significant impacts from “waters of the United States” definitional changes in the event that the states do not require similar mitigation following the change. The EA also contains three case studies and a national assessment to illustrate some of the possible effects of the proposed rule.

An approved jurisdictional determination, or AJD, is a determination of whether or not a resource is considered a “water of the United States”; a preliminary jurisdictional determination, or PJD, treats all aquatic resources that would be affected in any way by the permitted activity on the parcel as jurisdictional so that a permit applicant can move ahead expeditiously to obtain a permit decision even as the Corps makes no legally binding determination regarding whether jurisdiction exists over a particular aquatic resource. AJDs made in the context of the federal 404 dredged and fill permitting program can help inform an understanding of the potential effects following a revised definition of “waters of the United States.” It is important to note that in the context of the federal 404 dredged and fill permitting program, jurisdictional determinations (JDs) are typically made at the request of the landowner or project proponent. Because of this, there may be selection bias in terms of where the Corps has available information. In addition, because a number of factors influence where and when applicants request JDs, looking solely at program data does not allow overall analysis about the scope of where permits are and are not needed. (Note that a single permit application may involve many waters and/or JDs, and that a JD is not required for all permit actions.) Many applicants request JDs as an initial step in a request for a permit. Alternatively, some applicants may request an approved JD to obtain confirmation as to the jurisdictional status of aquatic resources to identify those waters which are not jurisdictional as a means to potentially reduce mitigation requirements and associated costs rather than assuming they are jurisdictional as done under a PJD.

The change in the scope of waters the agencies consider jurisdictional under the proposed definition of “waters of the United States” could result in either an increase or decrease in requests for AJDs compared to pre-2015 practice where PJDs are often favored. If more landowners elect to request AJDs, the workload and administrative burden on the Corps could increase initially. Over the long-term, however, providing clarity under this rulemaking as to which waters are categorically jurisdictional should reduce the administrative burden of establishing jurisdiction even if an increase in AJD requests occurs. Alternatively, applicants may continue the trend to request more PJDs than AJDs. In FY2015, 65 percent of all JDs were preliminary JDs (35 percent were approved JDs); in FY2016, 80 percent of all JDs were preliminary JDs (20 percent were approved JDs).

Because an AJD is generally valid for five years, the agencies chose to analyze data for AJDs from the last five fiscal years. During this period, the Corps conducted AJDs under the CWA for 82,738 aquatic resources. Of these AJDs, 60,116 aquatic resources were determined to be jurisdictional. The Corps conducted 14,357 upland determinations in that same period.

Chapter I discusses the potential aquatic resource implications identified by analyzing Corps data on AJDs. In short, many waters determined to be jurisdictional from FY13-FY17 data were within categories of waters that are likely to be jurisdictional under both pre-2015 practice and the proposed rule. There are, however, a number of waters likely to have been found jurisdictional during this time period that would be considered outside the scope of the revised definition of “waters of the United States” under the proposed rule.

Section 404 permits would not be required for dredged or fill activities in waters that are no longer subject to CWA jurisdiction. Evaluating a section 404 permit application typically takes into account the environmental and public interest implications of the proposed project, such as potential for flooding or impacts to drinking water supplies. Where no federal permit is required such evaluation would not occur, unless either a state or tribe has a permitting program that addresses these impacts to state or tribal waters that are beyond CWA jurisdiction under state or tribal law, or the actions are covered by local, tribal, or state regulations (*e.g.*, land use) that require comprehensive public reviews under state or tribal environmental policy acts. Where no federal permit under section 404 is required because impacts occur to non-jurisdictional waters under a new rule, compensatory mitigation under federal regulation would not be required for unavoidable impacts to such waters.

Regulation of newly non-jurisdictional waters following a change in the definition of “waters of the United States” would depend on state or tribal regulations that would provide regulatory coverage beyond the CWA, where such regulations exist. In some cases, state and local regulations may cover discharges of dredged or fill material into aquatic resources. Some tribes also have regulations to cover discharges of dredged or fill material into reservation waters. Some states and tribes may adjust their current practices in light of a revised definition of “waters of the United States.” See the Economic Analysis for more information regarding potential state responses to a change in the definition of “waters of the United States.”

Assumed 404 programs

New Jersey covers all waters of the state under their state-authorized dredged or fill program except in the Pinelands of New Jersey, where permitting of these discharges is limited to the waters within the jurisdictional scope of the CWA. Thus, the state would have to determine whether or not to change their statutes and permitting requirements within this coastal region following a change in the definition of “waters of the United States.”

Michigan has recently revised its statutory language to limit its permit program to the geographic scope of the CWA unless the Michigan legislature determines additional regulation is necessary.¹⁸¹ In this case, the state would have to consider whether it would be necessary to change its statute and permitting requirements in response to a change in the federal definition.

Both Michigan and New Jersey (and other states that may assume the 404 programs prior to any potential change to the definition of “waters of the United States”) would need to undertake an

¹⁸¹ Passed in 2013, PA 98 states: “Sec. 30101a. For the purposes of this part, the powers, duties, functions, and responsibilities exercised by the department because of federal approval of Michigan’s permit program under section 404(g) and (h) of the federal water pollution control act, 33 USC 1344, apply only to “navigable waters” and “waters of the United States” as defined under section 502(7) of the federal water pollution control act, 33 USC 1362, and further refined by federally promulgated rules and court decisions that have the full effect and force of federal law. Determining whether additional regulation is necessary to protect Michigan waters beyond the scope of federal law is the responsibility of the Michigan legislature based on its determination of what is in the best interest of the citizens of this state.” EPA found 14 of the provisions in PA 98 reduced the geographic or permitting scope of the state program to be inconsistent with the CWA. The Governor has asked for reconsideration and approval of these.

effort to ensure the geographic scope of their program is consistent with¹⁸² any revised definition of “waters of the United States” and make any conforming changes to their programs’ authorities and implementation within two years. A change in program scope is defined as a substantial program change requiring EPA review and approval as consistent with the CWA. Such review includes public hearings, a comment period, and publication in the *Federal Register*.¹⁸³

The agencies are aware of the view of some states that they would only seek to assume section 404 permitting authority if their state had sufficient CWA jurisdictional waters to warrant the assumption effort. A change in scope of CWA jurisdiction might alter state (and potentially tribal) interests in assuming the federal 404 program depending on the nature of their aquatic resources.

State and tribal programs

Because 35 states¹⁸⁴ and at least three tribes administer a state or tribally authorized dredged or fill program, a change in the definition of “waters of the United States” could affect such programs insofar as these states or tribes would need to determine whether the scope of their program would or should change as a result of a change in federal CWA jurisdiction. Further discussion can be found in Chapter II: State and Tribal Roles and Analysis.

Conclusions

The proposed rule would reduce the scope of waters subject to the CWA when compared to the baseline of the 2015 Rule and the alternate baseline of pre-2015 practice, and as such, the agencies anticipate that the regulated public would need to prepare fewer permit applications. In addition, the agencies would expect that the permit processing would be more efficient based on the enhanced clarity of the proposed rule. States with assumed 404 programs and states and tribes with dredged and fill programs authorized solely under state or tribal law would need to consider whether to revise their statutes and/or regulations to reflect changes in federal jurisdiction under the CWA. The agencies solicit comment and data to better assess potential effects and how states and tribes may respond to a change in the definition of “waters of the United States.”

CWA Financial Assistance Programs

Introduction

The CWA authorizes a variety of financial assistance programs, which are related directly or indirectly to “waters of the United States.” A change in the definition of the “waters of the United States” could potentially affect some or all of these programs. For purposes of this

¹⁸² An authorized state or tribal program may be broader or more stringent in jurisdictional scope than the CWA, but it must cover waters covered by the federal program.

¹⁸³ 40 CFR 233.16(d)(3)

¹⁸⁴ This includes states with inland dredged and fill programs, as well as those with permit programs for coastal or tidal waters. Both Michigan and New Jersey have state dredged and fill programs outside of their assumed programs.

discussion, the following CWA financial assistance programs are the primary and most relevant programs administered by the EPA: Section 106 Grant Program; Section 319 Nonpoint Source Management Program; Section 320 National Estuary Program (NEP); and various grant programs authorized under CWA Section 104(b)(3), including Wetland Program Development Grants (WPDG), Urban Waters Small Grants Program, and the Healthy Watersheds Consortium Grant Program.

Description and Potential Effects

Section 106 Grant Program

Section 106 of the CWA authorizes the EPA to provide financial assistance to states (including the U.S. Territories and the District of Columbia), eligible interstate agencies, and eligible tribes to assist them in administering programs for the prevention, reduction, and elimination of pollution. The EPA provides this financial assistance in the form of water pollution control (section 106) grants, which provide funding to build and sustain effective water quality programs to help meet the objective of the CWA.

Section 106 grants support a wide variety of water pollution prevention and control programs and activities, including monitoring and assessing water quality; developing WQS; identifying impaired waters and TMDLs; managing NPDES programs; ensuring compliance; implementing enforcement actions; protecting source water; and managing outreach and education programs.

Section 106 grants are allocated annually by the EPA directly to states and interstate agencies. A portion of section 106 funds is set aside and allocated to EPA regional offices to make allotments to eligible tribes. The EPA calculates section 106 allotment funds to states, territories, and interstate agencies (not including Monitoring Initiative funds) using an allocation formula that funds “on the basis of the extent of the pollution problem in the state” (CWA section 106(b)). Since 2006, the EPA has provided additional “Monitoring Initiative” funding to states, interstate agencies, and tribes to enhance water quality monitoring programs and conduct surveys of the nation's waters. The state Monitoring Initiative funds are allocated separately.

The programmatic scope of the section 106 water pollution program grants is sufficiently broad and cross-cutting to minimize the effects of any incremental change in jurisdiction from a grant-allocation perspective. Already, these funds support programs of the state or tribe regardless of whether the programs address waters that are jurisdictional. For example, “ground waters” have never been jurisdictional under the Act. Thus, the state and tribal program funding through 106 grants would continue to be unaffected by jurisdiction.

Section 319 Nonpoint Source Management Program

The Section 319 Nonpoint Source Management Program directs the EPA to help focus state and local nonpoint source efforts. Under the section 319 program, states, territories and tribes receive grants to support a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects and monitoring to assess the success of specific nonpoint source implementation projects.

CWA section 319(h) funds are provided to designated state and tribal agencies to implement their approved nonpoint source management programs. State and tribal nonpoint source programs include a variety of components, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and regulatory programs. Each year, the EPA awards about 5 percent of section 319(h) funds to tribes and awards the balance of the funds to states and territories in accordance with a longstanding allocation formula.

States and tribes submit annual section 319(h) funding plans to the EPA consistent with funding priorities they have established. If the funding plan is consistent with grant eligibility requirements and procedures, the EPA then awards the funds.

Section 319 grants are authorized for purposes of assisting the state or tribe in implementing nonpoint source control and management programs, as described in the CWA and as prioritized by the state or tribe. These programs encompass large watersheds and complex geographies and are largely shaped by the priorities of the state or tribe. The program has historically interpreted and applied the status to allow 319 grant funding to all types of surface water and groundwater, without considering the water's jurisdictional status. Furthermore, like the language of section 106, section 319(i) authorizes EPA to make grants for protecting groundwater quality, which further indicates that the scope of the grant program is not linked to CWA jurisdiction.¹⁸⁵

Section 320 National Estuary Program

The NEP is a place-based program to protect and restore the water quality and ecological integrity of estuaries of national significance. Currently, 28 estuaries located along the Atlantic, Gulf, and Pacific coasts and in Puerto Rico are designated as estuaries of national significance. Under the NEP, the EPA awards assistance agreements to the 28 designated estuaries whose activities are necessary for the development and implementation of a comprehensive conservation and management plan.

Section 320 funds are used to protect and restore the water quality and ecological integrity of estuaries of national significance. This is accomplished thru the development and implementation of Comprehensive Conservation and Management Plans by NEPs. The authorizing language does not refer to “waters of the United States,” or “navigable waters,” so they are unlikely to be affected by a change in CWA jurisdiction.

Section 104(b)(3) Authorized Grant Programs

Grants awarded under CWA section 104(b)(3) cover a range of EPA programs and are limited to projects for coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys and studies relating to the causes, effects, extent, prevention, reduction and elimination of water pollution.

Wetland Program Development Grants. The WPDG program funds projects that support the development and growth of state, tribal, or local wetlands protection, restoration, or management programs. WPDG grants assist state, tribal, local government agencies and interstate/intertribal

¹⁸⁵ 33 USC 1329(i).

entities in building programs to protect, manage and restore wetlands and other aquatic resources. Under the WPDG program, the EPA administers a set of four competitive grants: national WPDG, regional WPDG, tribal WPDG, and the Five Star and Urban Waters Restoration program. Funds cannot be used for implementation projects, such as individual mitigation projects, mitigation banks, or in-lieu-fee mitigation programs. WPDGs assist state, tribal, local government agencies and interstate/intertribal entities in building programs to protect, manage and restore wetlands.

Healthy Watersheds Consortium Grant Program. The Healthy Watersheds Consortium Grant Program seeks to accelerate strategic protection of healthy, freshwater ecosystems and their watersheds across the country. The primary focus is on the protection and stewardship of land in the watershed, rather than restoration of degraded habitats or projects with a strictly water quality improvement outcome. The Healthy Watershed Consortium Grant Program funds one cooperative agreement to an organization to manage the Healthy Watershed Consortium Grant subaward process that will award subgrants to support the strategic protection of freshwater ecosystems and their watersheds across the country. Non-profit, non-governmental organizations, interstate agencies, and intertribal consortia which are capable of undertaking activities that advance watershed protection programs are eligible to compete in this program. These funds are used for healthy watershed capacity development and for local demonstration and/or training subaward projects. Under the CWA 104(b)(3) authority, projects funded under the subgrant process must be limited to activities that conduct or promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution.

The above CWA grant programs administered under section 104(b)(3) do not rely on a connection with the jurisdictional scope of the CWA. These programs, like the section 106 and 319 grant programs, are intended to address programmatic improvements regarding the ability and capacity of states, tribes and local communities to manage and protect surface water resources regardless of their jurisdictional status.

Conclusions

Overall, the agencies do not anticipate significant effects on its current CWA financial assistance programs due to a revised definition of the “waters of the United States.” For section 106 and 319 grant programs, the authorizing language and the range of programmatic activities are sufficiently broad, and the grants are already applied to support programs that address both jurisdictional and non-jurisdictional waters under the current definition of “waters of the United States,” making it unlikely that a change in the definition of “waters of the United States” would have an effect on the programs and funding allocations. Grants administered under the Section 320 NEP are also unlikely to be affected because the program is not formed around the definition of the “waters of the United States.” And lastly, grant programs administered under the CWA general grant-giving authority, section 104(b)(3), are not likely to be affected since the range of activities related to building water programs are on a scale and programmatic basis that funding decisions and allocations are not likely to be adjusted to account for any change in jurisdiction. The agencies solicit comment on their conclusions.

Clean Water Act Enforcement Program

Introduction

CWA section 301 prohibits the unauthorized discharge of a pollutant by a person from a point source to “waters of the United States.” Noncompliance with CWA sections 301 or 311, or a requirement of a permit issued under sections 402 or 404, constitutes a violation of the CWA. The goals of an enforcement program under the CWA are to assure compliance, to protect human health and the environment, to send a clear message of deterrence to the regulated community, and to create a level regulatory playing field for all citizens and businesses. The CWA provides the implementing agencies with a range of enforcement tools to bring a party into compliance.¹⁸⁶

Overview of Administrative, Civil Judicial, and Criminal Enforcement Authorities

The EPA has both administrative and judicial tools to enforce compliance with the CWA. It may issue compliance orders under CWA section 309(a) or administrative penalty orders under CWA section 309(g). For discharges of oil or hazardous substances, the EPA may pursue administrative enforcement under CWA section 311(b). These authorities allow the EPA to require compliance with the CWA through orders that seek restoration and impose monetary penalties that recapture the economic benefit of noncompliance and deter future violations. In addition, CWA sections 309(b) and 311(b) authorize the EPA to commence a civil judicial action in United States District Courts to enforce compliance with the CWA. Civil judicial actions are used to compel a party to cease its violations and/or provide injunctive relief, including restoration of the “waters of the United States.” Under appropriate circumstances, the EPA may invoke its enforcement authority under section 311(e) to abate imminent and substantial threats to public health or the environment related to the discharge of oil or hazardous substances. Additionally, the EPA may invoke its emergency authority under section 504 to address imminent and substantial endangerments to the health or welfare of persons related to the discharge of pollutants.

CWA section 309(c) authorizes the EPA to take criminal enforcement action for violations of the Act. Typically, CWA criminal enforcement efforts are reserved for the most egregious violations involving culpable conduct related to unpermitted discharges to “waters of the United States,” discharges in violation of permits, and/or dishonest or false conduct that undermines the CWA’s statutory scheme. Criminal enforcement may also be pursued when there have been significant repetitive violations notwithstanding prior administrative or civil enforcement efforts to obtain compliance. While less commonly pursued than administrative and civil enforcement actions, criminal enforcement is an important element of the overall enforcement effort. Criminal

¹⁸⁶ See “[Injunctive Relief Requirements in Section 404 Enforcement Actions](#)” (Sep. 29, 1999) (“Complete restoration is preferable because it would (1) achieve compliance with the CWA (a fundamental goal of EPA’s enforcement program), (2) replace the lost functions and values of the impacted waters, and (3) maintain a level playing field within the regulated community by ensuring that all discharges are evaluated using the same guidelines”). ¹⁸⁷ Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act (January 19, 1989). Available at http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Compliance/1989_Enforcement_MOA.pdf.

enforcement may also secure restitution for victims and can recover assets that represent the proceeds of criminal wrongdoing. In addition to fines, criminal conviction can result in the imposition of prison sentences that serve as a vital deterrent to future wrongdoing and expresses societies disapproval of the conduct and the seriousness of the crime. EPA's Office of Criminal Enforcement, Forensics and Training also partners with state and local authorities to assist them in investigating and prosecuting egregious violations of the CWA's authorized programs.

Authority to Enforce CWA Section 311

CWA section 311 prohibits the discharge of oil or hazardous substances into "navigable waters of the United States" or adjoining shorelines in such quantities as may be harmful. Persons who discharge can be the subject of a federal enforcement action only; states and tribes cannot be authorized to implement the CWA 311 program.

The EPA shares responsibility for CWA section 311 enforcement with the USCG. The details of the shared responsibility are found in a Memorandum of Understanding between the EPA and the USCG, 58 FR 19420 (April 14, 1993). Any facility or vessel that discharges into "waters of the United States" or adjoining shorelines is required to report the discharge to the National Response Center, which is operated by the USCG.

Authority to Enforce CWA Section 402

Discharges from "point sources" to "waters of the United States" may be authorized through the section 402 NPDES permit program. The EPA and states with approved programs administer the permitting program. Unpermitted discharges or violations of NPDES permit requirements may be the subject of an enforcement action. The CWA authorizes the EPA enforcement action in both authorized states as well as in those states where the EPA is the NPDES permitting authority.

Authority to Enforce CWA Section 404

Section 404 of the CWA regulates the discharge of dredged or fill material into "waters of the United States" through the permitting program administered by the Corps. Discharges that are not permitted or exempted can be the subject of an enforcement action.

The EPA shares responsibility for CWA section 404 enforcement with the Corps. CWA section 309 and CWA section 404 authorize the EPA and the Corps to enforce against unpermitted discharges and violations of permits. The details of the shared responsibility are found in the 1989 Memorandum of Agreement between the agencies.¹⁸⁷ Under the Memorandum of Agreement, the EPA is the lead enforcement agency for flagrant violations, repeat violators, and other cases where the Corps recommends that the EPA take an action.

¹⁸⁷ Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act (January 19, 1989). Available at http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Compliance/1989_Enforcement_MOA.pdf.

Potential Effects

The proposed changes to the definition of “waters of the United States” would decrease the scope of the CWA geographic jurisdiction compared to the 2015 Rule and pre-2015 practice. Some waters over which the EPA and the Corps have asserted jurisdiction would no longer be subject to the EPA (or the Corps for section 404; or the USCG for section 311) enforcement authority.

The proposed changes to the definition of “waters of the United States” would remove whatever federal jurisdiction that may exist today over: (1) wetlands that do not abut or have a direct hydrologic surface connection to waters otherwise identified as “waters of the United States” in a typical year and (2) features that do not contribute perennial or intermittent flow to a TNW in a typical year either directly or indirectly (*e.g.*, ephemeral features that are jurisdictional tributaries under the 2015 Rule or pre-2015 practice). Accordingly, these features would not be subject to the permit program, or the EPA’s or the Corps’ compliance and restoration efforts though enforcement. For example, where certain wetlands are no longer considered adjacent, a CWA 404 permit would not be required to discharge dredged or fill material into those wetlands and an enforcement action could not be taken for a discharge into those wetlands.

As is true today, a facility that stores oil above certain threshold amounts must prepare a prevention and preparedness plan if a discharge of oil could reach “waters of the United States” in quantities that may be harmful. If any oil is released and reaches a “water of the United States” in amounts that may be harmful, the EPA has the authority to take enforcement action. No federal plan would be required and no federal enforcement could be taken regarding the storage of oil or discharges of oil that could reach nonnavigable, isolated, intrastate waters or ephemeral features, for example, as long as the oil does not reach “waters of the United States” as defined in the proposed rule.

Nothing in the proposed changes to the definition of “waters of the United States” affects the ability of states and tribes to apply and enforce independent authorities over aquatic resources in state or tribal law.

IV. OTHER POTENTIAL PROGRAM IMPACTS

Safe Drinking Water Act Programs, Including Source Water Protection

Introduction

The Safe Drinking Water Act (SDWA) was established in 1974 to protect the quality of drinking water in the United States. This law focuses on waters actually or potentially designated for drinking use, whether from above ground or underground sources. The SDWA authorizes the U.S. Environmental Protection Agency (EPA) to establish minimum standards to protect drinking water and requires all owners or operators of public water systems (PWSs) to comply with these health-related standards.

The primary components of the SDWA PWS regulatory program focus on treatment and prevention as the means of providing safe drinking water. There are no SDWA requirements on the quality of water entering a drinking water treatment plant; rather, the drinking water utility must treat contaminants and ensure safe public drinking water for their consumers by meeting the regulatory standards. For example, if nitrate levels, organic matter, or suspended solids in source water increase, then drinking water utilities may need to add treatment to continue to meet drinking water standards.

Amendments to the SDWA in 1996 enhanced the existing law by recognizing source water protection, requiring operator certification, establishing a funding mechanism for water system improvements, and ensuring public access to community water system information. This approach was intended to ensure safe drinking water through a multi-barrier approach by protecting it from source to tap.¹⁸⁸

The 1996 amendments required states and water suppliers to conduct one-time assessments of water sources to see where they may be vulnerable to contamination. These source water assessments included three steps: delineation of the source water protection area; inventory of the potential sources of contamination; and determination of the susceptibility (vulnerability) of the water supply to contamination. While these assessments serve as an important source of information and can be used to develop protection plans, the SDWA does not confer any

¹⁸⁸ The 1996 Safe Drinking Water Act Amendments created a coordinated set of programs and requirements to help water systems make sure they have a safe supply of drinking water. These programs and requirements form a Multiple Barrier Approach that places technical and managerial barriers that help prevent contamination at the source, treatment, and tap to provide a safe supply of drinking water for consumers. The barriers are:

- Risk Prevention: Selecting and protecting the best source of water where possible or protecting a current source of water.
- Risk Management: Using effective treatment technologies, properly designed and constructed facilities, and employing trained and certified operators to properly run system components.
- Monitoring and Compliance: Detecting and fixing problems in the source and/or distribution system.
- Individual Action: Providing customers with information on water quality and health effects so they are better informed about their water system.

(EPA Office of Water, EPA 816-K-06-005, September 2006)

authority to protect surface water, implement a source water protection plan, or update the initial source water assessment.

The Clean Water Act (CWA) and other state, tribal, and local regulations help to ensure high quality source waters, from rivers, streams, lakes, and reservoirs, are available for drinking water use. Water quality in rivers, streams, and lakes that serve as drinking water sources depends on pollutant loadings from a variety of sources, including point sources, nonpoint source runoff, groundwater quality, as well as the quality of upstream surface waters. Key CWA programs supporting source water protection include water quality standards, section 311 oil spill prevention and response, section 402 National Pollutant Discharge Elimination System (NPDES) permits, section 404 permits, total maximum daily load (TMDL) development and implementation, and nonpoint source management. Funds from the section 106 program can be used to monitor water quality in source water areas and the section 319 nonpoint source program grants can be used for projects to improve water quality of impaired waterbodies. Additionally, voluntary actions of federal, state, or local source water protection programs and collaborations may be focused on protecting and improving sources of drinking water.

Groundwater

While PWSs that rely on surface water serve more than twice as many people as those that rely primarily on groundwater, there are far more groundwater systems than surface water systems in the United States.¹⁸⁹ Additionally, groundwater is connected to surface water through infiltration from wetlands, rivers, streams, lakes, and reservoirs. This infiltration provides storage and maintains water levels in aquifers which, in turn, may supply base flow for surface waters which is especially important during dry periods. Protection of groundwater sources is often limited to wellhead protection in the immediate area of a PWS well.

State and Tribal Programs

In general, most states maintain source water protection as a non-regulatory program. Several states require periodic updates of source water assessments; some only require updating the assessments for groundwater sources (wellhead protection plans) and a few states include source water protection in their public water supply plans or other planning processes. Even in these states, most of the requirements are for assessment and planning activities, rather than implementation of the plans (*e.g.*, stream restoration or development of local ordinances).

There are several notable exceptions where source water protection and watershed management are explicitly addressed at the local level. These include cities where most of the drinking water originates on federal lands that are managed for water quality (*e.g.*, San Francisco, California, which relies on the Hetch Hetchy watershed in Yosemite National Park, and Portland, Oregon, which relies on the Bull Run Watershed Management Unit, 96 percent of which is owned by the

¹⁸⁹ EPA data from 2017 Third Quarter Safe Drinking Water Information System/Federal Version indicate that approximately 135,100 systems serving almost 104 million people utilize groundwater as a primary source of water, while approximately 14,800 systems serving over 222.4 million people utilize surface water as a primary source of water.

U.S. Forest Service) and in cities where state or local regulations protect their source areas and control the activities allowed in the watershed (*e.g.*, New York City, New York).

The SDWA does not require tribes to implement source water protection on tribal lands nor does it confer regulatory authority to tribes to protect surface water. Most tribes maintain source water protection as a non-regulatory program; therefore, the level of programmatic activity and investment in implementing protections varies from tribe to tribe.

Tribes are eligible to receive limited financial and capacity support for source water protection under the SDWA Public Water System Supervision Program and through Direct Implementation Tribal Cooperative Agreements administered by EPA regional offices (exclusive of Alaska, where the state has primary enforcement responsibility for the Alaska Native Villages, and the Navajo Nation, which also has primary enforcement responsibility), which help tribes to complete source water assessments and develop source water protection programs. However, implementation of source water protection is more often supported through the Indian Environmental General Assistance Program or as part of other environmental protection efforts such as watershed management, pesticide management, or nonpoint source reduction, and is completed through CWA programs, such as the section 106 program, section 319 nonpoint source program, or other environmental programs.

Current Challenges for Utilities

Utilities recognize that changes in source water quality play a significant role in their operations. Because wetlands and streams in the source watershed can play a role in reducing sediment loading to the waterbodies in source water protection areas, CWA regulation of jurisdictional waters and controls under state authorities may help address high turbidity events.¹⁹⁰ Therefore, a change in the scope of CWA jurisdiction may affect sediment loading within source water protection areas and could require some PWS to add treatment. The agencies are unable to assess the magnitude, if any, of potential sediment loading changes or additional treatment needed as a result of the proposed definition. Small water systems, serving fewer than 10,000 people, may be less prepared than larger systems to respond to any change in source water quality.

The Drinking Water and Clean Water State Revolving Funds

Under SDWA authorities, the Drinking Water State Revolving Fund (DWSRF)¹⁹¹ can be used to maintain existing infrastructure or purchase improved treatment, storage, and transmission and distribution for a drinking water system. This can help utilities address upstream source water

¹⁹⁰ High turbidity water may compromise the treatment processes reducing the efficacy of disinfection and increasing the risk that disinfection processes will create harmful byproducts.

¹⁹¹ EPA provides grants to all 50 states plus Puerto Rico to capitalize state Drinking Water State Revolving Fund (DWSRF) loan programs. The states contribute an additional 20 percent to match the federal grants. The program also provides direct grant funding for the District of Columbia, U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of Northern Marianas. The 51 DWSRF programs function like infrastructure banks by providing low interest loans to eligible recipients for drinking water infrastructure projects.

degradation. The DWSRF may only lend to a system out of compliance if that project is intended to return the system to compliance.

The DWSRF includes several optional set-asides that states may take for such uses as supporting source water protection programs. Eligible activities include, but are not limited to, support for state personnel who manage source water protection programs, loans for land acquisition and conservation easements, loans for incentive-based source water protection measures, and activities described in a state's Wellhead Protection Program. From 1997-2017, 24 states used at least some portion of these set-asides for Source Water Protection Technical Assistance, or Source Water Protection Loans.¹⁹²

Additionally, the Clean Water State Revolving Fund can be used to support projects that protect sources of drinking water. This includes projects to maintain or improve publicly owned treatment works (POTWs) and combined sewer overflows, as well as nonpoint source projects. While some subsidy can be available for the Clean Water State Revolving Fund, assistance generally is in the form of loans that must be repaid.

The agencies do not expect the function or scope of funding programs to be affected with any change in the definition of "waters of the United States." They are available and will continue to be available to states.

Potential Effects

Over 65 percent of Americans who are served by PWSs rely on systems which primarily draw their water from rivers, streams, lakes, and reservoirs.¹⁹³ In an exploratory effort, the agencies attempted to evaluate the spatial distribution of drinking water sources in relation to streamflow classification (e.g., perennial, intermittent, ephemeral) type by overlaying the source protection areas (SPAs)¹⁹⁴ for surface water intakes on the National Hydrography Dataset (NHD) at high resolution. Due to data limitations of the NHD – in particular the fact that the NHD does not identify intermittent and ephemeral streams as separate categories in many parts of the country – coupled with uncertainty regarding the jurisdictional status of many intermittent streams and all ephemeral streams subject to a case-specific significant nexus analysis under pre-2015 practice, the agencies have concluded that the exploratory analysis cannot appropriately or accurately assess the potential effects of the proposed rule on PWSs.

In addition, the agencies note that the mere presence of ephemeral streams in a SPA does not mean there will be water quality degradation following the proposed change in the definition of "waters of the United States," as states, tribes, and local governments may have programs and

¹⁹² Does not include funds that went to SWP Area Delineation Assessments, since it was required for all states, or funds that went to wellhead protection.

¹⁹³ Data from EPA's Government Performance and Results Act (GPRA) Inventory Summary Report, FY2017 Third Quarter. Available at https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&PortalPath=/shared/SFDW/_portal/Public&Page=Inventory.

¹⁹⁴ Each SPA identifies those waters that will reach a drinking water intake within 24 hours but does not necessarily represent an area that receives special protection. Also, the choice of a 24-hour time of travel does not imply that activities in drainage areas above this do not have the potential to impact water quality to downstream drinking water supplies. Rather, the 24-hour transport was chosen as a consistent nationwide metric.

policies to protect source water, and even if those are absent, activities that might result in water quality degradation will not occur on all streams. Indeed, many ephemeral streams are not considered jurisdictional under pre-2015 practice. As discussed above, utilities remain committed to treating source water to meet standards.

Conclusions

PWSs are located throughout the hydrologic landscape. Actions that have the potential to change water quality have the potential to impact downstream PWS operations. The degree of this impact, if any, can vary based on the nature and magnitude of change, state, tribal, and local authorities and programs for managing water quality, and the size, complexity, and technical capacity of an individual drinking water system. The drinking water regulations will continue to apply to water delivered by PWSs, with the goal of protecting public health. The DWSRF is available to help fund source water protection programs and finance improvements to drinking water utilities. However, the need for source water protection often is greater than the available funds and the costs of DWSRF financing is often passed along to ratepayers. Overall, the potential effects of a change in CWA jurisdiction on drinking water quality will depend on whether there are activities impacting source waters; whether there are state or tribal protections in place, including local source water protection activities, that will cover areas that would not be subject to CWA jurisdiction; and how well an individual drinking water utility is prepared to respond to a potential change in source water quality that may impact its operations and ability to meet SDWA requirements. The agencies solicit comment and data to better assess potential effects and how states and tribes manage source water protection, as well as how they may respond to a change in the definition of “waters of the United States.”

RCRA Section 1004(27) Permitting and Corrective Action Program

Introduction

Hazardous Waste Permitting

Under the Resource Conservation and Recovery Act (RCRA), a facility that stores, treats or disposes of hazardous waste (TSDF) (as defined under EPA’s RCRA regulations) is generally required to obtain a permit. Hazardous wastes are classified as either listed wastes or wastes exhibiting a hazardous characteristic. Most states have been authorized to administer this permitting program, with the exception of Alaska and Iowa, along with some U.S. Territories. EPA regional offices administer the RCRA program for regulated activities in unauthorized states, territories, and tribal lands (except where the state is authorized to administer the program¹⁹⁵) within their region.

RCRA facility permits include requirements to conduct facility-wide corrective action (cleanup of contamination), including corrective action beyond the facility boundary, as necessary to protect human health and the environment. Remediation activities often involve less concentrated wastes, one-time activities, and shorter-term activities. The EPA or an authorized

¹⁹⁵ See e.g., 83 FR 10383, March 9, 2018, Section J in the most recent authorization FRN for Washington.

state oversees such remediation activities. Corrective action cleanup/remediation activities at RCRA-permitted facilities may involve discharges of treated water (*e.g.*, from pump and treat operations) to “waters of the United States,” generally through the facility’s wastewater treatment facility.

RCRA regulations provide certain exemptions from RCRA permits (and certain facility standards) specifically for wastewater treatment units (WWTUs) that are part of a wastewater treatment facility subject to the CWA (whether or not they actually possess a CWA permit). Specifically, the WWTU exemption applies to a WWTU that meets the definition of “tank” or “tank system” (which includes associated ancillary equipment (*e.g.* piping)), manages hazardous wastewaters, and is part of a wastewater treatment facility subject to CWA section 402 or 307(b) requirements.¹⁹⁶ Also, POTWs managing hazardous wastewaters are deemed to have a RCRA permit as long as certain conditions are met, among them, having a CWA section 402 permit.¹⁹⁷

A facility that is not permitted under CWA 402 and instead is permitted under RCRA to manage a hazardous waste is subject to different requirements than a facility permitted under CWA section 402 or 307(b). The requirements for RCRA permitted (or interim status) facilities are generally at 40 CFR parts 264, 265, and 270. The requirements include secondary containment for hazardous waste tank systems.¹⁹⁸

Potential Effects

Potential Effect to RCRA Hazardous Waste Permitting

If a facility with a WWTU is not subject to CWA section 402 or 307(b) requirements, then the WWTU exemption from RCRA permitting would not apply and the facility could be subject to RCRA permitting requirements for that wastewater unit and requirements for facility-wide corrective action. Thus, a change in the scope of CWA jurisdiction has the potential to affect the regulatory status of facilities currently covered by the WWTU exemption in states with authorized RCRA programs. Such facilities could be required to obtain RCRA permits for those units, or modify their existing permits to include those units. In addition, facilities could utilize off-site wastewater treatment capacity where available (*e.g.*, centralized wastewater treatment), and hazardous waste generators may perform treatment without a RCRA permit in tanks or containers consistent with the temporary accumulation provisions in 40 CFR part 262¹⁹⁹ and as allowed under their authorized state RCRA program.

Because EPA regional offices administer the RCRA permit program in Iowa, Alaska, certain territories and on tribal lands, a change in CWA jurisdiction could affect the regulatory status of facilities currently covered by the WWTU exemption or POTWs in those locations in the event that such facilities handle and store wastes in tanks that are listed or exhibit characteristics considered hazardous waste. The respective EPA regional offices could be required to issue additional RCRA permits in such instances. The magnitude of the change associated with

¹⁹⁶ See 40 CFR 264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v). See also definition of WWTU at 40 CFR 260.10.

¹⁹⁷ See permit by rule regulation at 40 CFR 270.60(c).

¹⁹⁸ A tank system is the tank and its ancillary equipment.

¹⁹⁹ See Footnote 102 in the November 28, 2016 Federal Register, 81 FR at 85792.

switching from CWA section 402 permitting to RCRA permitting that could be precipitated by a change in the definition of “waters of the United States” is unknown.

Methodology

The agencies consulted with internal EPA experts to better understand the potential effects on RCRA-related programs.

Conclusions

Because data are lacking on potentially affected facilities, POTWs, and corrective action or remediation programs due to a change in the definition of “waters of the United States,” the agencies are only able to characterize this effect as a possibility. The actual number of facilities or programs that handle qualifying wastes is uncertain. Whether state authorized NPDES programs would change their permitting approach should the federal scope of jurisdiction change is unknown. Even if a revised definition resulted in changes to state programs, the agencies have concluded elsewhere in this document that it is more likely that a change in the scope of CWA geographic jurisdiction following any revised definition of “waters of the United States” would change permit limits or compliance points rather than eliminate permitting altogether.

The agencies are not aware of other state, tribal, or local laws or programs that currently exist that could address the potential effects of a change in permitting responsibility from the CWA to RCRA following a change in the definition of “waters of the United States.” The agencies solicit comment and data to better assess potential effects on the RCRA program due to a change in CWA jurisdiction.

Consideration of Other Federal Programs

Introduction

When reviewing individual requests for a federal approval or permit under the various CWA programs, the approval or permit decision by the Environmental Protection Agency or the U.S. Army Corps of Engineers (Corps) may create a nexus to a variety of other federal laws, regulations, and policies that may need to be addressed as part of the individual request for a federal approval or permit. These federal laws, regulations, and policies include, but are not limited to, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the National Historic Preservation Act (NHPA).

Because the Corps issues thousands of permits nationwide under the Rivers and Harbors Act and the CWA section 404 dredged and fill permitting program, the Corps has developed streamlined processes for coordinating with other federal laws and regulations. However, where a revised definition of “waters of the United States” would mean that a 404 permit is no longer required, a complex set of scenarios for addressing the nexus with other federal laws results.

For a federal project, activity, program, permit, or other applicable federal undertaking affecting features that would not be regulated under CWA programs under a revised definition of “waters

of the United States,” the lead federal agency would be responsible for complying with any other applicable federal laws, regulations and policies. The two most likely scenarios for a federal agency to be the lead on a project are when a federal agency is constructing a project or when a non-federal entity (either public or private) needs a non-CWA federal permit or approval or is receiving funding for a project from a federal agency. An example of the first scenario would be where the Department of Army seeks a CWA section 404 permit from the Corps for construction of facilities that may affect “waters of the United States.” In such a situation, the Department of the Army may rely on the Corps processes for complying with other federal laws such as NEPA or the ESA. If the waters are no longer jurisdictional under a revised definition, then the Department of the Army would still be responsible for complying with those other federal laws. The exact mechanism for compliance would vary depending on the applicable federal law or policy and its requirements. An example of the second scenario would be where a community non-governmental organization is receiving a grant through the National Oceanic and Atmospheric Administration (NOAA) habitat conservation program for stream restoration activities that requires Corps approval or a permit under CWA section 404 for work in a “water of the United States.” NOAA is likely to rely on the Corps’ streamlined processes for complying with other federal laws for the grant program. If waters are no longer jurisdictional under a revised definition of “waters of the United States,” no CWA permit would be required, and NOAA would be responsible for ensuring that any actions funded by its grant programs would comply with other federal laws such as the NHPA.

The situation is different where there is no “lead” federal agency. In such cases, where certain waters would no longer be regulated under CWA programs for a non-federal project and no other federal nexus exists, the federal law or policy may no longer apply to the proposed activity. However, multiple states have laws, regulations, or policies that address the intent of the federal authorities including, but not limited to, public review requirements, environmental resource considerations, historic properties preservation, and special species protections. The extent to which each state’s authorities align with federal requirements varies from state to state, some providing more requirements and some providing fewer or none. Should the scope of CWA jurisdiction change, states without similar authorities have the discretion to determine if their laws, regulations or policies should be adjusted.

Endangered Species Act

The ESA provides for the protection of federally-listed threatened and endangered species and their designated critical habitat. When a CWA permit or approval is required, the Corps or the EPA (*i.e.*, where EPA retains authority under CWA section 402) takes appropriate action under section 7 of the ESA (including, in appropriate circumstances, conducting consultation with U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS)). Section 7 of ESA and the implementing regulations provide procedures and tools to streamline and expedite consultation. Under the proposed rule, fewer waters would be jurisdictional than under pre-2015 practice or the 2015 Rule, thereby reducing instances of a federal nexus through a CWA permit or other CWA action for the ESA. This potential decrease in associated ESA section 7 consultations could result in a corresponding increase in ESA section 10 permit activities for the USFWS and NMFS should applicants or states decide to seek incidental take coverage under ESA section 10.

National Historic Preservation Act

Section 106 of the NHPA directs federal agencies to take into account the effect of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment. In some cases, the Corps or EPA may require applicants to consult with the Advisory Council on Historic Preservation in order to receive a CWA approval or permit. As in the examples above, there are three scenarios that may occur when projects, under current conditions, are regulated under the CWA yet under the proposed rule may no longer be regulated in certain waters: (1) when another federal agency constructs the project; (2) when a non-federal entity (public or private) constructs the project and received funding or needs approval from another federal agency, and (3) when a non-federal entity constructs a project and no other federal agency permit approval is required and no federal funding is received. In scenarios one and two, where another federal agency may be the project lead or where a non-federal entity may need approvals or is receiving funding from another federal agency and a CWA permit is no longer required in certain waters, that federal agency would be responsible for complying with consultation requirements under section 106 of the NHPA. If the other federal agency does not have procedures and tools in place to streamline and expedite reviews similar to those of the Corps, the consultations with the Advisory Council on Historic Preservation, and Tribal and State Historic Preservation Officers would likely take more time and effort. Where a non-federal entity is receiving funding or approval from another federal agency, the burden of consultation would likely be shifted to the non-federal entity as the applicant or grantee.

In the third scenario, where a non-federal entity would not require any other approvals from other federal agencies and is not receiving federal funds, compliance with section 106 of NHPA will not be required for those projects if the only nexus to a federal undertaking, funding, or permit would have been through a CWA permit that is not required because a feature is not jurisdictional under the proposed definition of “waters of the United States.” The non-federal entity would need to comply with applicable state laws for historic properties which may or may not align with NHPA in the types of historic properties protected, the consultation process, and/or the proposed activities subject to review (*i.e.*, the state law may only apply to public projects and not private).

Though the use of the NHPA is not unique to tribes, several tribes have raised concerns throughout the tribal consultation and engagement process for this proposed rule about the potential tribal impacts to the use NHPA resulting from a revised definition of “waters of the United States.” Historic properties may include prehistoric or historic districts, sites, buildings, structures, objects, sacred sites, and traditional cultural places, that are included in, or eligible for inclusion in, the National Register of Historic Places. Under section 101 of the NHPA, property of traditional religious and cultural importance to a tribe or Native Hawaiian organization may be determined to be eligible for inclusion on the National Register. A change in the scope of the CWA could result in fewer opportunities for tribes to be involved in the section 106 consultation process.

Conclusions

As discussed above, other federal laws, regulations, and policies are often addressed as part of individual requests for a federal approval or permit. Where a revised definition of “waters of the

United States” would mean that a CWA permit is not required for certain activities, in some cases project proponents will remain responsible for complying with these laws; in other cases, they will not. In addition, where there are currently joint applications procedures in place, federal, state, and local agencies may depend on notifications through the EPA or the Corps permitting programs to inform them whether an applicant needs to apply for approval under other applicable federal, state, local laws, regulations or policies not directly connected to a CWA permit or approval. Examples of such approvals include some state regulatory programs and state or local coastal zone management acts or ordinances. For these programs, the federal, state, or local agency may consider modifying their procedures to ensure the regulated community is appropriately notified and applying for required permits.

The agencies solicit comment and data to better assess potential effects on these other federal programs due to a change in CWA jurisdiction as well as information on other federal laws and programs the agencies have not addressed in this RPA.