

1 Answer and Request for Hearing including the work performed by Respondent
2 described in the Compliance Plan, and to date, and the communications and
3 discussions with EPA regarding the same. Mr. Jackson will also testify regarding
4 the meetings and communications with EPA which formed Jackson's belief and
5 reliance that EPA agreed with Respondent that it was not required to prepare a
6 written SPCC Plan because a discharge of petroleum from the facility would not
7 impact waters of the U.S., and in rebuttal to the Complainant's exhibits and
8 witness testimony. Mr. Jackson will also testify regarding the facility's Oregon
9 general stormwater discharge permit and Stormwater Pollution Control Plan,
10 compliance with the SPCC Plan requirements at all times prior to its preparation
11 of a written SPCC Plan, and prior to EPA's filing of the Complaint on December
12 19, 2024. Mr. Jackson will testify as to his firsthand knowledge of the facility and
13 adjacent properties' topography, ditches, retention ponds, swales, culverts,
14 wetlands and drainage pathways relevant to whether a discharge of oil from the
15 facility could impact waters of the U.S., any allegations by EPA that Respondent's
16 actions had an adverse effect on water quality in violation of the Clean Water Act,
17 and the lack of any economic benefit regarding failure to prepare an SPCC Plan as
18 alleged by EPA.

19 3. **Daniel Scarpine, Principal Engineer, Aquarius Environmental.** Expert witness.
20 Mr. Scarpine will testify as to Respondent's spill protection equipment and safety
21 procedures during his visits to the facility in 2022-2024, his preparation of a written
22 SPCC Plan for the facility prior to EPA's filing of the Complaint on December 19,
2024. the facility and surrounding properties' topography, ditches, retention ponds,
swales, culverts, and drainage pathways, including the existing features. Mr.
Scarpine will testify regarding his knowledge of the facility's Stormwater Pollution

1 Control Plan, and in rebuttal to the exhibits and testimony of Complainant's
2 witnesses, including regarding whether a discharge of oil from the facility would
3 adversely impact waters of the U.S. as alleged by Complainant (and the use of
4 EPA's HSSM model for such allegations), the definition of waters of the United
5 States in EPA's Proposed Rule (Fed. Reg. November 20, 2025) as applicable to
6 EPA's Clean Water Act jurisdictional allegations, and any allegations by EPA that
7 Respondent's actions had an adverse effect on water quality in violation of the Clean
8 Water Act.

9 4. **Greg Summers, Principal Scientist, Anchor QEA.** Expert witness. Mr. Summers
10 will testify regarding EPA's proposed rule on "Updated Definition of Waters of the
11 United States" and application of the proposed requirements to Respondent's
12 facility regarding preparation of an SPCC Plan, EPA's use of the HSSM model,
13 and in rebuttal to EPA's exhibits and witness testimony regarding Clean Water Act
14 jurisdiction as it pertains to the alleged SPCC Plan violation.

15 5. **Julie Fox, Senior Scientist, Anchor QEA.** Expert witness. Ms. Fox will testify as
16 to her wetlands evaluation performed for Respondent in 2024 in response to EPA's
17 allegations of continuous surface water connection from wetlands to waters of the
18 U.S., EPA's proposed rule on "Updated Definition of Waters of the United States"
19 and application of the proposed requirements to Respondent's facility, and in
20 rebuttal to EPA's exhibits and witness testimony regarding Clean Water Act
21 jurisdiction as it pertains to the alleged SPCC Plan violation.

22 6. **Justin Pounds, Registered Geologist, Bridgewater Group.** Fact witness. Mr.
Pounds is expected to testify regarding his preparation of the facility's stormwater

1 permit and Stormwater Pollution Control Plan and related aspects of Respondent's
2 performance of the work described in the Compliance Plan.

3 7. **Richard Franklin, EPA Region 10 Oil Program Coordinator.** Mr. Franklin will
4 be called as a fact witness regarding his meetings, correspondence and related
5 communications with Respondent prior to EPA's Complaint, including at the
6 September 21, 2021 inspection and meeting with Respondent regarding the
7 facility's compliance with EPA's laws and regulations.

8 8. **Cassidy Owen, EPA Contractor.** Mr. Owen will be called as a fact witness
9 regarding his meetings and communications with Respondent, including his
10 attendance at the facility during the September 21, 2021 inspection of the facility
11 and surrounding properties with Richard Franklin.

12 Respondent reserves to supplement its exhibits and witness list, and the right to call
13 any fact witnesses named by Complainant in its Prehearing Exchange or Rebuttal
14 Prehearing Exchange.

15 **II. EXHIBITS**

16 For purposes of the list of documents below, "Respondent's Exhibit" is abbreviated as
17 "RX."

18 Additional documents, including documents in reply or rebuttal, will be provided as a
19 supplement to this Prehearing Exchange as provided by the Prehearing Order and 40 C.F.R.
20 §22.19. In this Initial Prehearing Exchange Respondent has not duplicated documents and
21 exhibits designated by Complainant in its Prehearing Exchange and accordingly reserves
22 the right to introduce any document and exhibit designated by Complainant in its
Prehearing Exchange or that will be designated in its Rebuttal Prehearing Exchange.

RX #	Description
RX 01	November 12, 2022, EPA Notice of Intent email to Jackson
RX 02	February 10, 2023, Compliance Plan
RX 03	April 14, 2023, EPA response and request for additional information letter
RX 04	May 2, 2023, Jackson response to EPA request for additional information
RX 05	August 3, 2023, Emails w/ EPA re compliance plan meeting
RX 06	April 11, 2024, EPA email to Jackson re staff change to A. Bruner
RX 07	July 30, 2024, Jackson Compliance Plan (attached to settlement letter, not included).
RX 08	October 26, 2023, DEQ NPDES Permit 1200-Z Coverage Letter
RX 09	March 12, 2025, EPA Continuous Surface Connection Joint Guidance Memo
RX 10	Federal Register / Vol. 90, No. 222 / Thursday, November 20, 2025 / Proposed Rules
RX 11	Daniel Scarpine Resume
RX 12	Greg Summers Resume
RX 13	Julie Fox Resume

III. ESTIMATED DURATION OF PRESENTATION OF RESPONDENT'S CASE

Respondent submits that the hearing in this case should be held in Clatsop County, Oregon pursuant to 3 §22.21 (d) and §22.19(d). Respondent estimates that the time needed for his direct case will be 1 to 1 1/2 days. An interpreter will not be needed for any of Respondent's witnesses.

IV. FACTUAL INFORMATION RELEVANT TO THE ASSESSMENT OF A PENALTY AND SUPPORTING DOCUMENTATION

Respondent and its witnesses will testify regarding their reliance upon EPA's communications (including Complainant's exhibits), actions, inactions and related correspondence that EPA did not request, require or otherwise communicate that an SPCC Plan was required for the facility and did not dispute Respondent's assertions that there was no pathway from the facility to waters of the U.S. in the event of a discharge of

1 petroleum from the facility, as well as their compliance with all applicable federal, state
2 and local laws.

3
4 **V. PENALTY REDUCTION**

5 Respondent asserts that no penalty is applicable or required based upon the evidence and
6 testimony of Respondent that it reasonably believed and relied upon communications with
7 EPA representatives that no SPCC Plan was required, that the facility employed and
8 utilized the necessary oil spill prevention measures, equipment and containment required
9 in such plan, and has fully cooperated with EPA since issuance of the November 15, 2023
10 Notice of Intent, and voluntarily performed each and every action identified by EPA as set
11 forth in the Compliance Plan, including preparation of an SPCC Plan, all completed over
12 on the compliance plan schedule EPA agreed to prior to issuance of the Complaint.

13 **VI. RESERVATION OF RIGHTS**

14 Respondent respectfully reserves the right to call all witnesses by Complainant; to
15 recall any and all witnesses in rebuttal; and to modify or supplement the names or witnesses
16 and exhibits prior to the Adjudicatory Hearing, pursuant to 40 C.F.R. Part 22, and upon
17 adequate notice to Respondent and this Tribunal.

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20 The Prehearing Exchange will be supplemented, including submission of names of
21 additional witnesses and/or submission of additional exhibits prior to hearing, upon
22 timely notice to Presiding Officer and to Complainant.

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DATED this 6th day of February 2026.

BAKALIAN & ASSOCIATES P.S.

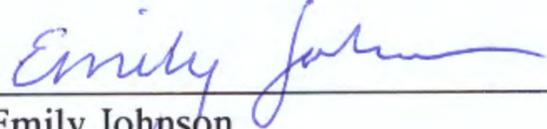
Allan Bakalian

Allan Bakalian, WSBA# 14255
Bakalian & Associates P.S.
8201 164th Avenue NE, Suite 200
Redmond, WA 98052
(425) 985-6527
allan@bakalianlaw.com
Attorneys for Respondent

In the Matter of *Jackson & Son Distributors, Inc., d/b/a Jackson and Son Oil*, Respondent.
Docket No. CWA-10-2025-0023

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **RESPONDENT'S PREHEARING EXCHANGE**, dated February 6, 2026, was sent this day to the following parties in the manner indicated below.



Emily Johnson
Legal Assistant

Copy by OALJ E-Filing System to:

U.S. Environmental Protection Agency
Office of Administrative Law Judges
https://yosemite.epa.gov/OA/EAB/EAB-ALJ_Upload.nsf

Copy by Electronic Mail to:

Ashley Bruner
Assistant Regional Counsel
U.S. EPA, Region 10
1200 Sixth Avenue
Suite 155, M/S 11-C07
Seattle, WA 98101
Email: bruner.ashley@epa.gov
Counsel for Complainant

Christine Allen
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue Suite 155, M/S 11-I12
Seattle, Washington 98101
(206) 553-1495
Email: Allen.Christine.J@epa.gov
Co-Counsel for Complainant

Dated: February 6, 2026

RX 01

Notice of Intent to File Complaint for Violations of the Clean Water Act and Opportunity to Confer Prior to Filing

From: Masters, Kyle (masters.kyle@epa.gov)
To: jacksonandsonoil@yahoo.com
Cc: moore.johnm@epa.gov
Date: Tuesday, November 15, 2022 at 09:27 AM PST

CONFIDENTIAL - FOR SETTLEMENT PURPOSES ONLY

Casey Jackson, General Manager
Jackson and Son Oil
84721 Happel Lane
Seaside, Oregon 97138
jacksonandsonoil@yahoo.com

Dear Mr. Jackson:

The U.S. Environmental Protection Agency (EPA) documented violations of the Clean Water Act (CWA) at the Jackson and Son Oil facility, located at 84721 Happel Lane in Seaside, Oregon. A summary of alleged violations is attached. The purpose of this notice is to inform you that EPA is prepared to initiate an enforcement action for these violations and to offer you the opportunity to discuss this matter with EPA prior to the filing of a Complaint.

Section 311(b) of the Clean Water Act, 33 U.S.C. § 1321(b), and 40 C.F.R. Part 19 authorize EPA to seek penalties for violations of the Clean Water Act up to \$51,796 per day of violation.

In general, EPA favors pre-filing discussions, which help ensure that we have all relevant information and may lead to resolution that avoids the time and expense of litigation. If we can reach a settlement, we would resolve the case with an administrative Consent Agreement and a Final Order, and EPA would not file a Complaint. Once a Consent Agreement and a Final Order is signed by all parties, EPA typically issues a press release announcing the settlement.

If Jackson and Son Oil and EPA do not reach a timely settlement, EPA will either file an administrative Complaint and the case will be assigned to an Administrative Law Judge, or refer the matter to the Department of Justice for filing in federal district court. EPA reserves the right to seek the maximum allowable penalty in litigation of this case should Jackson and Son Oil and EPA fail to reach a settlement in the time period allotted.

Before responding to this notice, EPA encourages you to review several documents that are pertinent to EPA's enforcement action and may benefit any settlement discussions:

1. EPA's [Small Business Resources Information Sheet](#) provides information on potential compliance assistance opportunities that are available to you.
2. EPA's *Civil Penalty Policy for Section 311(b)(3) and Section 311(j) of the Clean Water Act* (August 1998) sets forth factors that EPA considers in determining the appropriate penalty for your violations. For more information, visit EPA's Penalty Policies and Guidance webpage at www.epa.gov/enforcement/enforcement-policy-guidance-publications.

EPA generally provides a period of 90 days to reach settlement before considering more formal enforcement options. To reach a timely settlement within 90 days, prefiling negotiations should begin within 30 days. If you wish to set up an initial meeting to discuss this matter, please contact J. Matthew Moore in the Office of Regional Counsel at (206) 553-6266 within 14 days of this notice. If we do not hear from you within 14 days, EPA will take that as an indication that you do not wish to engage in prefiling negotiations, in which case EPA intends to initiate formal enforcement action unilaterally.

Please reply to this email to confirm its receipt. Thank you for your prompt attention to this important matter.

Sincerely,

Kyle Masters
Surface Water Enforcement Section
U.S. EPA Region 10
1200 Sixth Avenue, Ste. 155, M/S 20-C04
Seattle, WA 98101

Masters.Kyle@epa.gov

Phone: (206) 553-8515



JacksonAndSonOil_ViolationsTable.pdf
375.3kB

List of Violations

Jackson & Son Distributors, Inc., dba Jackson and Son Oil – Seaside, Oregon

Inspection Date: September 21, 2021

SPCC Rule Reference (40 CFR Part 112)	Description of Violation(s)
40 C.F.R. § 112.3(a)	The Facility has an aggregate aboveground storage capacity exceeding 1,320 gallons of oil and is a non-transportation-related Facility engaged in storing oil, which due to its location could reasonably be expected to discharge oil into or upon the navigable waters of the United States; however, at the time of the EPA inspection, the Facility had not developed an SPCC Plan.
40 C.F.R. §§ 112.7(c) and 112.8(c)(2)	Bulk storage tank installations must provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitations. EPA identified two 10,000-gallon single-walled diesel tanks, located at the eastern edge of the Facility, without secondary containment.
40 C.F.R. § 112.8(b)(3) and (4)	Facility drainage systems from undiked areas with a potential for a discharge must be engineered to retain or return oil in the event of a discharge. EPA observed that Facility drainage from un-diked areas (i.e., the eastern diesel transfer area and the southern diesel and gasoline transfer area) flowed offsite rather than being designed to be retained onsite.
40 C.F.R. § 112.7(h)(1)	Containment systems for drainage from truck loading/unloading racks (“TLUR”) must hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the Facility. The Facility's TLUR contains a single sump inlet that is connected to a 100-gallon sump. The largest compartment of a tank truck loaded at the TLUR is 3,300 gallons; therefore, the capacity of the sump is inadequate.
40 C.F.R. §§ 112.7(e) and 112.8(c)(6)	Facilities must conduct inspections and tests in accordance with written procedures developed for the facility and keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, for three years. The Facility must test or inspect each aboveground container for integrity on a regular schedule, and whenever it makes material repairs. None of the Facility's aboveground storage tanks have received any formal integrity testing since being placed into service, and the Facility does not maintain inspection records.
40 C.F.R. § 112.7(h)(2)	Facilities must provide a warning system in the TLUR area to prevent vehicles from departing before complete disconnection of oil transfer lines. The Facility provides no brake interlock system, physical barriers, warning signs, or wheel chocks at the TLUR.
40 C.F.R. § 112.8(c)(1)	Facilities may not use a container for the storage of oil unless its material and construction are compatible with the materials and conditions of storage. Metal corrosion and delamination was observed at the base of two of the four field-constructed aboveground storage containers located in the center of the Facility. An oil leak and oil staining were observed along the base of one tank.
40 C.F.R. § 112.8(c)(8)	At each container installation, the Facility must employ specified devices to avoid discharges caused by tank overflow. The Facility has failed to employ any of the required devices.

RX 02

COMPLIANCE PLAN

JACKSON and SON OIL
84721 Happel Lane, Seaside, Oregon

The following compliance plan and schedule is provided to the US Environmental Protection Agency Region 10 to address certain Clean Water Act requirements associated with EPA's Spill Prevention Control and Countermeasure (SPCC) regulations (40 CFR Part 112) identified by EPA in its July 2021 inspection report, January 2022 correspondence and November 15, 2022 Notice of Intent.

1. Site Survey. Jackson will complete a topographical survey of the facility to determine the stormwater drainage pathways associated with its operations, and for designing and constructing spill containment, stormwater control systems and the SPCC Plan.
 - a. Schedule: April 2023
2. New ASTs/Secondary Containment. Jackson has ordered a two-compartment double-walled AST (10,000 compartments) to replace the two existing 10,000-gallon diesel ASTs at the cardlock fill station.
 - a. Schedule: August/September 2023 The new double-walled AST has been ordered and is expected to be delivered in July. It will be installed when the cardlock fill station improvements are completed before September 30.
3. Bulk plant Inspection and Testing. Jackson has contracted with Advance Coating Solutions to perform formal integrity testing of the four 20,000-gallon ASTs at the bulk storage plant, including identifying any potential corrosion or leaks. The tanks will need to be completely emptied and cleaned before testing.
 - a. Schedule: April 2023
4. Truck Loading Containment (TLUR). Jackson has engaged Daniel Scarpine, P.E., with Aquarius Environmental, to engineer and design a spill containment system for the bulk plant TLUR, consistent with 40 CFR 112(h)(1). The TLUR will also be designed to manage stormwater collection and discharges under the facility's new Stormwater Pollution Control Plan (SWPCP) and Oregon DEQ 1200Z stormwater permit.
 - a. Schedule: The TLUR containment will be constructed during the summer, and completed by September 30, 2023, in conjunction with the facility's stormwater system improvements and the SWPCP Plan.

5. TLUR Warning System. Jackson will obtain and install the required warning system in the TLUR area to prevent vehicles from departing before disconnecting the transfer lines.
 - a. Schedule: September 2023

6. Tank Overfill Warning Devices. The facility tanks/containers will be equipped the necessary devices per 40 CFR 112.8(c)(8).
 - a. Schedule: September 2023

7. Loading area stormwater/oil spill containment – The cardlock loading area catchbasins will be replaced with spill containment compartments to prevent a release of oil through the stormwater system.
 - a. Schedule: September 30, 2023

8. SPCC Plan. Jackson will prepare a SPCC plan for the facility, following the completion of the facility containment, TLUR and facility stormwater drainage system improvements.
 - a. Schedule: September 30, 2023

RE: Jackson and Sons

From Allan Bakalian <allan@bakalianlaw.com>

Date Fri 2/10/2023 5:17 PM

To Moore, John (Matthew) <moore.johnm@epa.gov>

Cc Emily Johnson <emily@bakalianlaw.com>; Fidis, Alexander <Fidis.Alexander@epa.gov>

 1 attachment (105 KB)

JacksonCompliancePlan021023.pdf;

Hi Matthew and Alexander,

Attached is the compliance plan and schedule for Jackson and Sons Oil.
Please let me know if you have any questions or would like to discuss it further.

Allan

Allan Bakalian | BAKALIAN & ASSOCIATES PS | allan@bakalianlaw.com | 425-985-6527

8201 164th Ave. NE, Ste. 200, Redmond, WA 98052



Confidential/Privileged Communication: This email and any attachments are confidential, privileged and intended only for the intended recipient(s). Unauthorized disclosure, copying, distribution or use of this email is prohibited. If you received this email in error, please notify me immediately and delete the message and any attached documents. Thank you.

From: Moore, John (Matthew) <moore.johnm@epa.gov>

Sent: Friday, February 10, 2023 11:29 AM

To: Allan Bakalian <allan@bakalianlaw.com>

Cc: Emily Johnson <emily@bakalianlaw.com>; Fidis, Alexander <Fidis.Alexander@epa.gov>

Subject: RE: Jackson and Sons

Hi Allan,

Thank you for the update. We will anticipate receiving the compliance plan today. When you submit it, please include my colleague, Alex Fidis, who I cc'ed on this email. In mid-February, I will be out of the office on parental leave and Alex is assigned to this enforcement matter while I am out.

We look forward to hearing from you soon.

Matt

J. Matthew Moore
U.S. EPA, Region 10

RX 03



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 155
Seattle, WA 98101

OFFICE OF REGIONAL
COUNSEL

April 14, 2023

Sent via email

Mr. Allan Bakalian
Bakalian & Associates PS
8201 164th NE, Suite 200
Redmond, Washington 98052
allan@bakalianlaw.com

Re: Jackson and Son Oil SPCC Compliance Plan

Dear Mr. Bakalian:

EPA Region 10 has reviewed the Compliance Plan for the Jackson and Son Oil facility located at 84721 Happel Lane, Seaside, Oregon, submitted by email on February 10, 2023. Overall, the Compliance Plan needs additional specificity for the compliance measures to be implemented and more clarity with respect to the proposed schedule, including how the interdependent projects will be sequenced. The enclosure to this letter requests additional information intended to address the lack of specificity in the Compliance Plan. In addition, we also request that Jackson and Son Oil provide any updates since the February 10 submittal related to the implementation of compliance measures and work schedule.

Provide a response to each of the questions in the enclosure within two weeks of the date of this letter, or by April 28, 2023. If additional time is needed to respond to one or more of the questions please identify which question, provide a reason why more time is needed and the earliest date a response can be provided. Responses to all other questions should be submitted on or before April 28

After we receive and review the responses, we would like to schedule a meeting to discuss the Compliance Plan and any remaining questions or concerns. Furthermore, we would like to discuss incorporating the compliance measures and schedule for completion of the work in an administrative order to ensure the facility comes into compliance in a timely manner. If you have any questions concerning this letter or the enclosure please contact me at (206) 553-4710 or fidis.alexander@epa.gov. Thank you for your attention to this matter.

Sincerely,

Alex Fidis
Assistant Regional Counsel
EPA Region 10

cc: Kyle Masters

Enc: Request for Additional Information Concerning the Jackson and Son Oil Compliance Plan

ENCLOSURE:

Request for Additional Information Concerning the Jackson and Son Oil Compliance Plan

Provide answers to the each of the following questions and subparts:

1. Please provide a schedule of integrity testing at the bulk storage area.
 - a. Has integrity testing for the four approximately 20,000 gallon tanks started?
 - b. Will the tanks to be emptied, cleaned, and tested in sequence?
 - c. What industrial standard for integrity assessment will be used?
 - d. Which company will perform the integrity testing?
 - e. Will the work include verifying the size of the containment around the four ASTs in this area?
 - f. Will routine inspection procedures for facility staff be implemented at this time?
2. Has the Site Survey scheduled to be completed in April 2023 been completed? If so, please provide a copy of the report. If the survey has not been completed, please provide the dates the work will be conducted.
 - a. Will the survey support the 1200-Z industrial stormwater permit application?
 - b. Please provide a copy of the facility's Stormwater Pollution Prevention Plan or an estimated date the Plan will be completed.
3. Identify the company providing the new 10,000 gallon double walled tanks for the cardlock fill station and provide documentation the tanks have been purchased.
 - a. Are these tanks constructed and tested to a specific industry standard?
 - b. Provide documentation verifying the integrity of the tanks from the manufacturer.
 - c. Identify any other improvements that have been made or that are scheduled for the cardlock station?
 - d. Provide a construction schedule for the work, including a scope of work and a narrative outlining the work to include use of a liner, drainage pathway improvements, other equipment and procedures to control a potential discharge.
4. Provide a complete construction schedule for the containment system work slated for the TLUR area.
 - a. Provide specification for (i.e. as-built drawings) the secondary containment.
 - b. Provide specifications for all control devices, e.g. oil/water separators, and describe inspection protocols.
5. Identify the type of warning system to be installed in the TLUR area.
 - a. Provide a work completion date and the name of the company conducting the work.
 - b. Will the warning system be installed concurrently with other improvements at the facility?

6. Identify the type of tank overflow warning devices to be installed in the bulk storage area.
 - a. Provide the name of the company conducting the work.
 - b. Provide a date when the work will be finished.
 - c. Will the work be conducted concurrently with other improvements at the facility?

7. Provide a complete construction schedule for the containment system work slated for the cardlock area.
 - a. Provide specification, (i.e. as-built drawings) of the secondary containment system and components needed to prevent a release of oil to the stormwater conveyance system.
 - b. Provide a description of operations and management and on-going inspection protocols.
 - c. Will the containment system include an oil/water separator? If so, identify the make and model.

8. Provide the professional engineer license number for the person signing and attesting the SPCC Plan.

RX 04

BAKALIAN & ASSOCIATES P.S.

Allan B. Bakalian
Admitted in OR & WA

8201 164TH AVENUE NE, SUITE 200
REDMOND, WA 98052

allan@bakalianlaw.com
(425) 985-6527

May 2, 2023

Email: fidis.alexander@epa.gov

Alex Fidis, Assistant Regional Counsel
EPA Region 10, Office of Regional Counsel
1200 Sixth Ave., Suite 155, M/S 11-C07
Seattle, WA 98101

**Re: Jackson and Son Oil SPCC Compliance Plan
Request for Additional Information**

Dear Ms. Fidis:

This letter is in response to your April 14 request for additional information concerning Jackson and Son's February 10, 2023 Compliance Plan. Thank you for acknowledging our submittal proposed implementation schedule which, as you noted, is pending delivery of the new equipment and completion of the engineering plans and construction schedule for the petroleum storage upgrades requested by EPA and the separately administered Oregon 1200Z industrial stormwater permit and pollution control plan. We appreciate your assistance as our team of professionals, including Daniel Scarpine, an Oregon registered engineer (#65720PE), work to complete the petroleum storage, spill containment and stormwater improvements in a timely manner.

As you requested, below is a status update of the work outlined in the February 10, 2023 Compliance Plan.

1. Bulk Petroleum (AST) Storage Area Integrity Testing.

The integrity testing was performed on April 5, 2023, by Powers Engineering and Inspection Inc. We expect to receive the reports shortly, which will include the details and specifications you requested. Please note that the tanks were not required to be emptied for the testing. The inspection also confirmed that none of the tanks are leaking as noted during EPA's September 2021 inspection and photo log (photograph no. 17); the corrosion at the base of this southern most AST was removed by sanding and recoating. Inspection procedures are being implemented as part of the facility maintenance.

2. Site Survey.

Attached is a copy of the site survey, with topographical elevations used to support the pending SPCC plan and 1200-Z industrial stormwater permit application and pollution control plan. Our engineer, Daniel Scarpine, has also prepared the attached figures and plans for the stormwater management improvements (50% design) for the facility, which incorporate the TLUR and Cardlock containment and stormwater bypass systems as EPA requested.

3. Cardlock ASTs.

Jackson has purchased a new 15,000 gallon above ground double-walled storage tank, with separate 9,000 gallon and 6,000-gallon chambers, from Source North America Corporation. The tank is manufactured by Greer Steel Inc. and is expected for delivery in June. A copy of the invoice and deposit securing this purchase is attached. The new AST complies with the UL-142/STI F921 tank specification standard, which is attached. Construction and installation of the new double-chamber AST and stormwater management improvements will include a petroleum spill containment system for each cardlock filling area, as shown on the attached stormwater plan figures.

4. Petroleum Storage Tank Farm Truck Loading and Unloading Area.

The attached 50% design for the stormwater management improvements depicts the oil/water separator, stop valve and stormwater collection system for the TLUR. We will provide the final plans for your review as soon as they are completed.

5. TLUR Warning System.

The new TLUR warning system will be installed as part of the ongoing facility upgrades and improvements. Copies of the invoices with the manufacturer and system components will be provided following installation.

6. AST Bulk Storage Area Overfill Warning System.

Jackson has repaired and is currently using visual mechanical tank gauges with warning level markings to avoid and prevent overfilling of the bulk storage ASTs.

7. Cardlock Containment Construction Schedule.

The Cardlock containment construction schedule will commence upon delivery of the new 15,000-gallon AST and DEQ's issuance of the 1200Z stormwater permit and approval of the SWPCP and final engineering design and construction plans described above. Details of these systems, along with a description of their operation, management, and inspection protocols will be identified on the as-built drawings and plans.

Please let me know if you have any questions about this submittal, and when you would like to schedule a time to review and discuss the schedule for completion of this work.

Very truly yours,

Allan Bakalian

Allan Bakalian
Attachments

RX 05

RE: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

From Allan Bakalian <allan@bakalianlaw.com>
Date Thu 8/3/2023 5:26 PM
To Fidis, Alexander <Fidis.Alexander@epa.gov>
Cc Emily Johnson <emily@bakalianlaw.com>

OK. How about 3pm tomorrow?
You can email the invite.

Thank you

Allan Bakalian | BAKALIAN & ASSOCIATES PS | allan@bakalianlaw.com | 425-985-6527
8201 164th Ave. NE, Ste. 200, Redmond, WA 98052



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From: Fidis, Alexander <Fidis.Alexander@epa.gov>
Sent: Thursday, August 3, 2023 3:45 PM
To: Allan Bakalian <allan@bakalianlaw.com>
Subject: RE: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

Thanks Allan –
I have availability tomorrow (Friday) after 2:30 pm and if that doesn't work I'm free Monday after 12. Let me know if you have availability and I will send a scheduler.
-Alex

From: Allan Bakalian <allan@bakalianlaw.com>
Sent: Wednesday, August 02, 2023 10:45 AM
To: Fidis, Alexander <Fidis.Alexander@epa.gov>
Subject: RE: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

Hi Alex,

I am happy to give you an update after speaking with the Jackson team today.
I do not think we need to involve Jackson's consultants, but if you have specific questions, I will seek their input as necessary.
What is your availability this afternoon (after 3pm), tomorrow or Friday?

Allan

Allan Bakalian | BAKALIAN & ASSOCIATES PS | allan@bakalianlaw.com | 425-985-6527

8201 164th Ave. NE, Ste. 200, Redmond, WA 98052



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From: Fidis, Alexander <Fidis.Alexander@epa.gov>

Sent: Friday, July 28, 2023 10:16 AM

To: Allan Bakalian <allan@bakalianlaw.com>

Subject: RE: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

Allan –

I'm following up on the email below. Please let me know if your client is willing to schedule a time to discuss the status of the work identified in the compliance plan submitted to EPA. If you'd like to discuss by phone feel free to call me at 971-221-7813. Thank you.

-Alex

From: Fidis, Alexander

Sent: Friday, July 14, 2023 2:45 PM

To: Allan Bakalian <allan@bakalianlaw.com>

Subject: RE: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

Allan –

EPA is interested in getting an update on the status of the compliance measures that Jackson and Son have been implementing. Is there a day/time that would work for a quick phone call (maybe 30 minutes) with the EPA compliance officer, relevant personnel from Jackson or its consultant, and the two of us. Given that we might have some questions it seems more efficient to discuss verbally.

-Alex

From: Allan Bakalian <allan@bakalianlaw.com>

Sent: Friday, May 05, 2023 11:32 AM

To: Fidis, Alexander <Fidis.Alexander@epa.gov>

Cc: Casey Jackson <jacksonandsonoil@yahoo.com>; Emily Johnson <emily@bakalianlaw.com>

Subject: Jackson and Son Oil Compliance Plan - AST Integrity reports 3 of 3 emails

Attached are the last two integrity test reports as noted in my first email.

Please confirm receipt of all 7 reports at your earliest convenience.

Thank you.

Allan Bakalian | BAKALIAN & ASSOCIATES PS | allan@bakalianlaw.com | 425-985-6527

8201 164th Ave. NE, Ste. 200, Redmond, WA 98052



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RX 06

From: [Bruner, Ashley](#)
To: [Allan Bakalian](#)
Cc: [Spaulding, Kate](#)
Subject: Jackson and Son Oil
Date: Thursday, April 11, 2024 9:58:58 AM
Attachments: [JacksonAndSonOil_ViolationsTable.pdf](#)

Allan –

EPA staffing on the Jackson and Son Oil case has transitioned to Kate Spaulding (cc'd here) and me. I am an attorney in the Region 10 water law branch and Kate is a compliance officer in our Enforcement and Compliance Assistance Division. I realize it has been a while since you have had contact with EPA. We would like to move forward with closing this case out. As a first step to accomplish that, I'd like to schedule a meeting to discuss the status of the facility's work related to the attached list of violations. I have coordinated with Alex Fidis and am aware of the work that the facility had accomplished through August of 2023, but need to get a current picture of compliance. Could you suggest some times that you and your client are available to meet? If you'd like to discuss, my phone number is 206-553-0702.

Thank you.

Ashley

Ashley Bruner | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
she/her/hers



RX 07

Jackson & Son Oil Compliance Plan Schedule and Status

Action Item	Status	Date Completed
Bulk Petroleum (AST) Storage Area Integrity Testing	Powers Engineering & Inspection (4/5/23)	5/5/2023
Site Survey	Completed by Benthin Land Surveying Inc.	3/31/2023
1200-Z Industrial Stormwater Permit	Permit Issued	10/26/2023
Stormwater Pollution Prevention Plan (SWPCP)	Approved by DEQ	9/15/2023
Cardlock ASTs Containment (replace 2-single wall ASTs)	Purchased new double-wall 15,000 gal. split AST (9,000gal/6,000gal)	Installation in progress (expect to be operational by September 2024)
TLUR overfill warning system	Overfill alarm/shut off	4/28/2024
Repair/Replace bulk storage tank overfill warning devices	Completed.	4/28/2023
TLUR containment with Oil/Water Separator	50% Engineering Design completed; construction scheduled	Fall 2024

Pending Actions

RX 08



Oregon

Tina Kotek, Governor

Department of Environmental Quality
Water Quality

October 26, 2023

Larry Jackson
Jackson & Son Distributors, Inc.
84721 Happel Lane
Seaside, Oregon 97138

RE: Issuance NPDES Permit Number 1200-Z
Permit Number: NGEN12Z-ORRZ00043
Facility: Jackson & Son Oil
84721 Happel Ln
Seaside Oregon 97138
Clatsop County
SIC Code(s): 5171

Dear Permit Registrant:

The Oregon Department of Environmental Quality has issued coverage under the 2021-2026 1200-Z industrial stormwater general permit to the above reference facility as of this date. Refer to the issued monitoring table with the monitoring requirements for the facility.

It is your responsibility to take all necessary steps to comply with conditions established in the permit to help protect Oregon's waterways. Download and save a copy of the final permit on DEQ's industrial stormwater website: <https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Industrial.aspx>. Technical assistance materials associated with this permit may also be found on the website.

The industrial stormwater general permits, technical assistance manuals and other information is also available on [DEQ Stormwater Program's website](#).

Sincerely,

[DEQ Stormwater Permitting Program](#)

RX 09



**MEMORANDUM TO THE FIELD BETWEEN
THE U.S. DEPARTMENT OF THE ARMY, U.S. ARMY CORPS OF ENGINEERS
AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY CONCERNING THE PROPER IMPLEMENTATION
OF “CONTINUOUS SURFACE CONNECTION” UNDER THE DEFINITION OF “WATERS OF THE UNITED
STATES” UNDER THE CLEAN WATER ACT**

March 12, 2025

PURPOSE

This memorandum provides guidance to the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency regarding the implementation of the definition of “waters of the United States” under both regulatory regimes currently operative across the country: the “Revised Definition of ‘Waters of the United States,’” as amended by the final rule “Revised Definition of ‘Waters of the United States’; Conforming” (the amended 2023 rule; 40 C.F.R. 120.2 and 33 C.F.R. 328.3) and the “pre-2015 regulatory regime”¹ consistent with the Supreme Court’s decision in *Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023).²

This memorandum is being issued in response to requests for clarification on the implementation of the Federal Water Pollution Control Act, also known as the Clean Water Act, with respect to adjacent wetlands in light of the Supreme Court’s decision in *Sackett v. Environmental Protection Agency*. Specifically, the preamble to the 2023 Rule (“Revised Definition of ‘Waters of the United States,’” 88 FR 3004 (January 18, 2023)) and the preamble to the conforming rule (“Revised Definition of ‘Waters of the United States’; Conforming,” 88 FR 61964, September 8, 2023) did not include adequate direction or guidance on the meaning of the “continuous surface connection” requirement, and the agencies’ case-specific policy memoranda issued post-*Sackett* neither provided national guidance on the topic nor clear and transparent direction for the public or the agencies. The case-specific policy memoranda also contain conclusions which are inconsistent with the discussion of “continuous surface connection” as described in the pre-2015 regulatory regime guidance documents and the *Sackett* decision. In order to provide national consistency and eliminate confusion about the scope of “adjacent wetlands,” and

¹ The “pre-2015 regulatory regime” refers to the agencies’ definition of “waters of the United States” set forth in pre-2015 Corps and EPA regulations (the Corps’ 1986 regulations and the EPA’s 1988 regulations, inclusive of the exclusion for prior converted cropland, which both agencies added in 1993), implemented consistent with relevant case law, including *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001), and *Rapanos v. United States*, 547 U.S. 715 (2006). It also refers to longstanding practice, as informed by applicable guidance, including “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States*” (Dec. 2, 2008) (2008 *Rapanos* Guidance), available at https://www.epa.gov/sites/default/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf. Additionally, the agencies interpret the phrase “waters of the United States” consistent with the Supreme Court’s decision in *Sackett v. Environmental Protection Agency*.

² For more information about the operative definition of “waters of the United States” for specific geographic areas in light of litigation, please visit <https://www.epa.gov/wotus/definition-waters-united-states-rule-status-and-litigation-update>.

specifically the phrase “continuous surface connection” as used in the *Rapanos* and *Sackett* decisions across both currently operative regulatory regimes, we are providing the following direction. This will provide for more effective and efficient approved jurisdictional determinations, permitting actions and other relevant actions consistent with *Sackett*.³

In addition, the agencies plan to issue a public notice imminently in the *Federal Register* to establish a docket on “WOTUS Notice: The Final Response to SCOTUS,” outlining a process to gather recommendations on the meaning of key terms in *Sackett* to inform future administrative actions that will seek to conform the definition of “waters of the United States” to Supreme Court precedent.

This guidance represents the agencies’ views on the proper implementation of the definition of “waters of the United States” and is effective immediately. The EPA and the Department of the Army will apply this guidance when determining if a wetland has a “continuous surface connection” to a requisite jurisdictional water under the Clean Water Act.

BACKGROUND

Sackett* and *Rapanos

While the U.S. Supreme Court has issued numerous key decisions interpreting the phrase “waters of the United States,” the two cases that are of particular importance for purposes of this memorandum, especially as they relate to the “continuous surface connection” requirement for adjacent wetlands, are *Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023), and *Rapanos v. United States*, 547 U.S. 715 (2006).

On May 25, 2023, the *Sackett* Court “conclude[d] that the *Rapanos* plurality was correct” and rejected Justice Kennedy’s “significant nexus” standard, calling it a “particularly implausible” “theory” and stating that “the CWA never mentions the ‘significant nexus’ test, so the EPA has no statutory basis to impose it.” *Sackett*, 598 U.S. at 680. As a result, the agencies can apply only the *Rapanos* plurality standard as informed by *Sackett* in determining when adjacent wetlands are subject to CWA jurisdiction. As explained by the plurality in *Rapanos*, this standard is also consistent with prior Supreme Court precedent interpreting “waters of the United States,” including the Court’s opinion in *Riverside Bayview*. See *Rapanos*, 547 U.S. at 734-35, 740-42, 746-48 (Scalia, J., plurality).

Sackett makes reference to the relationship between adjacent wetlands and covered waters on multiple occasions. The *Sackett* Court clarified that:

In *Rapanos*, the plurality spelled out clearly when adjacent wetlands are part of covered waters. It explained that “waters” may fairly be read to include only those wetlands that are “as a practical matter indistinguishable from waters of the United States,” such that it is “difficult to determine where the ‘water’ ends and the ‘wetland’ begins.” That occurs when wetlands have “a continuous surface connection to bodies that are ‘waters of the United States’ in their own

³ The Clean Water Act and the EPA and Corps regulations, interpreted consistent with the *Sackett* decision, contain legally binding requirements. This guidance does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally binding requirements on the EPA, the Corps, Tribes, states or the regulated community.

right, so that there is no clear demarcation between ‘waters’ and wetlands.” . . . We agree with this formulation of when wetlands are part of “the waters of the United States.

Id. at 678 (internal citations omitted).

The *Sackett* Court also found that “[w]etlands that are separate from traditional navigable waters cannot be considered part of those waters, even if they are located nearby,” *id.* at 678, and that “‘adjacent’ cannot include wetlands that are not part of covered ‘waters,’” *id.* at 682. The Court also recognized that in determining the jurisdictional status of wetlands, the *Riverside Bayview* Court “need[ed] to focus so extensively on the adjacency of wetlands to covered waters” to adhere to the proper interpretation of the Clean Water Act. *Id.* at 674.

This is why the plurality in *Rapanos* rejected the Corps’ practice of asserting jurisdiction over wetlands adjacent to features that themselves were not “waters of the United States” in their own right based on a hydrologic connection theory. The *Rapanos* plurality instead concluded:

[O]nly those wetlands with a continuous surface connection to bodies that are “waters of the United States” in their own right, so that there is no clear demarcation between “waters” and wetlands, are “adjacent to” such waters and covered by the Act. Wetlands with only an intermittent, physically remote hydrologic connection to “waters of the United States” do not implicate the boundary-drawing problem of *Riverside Bayview*, and thus lack the necessary connection to covered waters that we described as a “significant nexus” in *SWANCC* Thus, establishing that wetlands . . . are covered by the Act requires two findings: first, that the adjacent channel contains a “wate[r] of the United States,” (*i.e.*, a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the “water” ends and the “wetland” begins.

Rapanos, 547 U.S. at 742 (Scalia, J., plurality) (emphasis in original).

Additionally, the plurality said that “adjacent” means “physically abutting,” and used “abutting” and “adjacent” interchangeably. *Id.* at 748; see also *id.* at 742 (“*Riverside Bayview* rested upon the inherent ambiguity in defining where water ends and abutting (“adjacent”) wetlands begin[.]”). Most importantly, the plurality clarified that “the statutory definition [of ‘navigable waters’ at 33 U.S.C. §1362(7)] can be read to include *some* wetlands – namely, those that directly ‘abut’ covered waters.” *Id.* at 747, footnote 12 (emphasis in original).

2008 *Rapanos* Guidance in the Pre-2015 Regulatory Regime

Following *Rapanos*, on June 6, 2007, the agencies issued joint guidance entitled “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States* and *Carabell v. United States*” to address the waters at issue in that decision. The guidance was reissued with minor changes on December 2, 2008, and a review of that guidance reveals how the agencies interpreted the *Rapanos* plurality’s “continuous surface connection” construct. “[O]nly those adjacent wetlands that have a continuous surface connection because they directly abut the [relatively permanent] tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.” 2008 *Rapanos* Guidance at 7, footnote 29.

Additionally, the 2008 *Rapanos* Guidance applies the *Rapanos* plurality’s standard to assert jurisdiction over “[w]etlands that directly abut” “[n]on-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).” *Id.* at 1.

The Corps’ pre-2015 Jurisdictional Determination Form Instructional Guidebook, which contained instructions to aid field staff in completing the associated Approved Jurisdictional Determination Form prior to *Sackett*, states “[t]he [*Rapanos*] decision provides two new analytical standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to CWA jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water body (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs.”⁴

With significant nexus having been struck down by the Court in *Sackett*, we are left to determine what the pre-2015 regulatory regime’s approach to adjacency looked like without that evaluation. The Corps’ pre-2015 regulatory regime provides clarity on this point in the previously used *Rapanos* “Approved Jurisdictional Determination Form,” which states, “[a] wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus test.”⁵ Removing the significant nexus portion from that statement leaves the simple fact that unless a wetland has a continuous surface connection – directly abutting a requisite jurisdictional water – it cannot be determined to be jurisdictional as an adjacent wetland.

2023 Rule

On January 18, 2023, the agencies issued the 2023 Rule to revise the definition of “waters of the United States.” The preamble to the 2023 Rule included limited guidance on the implementation of “continuous surface connection,” and stated:⁶

Under the relatively permanent standard for adjacent wetlands, wetlands meet the continuous surface connection requirement if they physically abut, or touch, a relatively permanent paragraph (a)(2) impoundment or a jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard, or if the wetlands are connected to these waters by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert.

The agencies’ “discrete features” language is in tension with the pre-2015 regime and *Sackett* and the purpose of this memo is to align the agencies’ interpretation of adjacency with *Sackett*.

⁴ U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION FORM INSTRUCTIONAL GUIDEBOOK, 6 (May 30, 2007), available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2310>.

⁵ U.S. ARMY CORPS OF ENGINEERS, APPROVED JURISDICTIONAL DETERMINATION FORM, 2, available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2314>.

⁶ 88 FR 3004, 3090 (Jan. 18, 2023).

Guidance on Wetlands with a Continuous Surface Connection

Under either the amended 2023 regulatory definition of “waters of the United States” or the pre-2015 regulatory regime consistent with *Sackett*, the agencies are interpreting “waters of the United States” to include “only those adjacent wetlands that have a continuous surface connection because they directly abut the [requisite jurisdictional water] (e.g., they are not separated by uplands, a berm, dike, or similar feature).” 2008 *Rapanos* Guidance at 7, footnote 29; *see also* 88 FR 3090 (Jan. 18, 2023) (“wetlands meet the continuous surface connection requirement if they physically abut, or touch, a [requisite jurisdictional water]”). Additionally, pursuant to the *Rapanos* plurality, “[w]etlands with only an intermittent, physically remote hydrologic connection to ‘waters of the United States’ do not implicate the boundary-drawing problem of *Riverside Bayview*,” and thus do not have the “necessary connection” to covered waters that triggers CWA jurisdiction. *Rapanos*, 547 U.S. at 742 (Scalia, J., plurality). The plurality was even more clear that the CWA definition of “navigable waters” includes “some wetlands – namely, those that directly ‘abut’ covered waters.” *Id.* at 747, footnote 12 (Scalia, J., plurality) (emphasis in original).

Therefore, an interpretation of “continuous surface connection” which allows for wetlands far removed from and not directly abutting covered waters to be jurisdictional as adjacent wetlands has the potential to violate the direct abutment requirement for “adjacent wetlands” under the plurality’s standard and now *Sackett*’s endorsement of that standard.⁷ Therefore, any components of guidance or training materials that assumed a discrete feature established a continuous surface connection are rescinded.⁸

In summary, the Supreme Court in *Sackett* provided a clear two-part test for determining CWA jurisdiction over adjacent wetlands. First, the adjacent body of water must be a “water of the United States,” which generally means traditional navigable waters, or a relatively permanent body of water connected to a traditional navigable water. Second, the wetland, assuming it satisfies the agencies’ longstanding regulatory definition of “wetlands” at 33 C.F.R. 328.3 and 40 C.F.R. 120.2, must have a continuous surface connection to a requisite covered water making it difficult to determine where the water ends and wetland begins. The *Sackett* Court recognized that there may be some instances where that line drawing problem is difficult, such as during periods of drought or low tide or in those

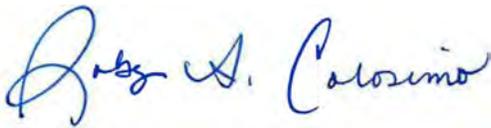
⁷ The same is true for any reliance on *United States v. Cundiff*, 555 F.3d 200 (6th Cir. 2009) to evaluate wetlands that do not directly abut an otherwise covered water. Such reliance could create conflict with *Sackett*’s two-part test for jurisdiction over adjacent wetlands.

⁸ This rescission encompasses the relevant portions of the agencies’ “September 24, 2024, Presentation: Updates on ‘Waters of the United States’” (“[w]etlands also have a continuous surface connection when they are connected to a jurisdictional water by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert...”). *Id.* at slide 47, available at https://www.epa.gov/system/files/documents/2024-09/wotus-overview_9-24-24_508c.pdf, and the agencies’ “Presentation – November 15, 2023, Updates for Tribes and States on ‘Waters of the United States’” (“[w]etlands also have a continuous surface connection when they are connected to a jurisdictional water by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert...”). *Id.* at slide 48, available at https://www.epa.gov/system/files/documents/2023-11/wotus-overview_tribes-and-states_11-15-23_508.pdf. This directive also serves to rescind the following case-specific memoranda to the Field implementing the pre-2015 regulatory regime consistent with *Sackett* that apply the same “discrete features” test as the two trainings listed herein: “Memorandum on NWK-2022-00809,” “Memorandum on SWG-2023-00284,” “Memorandum on LRB-2023-00451” and “Memorandum on NWK-2024-00392,” as well as the following case-specific memoranda addressing continuous surface connection under the amended 2023 rule: “Memorandum on NWP-2023-602,” “Memorandum on NAP-2023-01223,” “Memorandum on POH-2023-00187” and “Memorandum on MVR-2023-0828.”

instances where there may be temporary interruptions in surface connection. The agencies will work to resolve these scenarios on a case-by-case basis and provide further clarity when appropriate to guide future implementation.

The agencies will use a forthcoming *Federal Register* notice and recommendations docket on “WOTUS Notice: The Final Response to SCOTUS” as well as other stakeholder engagement opportunities to identify areas of implementation challenges to be later addressed either through additional guidance or rulemaking.

Dated: March 12, 2025



Robyn S. Colosimo, P.E.
Senior Official Performing the Duties of the Assistant Secretary of the Army (Civil Works)
Department of the Army

**BENITA
BEST-WONG**

Digitally signed by
BENITA BEST-WONG
Date: 2025.03.12
16:11:05 -04'00'

Benita Best-Wong,
Deputy Assistant Administrator performing the non-exclusive duties and functions
of the Assistant Administrator for Water, U.S. Environmental Protection Agency

RX 10

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

33 CFR Part 328

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 120

[EPA-HQ-OW-2025-0322; FRL 11132.1-01-OW]

RIN 2040-AG44

Updated Definition of “Waters of the United States”

AGENCY: Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Army (“the agencies”) are publishing for public comment a proposed rule revising the regulations defining the scope of waters federally covered under the Federal Water Pollution Control Act, as amended, also known as the Clean Water Act, in light of the U.S. Supreme Court’s 2023 decision in *Sackett v. Environmental Protection Agency*. With this proposed rule, the agencies intend to provide greater regulatory certainty and increase Clean Water Act program predictability and consistency by clarifying the definition of “waters of the United States.” This proposed rule is also intended to implement the overall objective of the Clean Water Act to restore and maintain the quality of the Nation’s waters while respecting State and Tribal authority over their own land and water resources.

DATES: Comments must be received on or before January 5, 2026.

ADDRESSES: You may send comments, identified by Docket ID No. EPA-HQ-OW-2025-0322, by any of the following methods:

- *Federal eRulemaking Portal:* <https://www.regulations.gov/> (our preferred method). Follow the online instructions for submitting comments.
- *Email:* OW-Docket@epa.gov.

Include Docket ID No. EPA-HQ-OW-2025-0322 in the subject line of the message.

- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Water Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

- *Hand Delivery or Courier:* EPA Docket Center, WJC West Building,

Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center’s hours of operations are 8:30 a.m. to 4:30 p.m., Monday–Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov>, including personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the “Public Participation” heading of the **SUPPLEMENTARY INFORMATION** section of this document.

The agencies will hold two hybrid public meetings, and additional information can be found at <https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities>. Refer to the **SUPPLEMENTARY INFORMATION** section below for additional information.

FOR FURTHER INFORMATION CONTACT:

Stacey Jensen, Oceans, Wetlands and Communities Division, Office of Water (4504-T), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 566-0657; email address: CWAwotus@epa.gov, and Milton Boyd, Office of the Assistant Secretary of the Army for Civil Works, Department of the Army, 108 Army Pentagon, Washington, DC 20310-0104; telephone number: (703) 693-3655; email address: usarmy.pentagon.hqda-asa-cw.mbx.asa-cw-reporting@army.mil.

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- B. Executive Order 14192: Unleashing Prosperity Through Deregulation
- C. Paperwork Reduction Act (PRA)
- D. Regulatory Flexibility Act (RFA)
- E. Unfunded Mandates Reform Act (UMRA)
- F. Executive Order 13132: Federalism
- G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
- H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risk
- I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
- J. National Technology Transfer and Advancement Act

I. Executive Summary

A. Purpose of the Regulatory Action

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Army (Army) (together, the agencies) are seeking public comment on a proposed rule that revises key aspects of the definition of “waters of the United States” to clarify the scope of Federal jurisdiction under the Federal Water Pollution Control Act, as amended, also known as the Clean Water Act, in light of the U.S. Supreme Court’s May 25, 2023, decision in *Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023).

In September 2023, the agencies issued a final rule without notice and comment amending the regulations defining “waters of the United States” to conform to the Supreme Court’s *Sackett* decision. “Revised Definition of ‘Waters of the United States’; Conforming,” 88 FR 61964 (September 8, 2023) (“Conforming Rule”). The agencies refer to the amended regulations following the Conforming Rule as the “Amended 2023 Rule” because the Conforming Rule amended regulations previously issued on January 18, 2023. See “Revised Definition of ‘Waters of the United States,’” 88 FR 3004 (January 18, 2023).

The agencies have heard numerous concerns raised by stakeholders about the Amended 2023 Rule, including that the Amended 2023 Rule does not adequately comply with the Supreme Court’s interpretation in *Sackett* of the scope of Federal jurisdiction under the Act as well as identifying implementation-related issues. With this action, the agencies are proposing to revise the Amended 2023 Rule to implement the *Sackett* decision, provide greater regulatory certainty, and increase Clean Water Act program predictability and consistency by

clarifying the definition of “waters of the United States.”

The agencies’ fundamental basis for this proposed revised definition is the text, structure, and history of the Clean Water Act and Supreme Court precedent, taking into account other relevant factors. This proposed revision to the definition of “waters of the United States” is intended to adhere faithfully to the Supreme Court’s direction, respect the Act’s careful balance between Federal authority and State responsibilities over waters, and carry out Congress’ overall objectives to restore and maintain the integrity of the Nation’s waters in a manner that preserves the traditional sovereignty of States over their own land and water resources pursuant to the cooperative federalism framework predicated by the Act. The agencies believe the proposed revised definition would also ensure clarity and predictability for Federal agencies, States, Tribes, the regulated community, and the public, including by proposing to add definitions of “relatively permanent” and “continuous surface connection” for the first time to the agencies’ regulations and by re-establishing definitions for “ditch,” “tributary,” “prior converted cropland,” and “waste treatment system” to ensure clear boundaries that indicate the distinction of Federal versus State and Tribal coverage of waters. Ultimately, the proposed rule is intended to ensure that the agencies are operating within the scope of the Federal Government’s authority over navigable waters under the Clean Water Act and the Commerce Clause of the U.S. Constitution.

B. Summary of the Major Provisions of the Regulatory Action

The agencies are proposing to revise the following categories of “waters of the United States” under 33 CFR 328.3 and 40 CFR 120.2 paragraph (a) by deleting the interstate waters category under paragraph (a)(1)(iii) and deleting “intrastate” from the paragraph (a)(5) category for lakes and ponds. In addition, ministerial changes are proposed to add in one place and delete in another place an “or” from paragraph (a)(1) to conform to the deletion of the interstate waters category. In addition, the agencies are proposing to revise the following exclusions: the (b)(1) waste treatment system exclusion, the (b)(2) prior converted cropland exclusion, and the (b)(3) ditch exclusion. The agencies are also proposing to add an exclusion for groundwater at (b)(9). The agencies are also proposing to add definitions of “continuous surface connection,” “ditch,” “prior converted cropland,” “relatively permanent,” “tributary,”

“and waste treatment system” in paragraph (c) of their regulations.

C. Costs and Benefits

Potential costs and benefits would be incurred as a result of actions taken under existing Clean Water Act programs (*i.e.*, sections 303, 311, 401, 402, and 404) that implement and follow this proposed rulemaking. Entities currently are, and would continue to be, regulated under these programs that rely on the definition of “waters of the United States” under the Clean Water Act.

The agencies prepared the Regulatory Impact Analysis for the Proposed Rule *Updated Definition of Waters of the United States* (“Regulatory Impact Analysis for the Proposed Rule”), available in the rulemaking docket, for informational purposes to analyze the potential cost savings and forgone benefits associated with this proposed action. The agencies analyzed the potential cost savings and forgone benefits against the baseline of the Amended 2023 Rule. The analysis is summarized in section VI of this preamble.

II. Public Participation

A. Written Comments

Submit your comments, identified by Docket ID No. EPA-HQ-OW-2025-0322, at <https://www.regulations.gov> (our preferred method), or the methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. EPA may publish any comment received to its public docket. Do not submit to EPA’s docket at <https://www.regulations.gov> any information you consider to be Confidential Business Information (CBI), Proprietary Business Information (PBI), or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). Please visit <https://www.epa.gov/dockets/commenting-epa-dockets> for additional submission methods; the full EPA public comment policy; information about CBI, PBI, or multimedia submissions; and general guidance on making effective comments.

B. Participation in Virtual and In-Person Public Meetings

The agencies will hold two in-person public meetings, with an option for virtual participation. To register to speak at the public meetings, please visit <https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities> or contact EPA staff at wotus-outreach@epa.gov. On the last working day before each meeting, EPA will post a general agenda for the meeting that will list pre-registered speakers in approximate order at <https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities>.

The agencies will make every effort to follow the schedule as closely as possible on the day of the public meeting; however, please plan for the meetings to run either ahead of schedule or behind schedule. Additionally, requests to speak will be taken the day of the meeting at the meeting registration desk for those participating in-person and during the speaker waitlist for those participating virtually. EPA and the Army will make every effort to accommodate all speakers who arrive and register, although preferences on speaking times may not be able to be fulfilled.

Each commenter will have three minutes to provide oral testimony. EPA and the Army encourage commenters to provide the agencies with a copy of their oral testimony electronically by emailing it to wotus-outreach@epa.gov. EPA and the Army also recommend submitting the text of your oral comments as written comments to the rulemaking docket.

The agencies may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public meeting.

Please note that any updates made to any aspect of the public meetings are posted online at <https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities>. While EPA and the Army expect the meetings to go forward as set forth above, please monitor our website or contact wotus-outreach@epa.gov to determine if there are any updates. EPA and the Army do not intend to publish a document in the **Federal Register** announcing updates.

The agencies will not provide audiovisual equipment for presentations unless we receive special requests in advance. Commenters should notify

wotus-outreach@epa.gov when they pre-register to speak that they will need specific equipment. If you require the services of an interpreter or special accommodations such as audio description, please pre-register for the meeting with wotus-outreach@epa.gov and describe your needs by at least one week before the meeting. The agencies may not be able to arrange accommodations without advance notice.

III. General Information

A. What action are the Agencies taking?

In this action, the agencies are publishing a proposed rule revising key aspects of the definition of “waters of the United States” in 33 CFR 328.3 and 40 CFR 120.2.

B. What is the Agencies’ authority for taking this action?

The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*, including sections 301, 304, 311, 401, 402, 404, and 501.

C. What are the incremental cost savings and forgone benefits of this action?

The Regulatory Impact Analysis for the Proposed Rule assesses the potential impacts of the changes to the definition of “waters of the United States” based on the potential effects to Clean Water Act programs that rely on the definition of “waters of the United States.” The Regulatory Impact Analysis is the agencies’ qualitative assessment of the potential effects of the revised definition on the Federal coverage of waters and water resources, including wetlands, across the country, as well as the potential effects on Clean Water Act programs and certain other programs under other Federal statutes. The Regulatory Impact Analysis 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 outside of Federal jurisdiction are covered under State and Tribal laws and regulations.

The agencies anticipate that the impacts of the proposed rule, as a result of implementing the *Sackett* decision, would be most significant for the Clean Water Act section 404 program, reducing the number of 404 permits issued and acres of wetland impacts mitigated relative to the baseline. The agencies expect the changes to produce cost savings to project proponents from avoided permitting and mitigation activities, as well as potential indirect benefits from long-term reduction in regulatory burden. The agencies also

expect forgone benefits from avoided impact minimization and mitigation measures. Notably, both the potential cost savings and forgone benefits are contingent on a number of factors, including decisions by States with respect to areas that would fall solely within State or Tribal and local jurisdiction. The agencies are considering methods to estimate the changes in the number of 404 permits issued by the U.S. Army Corps of Engineers (Corps) and the characteristics of the projects, notably the magnitude of wetland impacts that would no longer be minimized and mitigated, for the final rule Regulatory Impact Analysis. The agencies welcome input as to how this could be accomplished, for example, using geospatial analysis and Corps permit data. To estimate cost savings and forgone benefits for the final rule, the agencies could use similar methodologies to those used in previous economic analyses. In addition to direct burden reductions, small entities may also see benefits from this proposed rulemaking as the agencies anticipate increased opportunities and shorter delays for approved jurisdictional determinations (AJDs) for projects still requiring a permit due to less demand for AJDs and clearer regulatory language.

The agencies expect the proposed rule to be deregulatory in nature, and to have cost savings and forgone benefits. However, the agencies have not quantified cost savings and forgone benefits for the purposes of this proposed rule (*see* the Regulatory Impact Analysis for the Proposed Rule for information on uncertainties associated with the available data). The agencies seek input on ways that they could address any uncertainties, on other data relevant to cost savings and forgone benefits of the proposed rule, and on opportunities for quantification. The agencies identify potential data and propose potential methodologies to quantify such costs and benefits in the Regulatory Impact Analysis. Specifically, the agencies highlight potential approaches to quantitatively estimate the impact of the proposed rule through changes to coverage of interstate waters, relatively permanent waters, continuous surface connection, lakes and ponds, and to exclusions for waste treatment systems, prior converted cropland, and ditches. At present, the agencies do not have sufficient information available to quantify all of the cost savings and forgone benefits that individual States or Tribes would receive under the

proposed rule. Although some States and Tribes already have laws or regulations in place that exceed the requirements of the current regulation and/or of the proposed rule, the way States or Tribes would interpret and apply their own laws and regulations is unknown. Further, the extent to which States and Tribes may enact new laws or regulations or alter their interpretations of existing laws and regulations in the future is also unknown. Consequently, the agencies invite comment to assess what proportion of cost savings and forgone benefits States and Tribes would receive.

Importantly, while the potential cost savings or forgone benefits of the rule inform the agencies' interpretation of the definition of "waters of the United States," they cannot dictate where to draw the line between Federal and State or Tribal waters, as those are legal distinctions that have been established within the overall framework and construct of the Clean Water Act. The agencies therefore do not view the results of the Regulatory Impact Analysis as dictating the proper interpretation of "waters of the United States." In previous rules the agencies have considered impacts as a factor in defining the scope of "waters of the United States." The agencies now recognize that, as the Supreme Court explained in *Sackett*, "the CWA does not define the EPA's jurisdiction based on ecological importance" or similar impacts. 598 U.S. at 683. Rather, the impacts of faithfully implementing the statute's jurisdictional reach are a result of "the Act's allocation of authority" between the Federal Government and the States, and States, Tribes, and localities "can and will continue to exercise their primary authority to combat water pollution by regulating land and water use." *Id.* The agencies seek comment on the view that impacts are not an appropriate decisional basis in implementing the Act's jurisdictional scope and, if so, on what basis and to what extent the agencies may consider such impacts.

IV. Background

A. Legal Background

1. History of Federal Waterways Regulation

Congress' authority to regulate navigable waters derives from its Commerce Clause power over the channels of interstate commerce. See *Solid Waste Agency of Northern Cook Cnty v. Army Corps of Eng'rs*, 531 U.S. 159, 168 & n.3, 172, 173–174 (2001) (*SWANCC*). Navigable waterways

facilitating interstate and international commerce were understood at the Founding as an important asset worthy of protection and promotion. See *Ordinance of 1787*, § 14, art. IV ("The navigable waters leading into the Mississippi and Saint Lawrence, and the carrying places between the same, shall be common highways."); *The Federalist No. 2*, at 6 (John Jay) (Gideon Ed., Carey & McClellan eds. 2001) ("Providence has in a particular manner blessed [the Nation] . . . with innumerable streams, for the delight and accommodation of its inhabitants. A succession of navigable waters forms a kind of chain round its borders, as if to bind it together; while the most noble rivers in the world, running at convenient distances, present them with highways for the easy communication of friendly aids, and the mutual transportation and exchange of their various commodities."); *No. 14*, at 65 (James Madison) ("[T]he intercourse throughout the union will be daily facilitated by new improvements. . . . The communication between the western and Atlantic districts, and between different parts of each, will be rendered more and more easy, by those numerous canals, with which the beneficence of nature has intersected our country, and which art finds it so little difficult to connect and complete."). Consistent with that understanding, early authorities embraced the concept that waterways used in navigation were subject to Federal regulation while, at the same time, States continued to exercise sovereign prerogative to regulate water and land within their borders. *Gibbons v. Ogden*, 9 Wheat. (22 U.S.) 1, 218, 240 (1824); see *Sackett*, 598 U.S. at 673 ("Ever since *Gibbons v. Ogden*, this Court has used 'waters of the United States' to refer to similar bodies of water, almost always in relation to ships.").

Navigability remained the lodestar of Federal authority over water regulation for most of our Nation's history prior to the Clean Water Act. See *Gibbons*, 9 Wheat. (22 U.S.) at 193, 203 (the Commerce Clause "has been always understood to comprehend, navigation within its meaning," but did not encompass "[i]nspection laws, quarantine laws, health laws . . . [or] laws for regulating the internal commerce of a State"). Even as States shifted away from common-law nuisance suits against polluters, "federal regulation was largely limited to ensuring that 'traditional navigable waters'—that is, interstate waters that were either navigable in fact and used in commerce or readily susceptible of

being used in this way—remained free of impediments." *Sackett*, 598 U.S. at 659. In other words, Federal power traditionally encompassed navigable waters capable of being used "as a highway for interstate or foreign commerce [and] Congress could regulate such waters only for purposes of their navigability." *Id.* at 694 (Thomas, J., concurring).

The navigability of United States waterways—and the extent of Congress' authority to regulate them—has been the subject of extensive litigation before the U.S. Supreme Court. In early cases, the Court held that the term "navigable" refers to waters that are "navigable in fact," meaning that "they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water." *Daniel Ball*, 10 Wall. (77 U.S.) 557, 563 (1871). Over time, the Court also recognized that Federal authority could extend to waterways susceptible to navigation through improvements that facilitated modern navigation. In *The Montello*, for example, the Court held that waterways were susceptible to navigation, and thus Federal authority, based on their "capability of use by the public for purposes of transportation and commerce" through improvement. 20 Wall. (87 U.S.) 430, 441–42 (1874). At the same time, not "every small creek in which a fishing skiff or gunning canoe can be made to float at high water" fell within this ambit; rather, "to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade." *Id.* Thus, Federal "authority over navigable waters" extended to "regulating and improving navigation." *Sackett*, 598 U.S. at 688 (Thomas, J., concurring) (quoting *Gibson v. United States*, 166 U.S. 269, 271–72 (1897)).

After the Supreme Court found that no Federal law banned obstructions of navigable waterways, see *Willamette Iron Bridge Co. v. Hatch*, 125 U.S. 1 (1888), Congress responded by enacting the Rivers and Harbors Act of 1899 (RHA). Section 10 of the RHA prohibits "[t]he creation of any obstruction . . . to the navigable capacity of any of the waters of the United States," requires a permit to build "structures in any . . . water of the United States," and makes it unlawful "to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity" of any water, "within the limits of any breakwater, or of the channel of any navigable water of the United States." 33 U.S.C. 403. Section 13 of the RHA,

often called the Refuse Act, made it illegal to dump refuse “into any navigable waters of the United States, or into any tributary of any navigable water,” and gave the Corps the authority to regulate certain discharges into navigable waters of the United States. *Id.*; 33 U.S.C. 407. In interpreting the RHA, the Supreme Court reaffirmed the principle that Federal authority over waters arose from navigability and that States may continue to exercise their traditional authority over land and water.¹

Over time, the Federal Government began applying the RHA, and the Refuse Act in particular, to regulate pollution that interfered with the navigable waters of the United States. *See, e.g., United States v. Standard Oil*, 384 U.S. 224 (1966) (holding commercially valuable substances such as oil could be considered refuse); *United States v. Republic Steel Corp.*, 362 U.S. 482 (1960) (holding industrial solid waste is refuse); *see also SWANCC*, 531 U.S. at 178 (Stevens, J., dissenting) (“the goals of federal water regulation began to shift away from an exclusive focus on protecting navigability and toward a concern for preventing environmental degradation.”). Federal regulators sought to adopt an *ex ante* permitting scheme for discharges, but courts held that the Refuse Act provided insufficient authority. *See, e.g., Kalur v. Resor*, 335 F. Supp. 1, 10–11 (D.D.C. 1972). When these concerns and others prompted Congress to further legislative action, “a comprehensive program for controlling and abating water pollution” was born. *SWANCC*, 531 U.S. at 179 (Stevens, J., dissenting) (quoting *Train v. City of New York*, 420 U.S. 35, 37 (1975)).

2. The Federal Water Pollution Control Act

Prior to 1972, the ability to control and redress water pollution in the Nation’s waters largely fell to the Corps under the RHA. While much of that statute focused on restricting obstructions to navigation on the Nation’s major waterways, section 13 of the RHA made it unlawful to discharge refuse “into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such

¹ The Corps currently defines the scope of “navigable waters of the United States” under the RHA as encompassing “those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.” 33 CFR 329.4. This definition does not apply to the scope of “waters of the United States” under the Clean Water Act. *See* 33 CFR 329.1.

navigable water.”² 33 U.S.C. 407. Congress had enacted the Water Pollution Control Act of 1948, Public Law 80–845, 62 Stat. 1155 (June 30, 1948), to address interstate water pollution, and subsequently amended that statute in 1956 (giving the statute its current formal name), 1961, and 1965. The early versions of the Act promoted the development of pollution abatement programs, required States to develop water quality standards, and authorized the Federal Government to bring enforcement actions to abate water pollution.

These early statutory efforts, however, proved inadequate to address the decline in the quality of the Nation’s waters, *see City of Milwaukee v. Illinois*, 451 U.S. 304, 310 (1981), so Congress performed a “total restructuring” and “complete rewriting” of the existing statutory framework in 1972, *id.* at 317 (quoting legislative history of 1972 amendments) by amending the Federal Water Pollution Control Act, also known as the Clean Water Act, to address longstanding concerns regarding the quality of the Nation’s waters and the Federal Government’s ability to address those concerns under existing law.³ That restructuring resulted in the enactment of a comprehensive scheme (including voluntary as well as regulatory programs) designed to prevent, reduce, and eliminate pollution in the Nation’s waters generally, and to regulate the discharge of pollutants into “navigable waters” specifically, defined in the Act as “the waters of the United States, including the territorial seas,” 33 U.S.C. 1362(7). *See, e.g., S.D. Warren Co. v. Maine Bd. of Env’tl. Prot.*, 547 U.S. 370, 385 (2006) (noting that “the Act does not stop at controlling the ‘addition of pollutants,’ but deals with ‘pollution’ generally”).

The objective of the new statutory scheme was “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. 1251(a). In order to meet that objective, Congress declared two

² The term “navigable water of the United States” is a term of art used to refer to waters subject to Federal jurisdiction under the RHA. *See, e.g.,* 33 CFR 329.1. The term is not synonymous with the phrase “waters of the United States” under the Clean Water Act, *see id.*, and the general term “navigable waters” has different meanings depending on the context of the statute in which it is used. *See, e.g., PPL Montana, LLC v. Montana*, 565 U.S. 576, 591–93 (2012).

³ Following amendments in 1972 and 1977, the Federal Water Pollution Control Act became more commonly referred to as the Clean Water Act. *See* Public Law 92–500, 86 Stat. 816 (1972); Public Law 95–217, 91 Stat. 1566 (1977). In this document, for ease of reference, the agencies will generally refer to the Act as the Clean Water Act or the Act.

national goals: (1) “that the discharge of pollutants into the navigable waters be eliminated by 1985”; and (2) “that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983” *Id.* 1251(a)(1)–(2). Congress also established several key policies that direct the work of the agencies to effectuate those goals. For example, Congress declared as a national policy “that the discharge of toxic pollutants in toxic amounts be prohibited; . . . that Federal financial assistance be provided to construct publicly owned waste treatment works; . . . that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State; . . . [and] that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution.” *Id.* 1251(a)(3)–(7).

Congress recognized that States retained primary authority over the regulation of water and land within their borders and, at the same time, provided a major role for the States in implementing the Clean Water Act. For example, the statute highlighted “the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution” and “to plan the development and use . . . of land and water resources.” *Id.* 1251(b). Congress also declared as a national policy that States manage the major construction grant program and implement the core permitting programs authorized by the statute, among other responsibilities. *Id.* Congress added that “[e]xcept as expressly provided in this Act, nothing in this Act shall . . . be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.” *Id.* 1370.⁴

To carry out these policies, Congress broadly defined “pollution” to mean “the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water,” *id.* 1362(19), in keeping with the objective of the Act “to restore and

⁴ 33 U.S.C. 1370 also prohibits authorized States from adopting any limitations, prohibitions, or standards that are less stringent than required by the Clean Water Act.

maintain the chemical, physical, and biological integrity of the Nation's waters." *Id.* 1251(a). Congress then crafted a non-regulatory statutory framework to provide technical and financial assistance to the States to prevent, reduce, and eliminate pollution in the Nation's waters generally. For example, section 105 of the Act, "Grants for research and development," authorizes the EPA "to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of preventing, reducing, and eliminating the discharge into *any waters* of pollutants from sewers which carry storm water or both storm water and pollutants." *Id.* 1255(a)(1) (emphasis added). Section 105 also authorizes the EPA "to make grants to any State or States or interstate agency to demonstrate, in *river basins or portions thereof*, advanced treatment and environmental enhancement techniques to control pollution from all sources . . . including nonpoint sources, . . . [and] . . . to carry out the purposes of section 301 of this Act . . . for research and demonstration projects for prevention of pollution of *any waters* by industry including, but not limited to, the prevention, reduction, and elimination of the discharge of pollutants." *Id.* 1255(b)–(c) (emphasis added); see also *id.* 1256(a) (authorizing the EPA to issue "grants to States and to interstate agencies to assist them in administering programs for the prevention, reduction, and elimination of pollution").

Section 108, "Pollution control in the Great Lakes," authorizes the EPA to enter into agreements with any State to develop plans for the "elimination or control of pollution, *within all or any part of the watersheds* of the Great Lakes." 33 U.S.C. 1258(a) (emphasis added); see also *id.* 1268(a)(3)(C) (defining the "Great Lakes System" as "*all the streams, rivers, lakes, and other bodies of water within the drainage basin of the Great Lakes*") (emphasis added). Similar broad pollution control programs were created for other major watersheds, including, for example, the Chesapeake Bay, see *id.* 1267(a)(3), Long Island Sound, see *id.* 1269(c)(2)(D), and Lake Champlain, see *id.* 1270(g)(2).

In addition to the Act's non-regulatory measures to control pollution of the Nation's waters generally, Congress created a permitting program designed to address the discharge of pollutants into a subset of those waters identified as "navigable waters." *Id.* 1362(7). Section 301 contains the key regulatory

mechanism: "Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful." *Id.* 1311(a). A "discharge of a pollutant" is defined to include "any addition of any pollutant to navigable waters from any point source," defined to mean "any discernible, confined and discrete conveyance" such as a pipe or ditch. *Id.* 1362(12), (14). The term "pollutant" means "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." *Id.* 1362(6). Thus, it is unlawful to discharge pollutants into the "waters of the United States" from a point source unless the discharge is in compliance with certain enumerated sections of the Clean Water Act. Under section 402 of the Clean Water Act, a National Pollutant Discharge Elimination System (NPDES) permit is required where a point source discharges a pollutant to "waters of the United States."⁵ *Id.* 1342. Clean Water Act section 404 requires a permit before dredged or fill material may be discharged to "waters of the United States," with exemptions for certain activities, including normal farming, ranching, and forestry activities.⁶ *Id.* 1344. Congress therefore intended to achieve the Act's objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" by addressing pollution of all waters via non-regulatory means *and* federally regulating the discharge of pollutants to the subset of waters identified as "navigable waters."

Fundamental principles of statutory interpretation support this distinction between the "nation's waters" and "navigable waters." As the Supreme Court has observed, "[w]e assume that Congress used two terms because it intended each term to have a particular, nonsuperfluous meaning." *Bailey v.*

⁵ The term "point source" is defined in Clean Water Act section 502(14) and 40 CFR 122.2 to include "any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged." This definition specifically excludes return flows from irrigated agriculture and agricultural stormwater runoff. See also *infra* note 8 (discussing discharges of pollutants subject to the section 402 program).

⁶ Clean Water Act section 404(f) exempts several activities from the section 404 permitting requirement including many "normal farming, silviculture, and ranching activities" and the "construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches." 33 U.S.C. 1344(f)(1).

United States, 516 U.S. 137, 146 (1995) (recognizing the canon of statutory construction against superfluity). Further, "the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000) (internal quotation marks and citation omitted); see also *United Sav. Ass'n of Tex. v. Timbers of Inwood Forest Assocs.*, 484 U.S. 365, 371 (1988) ("Statutory construction . . . is a holistic endeavor. A provision that may seem ambiguous in isolation is often clarified by the remainder of the statutory scheme—because the same terminology is used elsewhere in a context that makes its meaning clear[.]") (citation omitted). Here, the non-regulatory sections of the Clean Water Act reveal Congress' intent to restore and maintain the integrity of the Nation's waters using Federal assistance to support State and local partnerships to control pollution in the Nation's waters *and* a Federal regulatory prohibition on the discharge of pollutants to the "navigable waters." If Congress had intended the terms to be synonymous, it would have used identical terminology. Instead, Congress chose to use separate terms, and the agencies are instructed by the Supreme Court to presume Congress did so intentionally. See *Sackett*, 598 U.S. at 661, 673 (recognizing distinction between a predecessor statute's definition of "interstate or navigable waters" and the Act's definition of "navigable waters"); 674 ("It is hard to see how the States' role in regulating water resources would remain 'primary' if the EPA had jurisdiction over anything defined by the presence of water.").

The term "navigable waters" is used in most of the key programs established by the Clean Water Act, including the section 402 and section 404 permitting programs; the section 311 oil spill prevention, preparedness, and response program;⁷ the water quality standards,

⁷ While Clean Water Act section 311 uses the phrase "navigable waters of the United States," EPA has interpreted it to have the same breadth as the phrase "navigable waters" used elsewhere in section 311, and in other sections of the Clean Water Act. 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). In 2002, EPA revised its regulations defining "waters of the United States" in 40 CFR part 112 to ensure that the rule's language was consistent with the regulatory language used in other Clean Water Act programs. Oil Pollution Prevention & Response; Non-Transportation-Related Onshore & Offshore Facilities, 67 FR 47042 (July 17, 2002). A district court vacated the rule for failure to comply with the

Continued

impaired waters, and total maximum daily load programs under section 303; and the section 401 State and Tribal water quality certification process. See additional discussion on “navigable waters” *supra*. Waters that meet the definition of “waters of the United States” are often called “covered” or “jurisdictional” waters. While there is only one definition of “waters of the United States” for purposes of the Clean Water Act, there may be other contextual factors that define the reach of a particular Clean Water Act program or provision.⁸ Additionally, as noted above, some Clean Water Act programs do not rely on the definition of “waters of the United States,” such as the EPA’s financial assistance programs under the Act.⁹

Since the Federal Water Pollution Control Act Amendments of 1972, the agencies have defined the scope of jurisdictional “navigable waters” or “waters of the United States” in regulations. See section IV.B of this preamble, *infra*, for an overview of the

Administrative Procedure Act and reinstated the prior regulatory language. *Am. Petroleum Inst. v. Johnson*, 541 F. Supp. 2d 165 (D.D.C. 2008). However, EPA interprets “navigable waters of the United States” in Clean Water Act section 311(b), in both the pre-2002 regulations and the 2002 rule, to have the same meaning as “navigable waters” in Clean Water Act section 502(7).

⁸ For example, the Clean Water Act section 402 permit program regulates discharges of pollutants from “point sources” to “navigable waters” whether the pollutants reach jurisdictional waters directly or indirectly. See *United States v. Rapanos*, 547 U.S. 715, 743 (2006) (Scalia, J., plurality opinion); see also *Cnty. of Maui v. Hawaii Wildlife Fund*, 590 U.S. 165, 183–84 (2020) (holding that the statute also requires a permit “when there is the functional equivalent of a direct discharge”). Section 402 also regulates “any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.” See 33 U.S.C. 1362(12). As another example, section 311 applies to “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.*]).” *Id.* 1321(b)(1). And section 404(g) authorizes EPA to approve State and Tribal assumption of the section 404 dredged and fill permitting programs for certain waters of the United States; the Federal Government retains permitting authority over discharges into waters used as a means to transport interstate or foreign commerce. *Id.* 1344(g).

⁹ For example, with respect to the Clean Water Act sections 106 and 319 grant programs, the authorizing language and the range of programmatic activities are sufficiently broad such that they have long addressed both jurisdictional and non-jurisdictional waters, so it is unlikely that a change in the definition of “waters of the United States” would affect those programs and funding allocations.

history of the agencies’ regulations defining “waters of the United States.” Most recently, the agencies issued a revised definition of “waters of the United States” in January 2023 that was then amended in September 2023 in light of the Supreme Court’s *Sackett* decision. “Revised Definition of ‘Waters of the United States,’” 88 FR 3004 (January 18, 2023) (“2023 Rule”); “Revised Definition of ‘Waters of the United States’; Conforming,” 88 FR 61964, 61968 (September 8, 2023) (“Conforming Rule”); see sections IV.B.3, IV.B.4, and IV.B.5 of this preamble, *infra*, for more information about these actions. The agencies refer to the 2023 Rule as amended by the Conforming Rule as the “Amended 2023 Rule.”

The EPA administers the Clean Water Act except as otherwise explicitly provided. 33 U.S.C. 1251(d). The Secretary of the Army, through the Corps, has authority to issue permits for the discharge of dredged or fill material pursuant to Clean Water Act section 404. *Id.* 1344. The United States Attorney General long ago determined that the “ultimate administrative authority to determine the reach of the term ‘navigable waters’ for purposes of § 404” resides with the EPA. Administrative Authority to Construe § 404 of the Federal Water Pollution Control Act, 43 Op. Att’y Gen. 197 (1979) (“Civiletti Memorandum”). The Act enables the Federal Government to implement certain Clean Water Act programs, and it gives direct grants of authority to States and authorized Tribes for implementation and enforcement of others.

In some cases, the Act provides States the option to administer certain Clean Water Act programs.¹⁰ For example, States implement the Clean Water Act section 401 water quality certification program and may request approval from the EPA to administer a Clean Water Act section 402 or 404 permitting program. Moreover, consistent with the Act, States and Tribes retain authority to implement their own programs to protect the waters in their jurisdiction more broadly and more stringently than the Federal Government. Section 510 of the Clean Water Act stipulates that, unless expressly stated, nothing in the Act precludes or denies the right of any State or Tribe to establish more

protective standards or limits than the Act.¹¹

Under the enacted statutory scheme under Clean Water Act section 303, the States are primarily responsible for developing water quality standards for “waters of the United States” within their borders and reporting on the condition of those waters to the EPA every two years. 33 U.S.C. 1313, 1315. States must develop total maximum daily loads (TMDLs) for waters that are not meeting established water quality standards and must submit those TMDLs to the EPA for approval under section 303(d). *Id.* 1313(d). Section 303(d) applies to “waters of the United States.” Non-jurisdictional waterbodies are not required to be assessed or otherwise identified as impaired. Total maximum daily loads likewise apply only to “waters of the United States.” *Id.* 1313(d). States also have authority to issue water quality certifications or waive certification for every Federal permit or license issued within their borders that may result in a discharge to navigable waters under section 401. *Id.* 1341. The definition of “waters of the United States” affects where Federal permits and licenses are required and thus where Clean Water Act section 401 certification applies.

These same regulatory authorities can be assumed by Tribes under section 518 of the Clean Water Act, which authorizes the EPA to treat eligible Tribes with reservations in a manner similar to States for a variety of purposes, including administering each of the principal Clean Water Act regulatory programs.¹² *Id.* 1377(e). In addition, States and Tribes retain authority to protect and manage the use of those waters that are not “navigable waters” under the Clean Water Act. See, e.g., *id.* 1251(b), 1251(g), 1370, 1377(a). Currently, all States and 83 Tribes have authority to implement section 401 water quality certification programs. All States and 53 Tribes have established water quality standards pursuant to section 303 of the Clean Water Act, which form a legal basis for limitations on discharges of pollutants to “waters of the United States.” At this time, 47 States and one Territory have authority

¹¹ Congress has provided for eligible Tribes to administer Clean Water Act programs over their reservations and expressed a preference for Tribal regulation of surface water quality on reservations to ensure compliance with the goals of the statute. See 33 U.S.C. 1377; 56 FR 64876, 64878–79 (December 12, 1991). Where appropriate, references to States in this preamble may also include eligible Tribes.

¹² Tribes must apply for and receive EPA approval to be eligible for treatment in a manner similar as a State (TAS) for each Clean Water Act program they wish to administer.

¹⁰ The Clean Water Act defines “State” as “a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.” 33 U.S.C. 1362(3).

to administer all or portions of the Clean Water Act section 402 permit program for those “waters of the United States” within their boundaries.¹³ To date, three States (Florida, Michigan, and New Jersey) have been approved to administer an authorized section 404 permit program for certain waters in their boundaries pursuant to section 404(g),¹⁴ with two States (New Jersey and Michigan) actively administering such programs. At present, no Tribes administer the section 402 or 404 programs, although at least one is exploring the possibility. For additional information regarding State and Tribal programs, see the Regulatory Impact Analysis for the proposed rule.

Clean Water Act section 311 and the Oil Pollution Act of 1990 authorize the Oil Spill Liability Trust Fund (OSLTF) to pay for or reimburse costs of assessing and responding to oil spills to “waters of the United States” or adjoining shorelines or the Exclusive Economic Zone.¹⁵ The OSLTF enables an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities. The OSLTF can only reimburse States and Tribes for cleanup costs and damages to businesses and citizens (e.g., lost wages and damages) for spills affecting waters subject to Clean Water Act jurisdiction. EPA also lacks authority under the Clean Water Act to take enforcement actions based on spills solely affecting waters not subject to Clean Water Act jurisdiction under section 311(b). Moreover, section 311 requires that EPA establish an oil spill prevention program “to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such discharges.” 33 U.S.C. 1321. Discharges of pollutants, such as oil and hazardous substances, are defined, as discussed above, as “any addition of any pollutant to navigable waters [i.e., ‘waters of the United

States’] from any point source.” *Id.* at 1362(12).

The scope of facilities required to prepare oil spill prevention and response plans is also affected by the definition of “waters of the United States.” EPA-regulated oil storage facilities with storage capacities greater than 1,320 gallons (except facilities located on farms) that have a reasonable expectation of an oil discharge to “waters of the United States” or adjoining shorelines¹⁶ 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 and Department of Transportation also require oil spill response plans under their respective authorities. However, section 311 spill prevention and preparedness plan requirements do not apply to a facility if there is no reasonable expectation that an oil discharge from that facility could reach a jurisdictional water or adjoining shoreline or the Exclusive Economic Zone.

It is important to note that just because a water meets the definition of “waters of the United States” does not imply that activities such as farming, construction, infrastructure development, or resource extraction cannot take place in or near that water. For example, the Clean Water Act exempts a number of activities from permitting or from the definition of “point source,” including agricultural storm water and irrigation return flows. See 33 U.S.C. 1342(l)(2), 1362(14). Moreover, since 1977, the Clean Water Act in section 404(f) has exempted activities such as many “normal farming, silviculture, and ranching activities” from the section 404 permitting requirement, including seeding, harvesting, cultivating, planting, and soil and water conservation practices. *Id.* 1344(f)(1). This proposed rulemaking would not affect these statutory exemptions.

In addition, permits are routinely issued under Clean Water Act sections 402 and 404 to authorize certain discharges to “waters of the United States.” Further, under both permitting programs, the agencies have established general permits for categories of activities that are similar in nature. General permits provide dischargers with knowledge about applicable requirements before dischargers may obtain coverage under them. Obtaining coverage under a general permit is

typically quicker than obtaining coverage under an individual permit, with coverage under a general permit often occurring immediately (depending on how the permit is written) or after a short review period. The permitting authority¹⁷ generally works with permit applicants to ensure that activities can occur consistent with the agencies’ regulations. Thus, the permitting programs allow for discharges to “waters of the United States” to occur while also ensuring that those discharges meet statutory and regulatory requirements designed to protect water quality.¹⁸

A jurisdictional determination is “a written Corps determination that a wetland and/or waterbody is subject to regulatory jurisdiction under Section 404 of the Clean Water Act (33 U.S.C. 1344) or a written determination that a waterbody 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.*)” 33 CFR 331.2. Jurisdictional determinations are identified as either preliminary or approved. An approved jurisdictional determination (AJD) is “a 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.” *Id.* An approved jurisdictional determination is administratively appealable and is a final agency action subject to judicial review. *U.S. Army Corps of Eng’rs v. Hawkes Co., Inc.*, 578 U.S. 590 (2016). AJDs are valid for five years from the date of issuance, unless new information warrants revision of the determination before the expiration date. Regulatory Guidance Letter (RGL) 05–02 (June 14, 2005). Applicants may also request a new AJD before the five-year expiration date.

¹⁷ Generally, the permitting authority is either EPA or an authorized State for the NPDES program and either the Corps or an authorized State for the section 404 program. No eligible Tribes have requested authority to administer a Clean Water Act section 402 or section 404 program at this time.

¹⁸ Regarding section 404 permits, the Corps or authorized State works with the applicant to avoid, minimize, and compensate for any unavoidable impacts to “waters of the United States.” For most discharges that “will cause only minimal adverse environmental effects,” a general permit (e.g., a “nationwide” permit) may be suitable. 33 U.S.C. 1344(e)(1). General permits are issued on a nationwide, regional, or State basis for particular categories of activities. While some general permits require the applicant to submit a pre-construction notification to the Corps or the State, others allow the applicant to proceed with no formal notification. The general permit process allows certain activities to proceed with little or no delay, provided the general or specific conditions for the general permit are met.

¹³ Three States (Massachusetts, New Hampshire, and New Mexico) do not currently administer any part of the Clean Water Act section 402 program.

¹⁴ When a State or eligible Tribe assumes a section 404 program, the Corps retains permitting authority over certain waters. The scope of Clean Water Act jurisdiction as defined by “waters of the United States” is distinct from the scope of waters over which the Corps retains authority following State or Tribal assumption of the section 404 program. Corps-retained waters are identified during approval of a State or Tribal section 404 program, and any modifications are approved through a formal process. 40 CFR 233.11(i), 233.14(b)(4), and 233.16. This proposed rulemaking does not address the scope of Corps-retained waters, and nothing in this proposed rulemaking should be interpreted to affect the process for determining the scope of Corps-retained waters.

¹⁵ See 33 U.S.C. 1321(b) for the full jurisdictional scope of Clean Water Act section 311.

¹⁶ See *supra* note 7.

The agencies have consistently maintained that AJDs and permits issued under a previous regulatory definition of “waters of the United States” would still be considered valid and would not necessarily be reopened due to a subsequent rule change, unless requested by the landowner or applicant. *See, e.g.*, 84 FR 56626, 56664 (October 22, 2019) (2019 Repeal Rule); 85 FR 22250, 22331–32 (April 21, 2020) (NWPR).¹⁹

A preliminary jurisdictional determination (PJD) is a non-binding “written indication that there may be waters of the United States on a parcel or indications of the approximate location(s) of waters of the United States on a parcel.” 33 CFR 331.2. An applicant can elect to use a PJD to voluntarily waive or set aside questions regarding Clean Water Act jurisdiction over a particular site and thus move forward assuming that all waters will be treated as jurisdictional without the Corps making a formal determination. The Corps does not charge a fee for these jurisdictional determinations. *See id.* 325.1 (omitting mention of fees for jurisdictional determinations); Regulatory Guidance Letter 16–01 (2016) (stating that such determinations are issued as a “public service”).

3. U.S. Supreme Court Decisions

From the earliest rulemaking efforts following adoption of the 1972 Federal Water Pollution Control Act amendments, to the agencies’ most recent attempt to define “waters of the United States” in 2023, the agencies’ definition and interpretation of their regulations has spurred substantial litigation testing the meaning of the phrase. Hundreds of cases and dozens of courts have attempted to discern the intent of Congress when crafting the phrase. *See, e.g.*, *Sackett*, 598 U.S. at 664–59 (summarizing history); *Rapanos v. United States*, 547 U.S. 715, 739 (2006) (Scalia, J., plurality opinion) (same); *see also* discussion *supra* of history of Federal waterways regulation in section 1.A.

As part of this complex litigation history, several key U.S. Supreme Court decisions have contributed to the agencies’ interpretation of the phrase “waters of the United States” in the proposed rule. *See* discussion of early interpretations of “navigable waters” and “waters of the United States” *supra* in section 1.A. The agencies note that,

in the first instance, the Court has long interpreted the term “navigable waters” to mean waters used in interstate commerce. *See, e.g.*, *Daniel Ball*, 10 Wall. (77 U.S.) at 563; *The Montello*, 20 Wall. (87 U.S.) at 441–42. The Court has also used the phrase “waters of the United States” in this context for centuries to mean “similar bodies of water, almost always in relation to ships.” *Sackett*, 598 U.S. at 673 (quoting *Gibbons*, 9 Wheat. (22 U.S.) at 218). As discussed in section IV.A.2 of this preamble, enactment of the Federal Water Pollution Control Act expanded the scope of Federal jurisdiction over waters from what was covered under the RHA. Yet as the Supreme Court emphasized in *Sackett*, Federal jurisdiction under the Clean Water Act is not unlimited. The agencies’ proposal is intended to appropriately limit the scope of Federal authority consistent with the centuries-old boundaries of Congress’ Commerce Clause authority. *See Sackett*, 598 U.S. at 704 (Thomas, J., concurring).

In 1985, the Supreme Court deferred to the Corps’ assertion of jurisdiction over wetlands actually abutting a traditional navigable water in Michigan, stating that adjacent wetlands may be regulated as “waters of the United States” because “in the majority of cases” they have “significant effects on water quality and the aquatic ecosystem” in those waters. *United States v. Riverside Bayview Homes*, 474 U.S. 121, 135 n.9 (1985). The Court recognized that “[i]n determining the limits of its power to regulate discharges under the Act, the Corps must necessarily choose some point at which water ends and land begins Where on this continuum to find the limit of ‘waters’ is far from obvious.” *Id.* at 132. The Court acknowledged the “inherent difficulties of defining precise bounds to regulable waters,” and recognized that “wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment” *Id.* at 135. The Court also “conclude[d] that a definition of ‘waters of the United States’ encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.” *Id.*

The Supreme Court again addressed the definition of “waters of the United States” in *SWANCC* by rejecting a claim of Federal jurisdiction over nonnavigable, isolated, intrastate ponds that lack a sufficient connection to traditional navigable waters, noting that the term “navigable” must be given meaning within the context and application of the statute. 531 U.S. at

172. The Court held that interpreting the statute to extend to nonnavigable, isolated, intrastate ponds that lack a sufficient connection to traditional navigable waters would invoke the outer limits of Congress’ power under the Commerce Clause. *Id.* The *SWANCC* Court found that Congress’ “use of the phrase ‘waters of the United States’” in the Clean Water Act is not “a basis for reading the term ‘navigable waters’ out of the statute.” *Id.* Where an administrative interpretation of a statute presses against the outer limits of Congress’ constitutional authority, the Court explained, it expects a clear statement from Congress that it intended that result, and even more so when the broad interpretation authorizes Federal encroachment upon a traditional State power. *Id.* at 172–73. The Clean Water Act contains no such clear statement that Congress intended Federal jurisdiction to extend to the abandoned sand and gravel pit at issue. *Id.* at 174.

In January 2003, the EPA and the Corps issued joint guidance interpreting the Supreme Court decision in *SWANCC*.²⁰ The guidance indicated that *SWANCC* focused on nonnavigable, isolated, intrastate waters, and called for field staff to coordinate with their respective Corps or EPA Headquarters on jurisdictional determinations that asserted jurisdiction over such waters. The agencies at that time focused their interpretation of *SWANCC* to its facts, and applied the decision narrowly as restricting the exercise of Federal jurisdiction solely based on the Migratory Bird Rule.

In 2006, the Supreme Court interpreted the term “waters of the United States” in *Rapanos v. United States*, 547 U.S. 715 (2006). In *Rapanos*, the Supreme Court consolidated appeals of two Sixth Circuit cases, *United States v. Rapanos*, 235 F.3d 256 (6th Cir. 2000) and *Carabell v. U.S. Army Corps of Engineers*, 391 F.3d 704 (6th Cir. 2004), in which the Clean Water Act had been applied to wetlands located near man-made ditches that were ultimately connected to traditional navigable waters. All members of the Court agreed that the term “waters of the United States” encompasses some waters that are not navigable in the traditional sense. *Rapanos*, 547 U.S. at 731 (Scalia, J., plurality opinion) (“We have twice stated that the meaning of ‘navigable waters’ in the Act is broader than the traditional understanding of that term,

¹⁹ An applicant or landowner may believe the permit includes conditions that are no longer required if this proposed rulemaking were to be finalized. If requested, the agencies stand ready to assist the applicant or landowner, consistent with regulatory requirements and prior practice.

²⁰ *See* U.S. EPA and U.S. Army Corps of Engineers, Legal Memoranda Regarding *Solid Waste Agency of Northern Cook County (SWANCC) v. United States* (January 15, 2003), available at https://www.epa.gov/sites/production/files/2016-04/documents/swancc_guidance_jan_03.pdf.

SWANCC, 531 U.S. at 167; *Riverside Bayview*, 474 U.S. at 133.”)

A four-Justice plurality in *Rapanos* interpreted the term “waters of the United States” to “include[] only those relatively permanent, standing or continuously flowing bodies of water ‘forming geographic features’ that are described in ordinary parlance as ‘streams[,] . . . oceans, rivers, [and] lakes,’” *id.* at 739 (Scalia, J., plurality opinion) (quoting *Webster’s New International Dictionary* 2882 (2d ed. 1954)), and “wetlands with a continuous surface connection” to a “relatively permanent body of water connected to traditional interstate navigable waters.” *Id.* at 742. The plurality explained that “[w]etlands with only an intermittent, physically remote hydrologic connection to ‘waters of the United States’ do not implicate the boundary-drawing problem of *Riverside Bayview*,” and thus do not have the “necessary connection” to covered waters that triggers Clean Water Act jurisdiction. *Id.* at 742. The plurality also noted that its reference to “relatively permanent” waters did “not necessarily exclude streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought,” or “seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.” *Id.* at 732 n.5 (emphasis in original). The plurality said that “adjacent” means “physically abutting,” and used “abutting” and “adjacent” interchangeably. *Id.* at 748; *see also id.* at 742 (“*Riverside Bayview* rested upon the inherent ambiguity in defining where water ends and abutting (“adjacent”) wetlands begin[.]”). The plurality clarified that “the statutory definition [of ‘navigable waters’ at 33 U.S.C. 1362(7)] can be read to include some wetlands—namely, those that directly ‘abut’ covered waters.” *Id.* at 747 n.12 (emphasis in original). The plurality also explained how its standard for Clean Water Act jurisdiction remained consistent with the Court’s precedent interpreting “waters of the United States,” including *Riverside Bayview*. *See id.* at 734–35, 740–42, 746–48 (Scalia, J., plurality opinion).

In a concurring opinion, Justice Kennedy took a different approach, concluding that “to constitute “‘navigable waters’” under the Act, a water or wetland must possess a ‘significant nexus’ to waters that are or were navigable in fact or that could reasonably be so made.” *Id.* at 759 (Kennedy, J., concurring in the judgment) (citing *SWANCC*, 531 U.S. at 167, 172). He stated that adjacent

wetlands possess the requisite significant nexus if the wetlands “either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’” *Id.* at 780.

Following *Rapanos*, Federal courts took different approaches to determining which *Rapanos* standard applied. On June 7, 2007, the agencies issued joint guidance entitled “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States* and *Carabell v. United States*” to address the waters at issue in that decision. The guidance did not change the codified definition of “waters of the United States.” The guidance indicated that the agencies would assert jurisdiction over traditional navigable waters and their adjacent wetlands, relatively permanent nonnavigable tributaries of traditional navigable waters and wetlands that abut them, nonnavigable tributaries that are not relatively permanent if they have a significant nexus with a traditional navigable water, and wetlands adjacent to nonnavigable tributaries that are not relatively permanent if they have a significant nexus with a traditional navigable water. The guidance was reissued with minor changes on December 2, 2008 (hereinafter, the “*Rapanos* Guidance”).²¹ After issuance of the *Rapanos* Guidance, Members of Congress, developers, farmers, State and local governments, environmental organizations, energy companies, and others asked the agencies to replace the guidance with a regulation that would provide clarity and certainty regarding the scope of the waters federally regulated under the Clean Water Act.

On May 25, 2023, the Supreme Court decided *Sackett v. EPA*. In its majority opinion, the Supreme Court held that the Clean Water Act extends to relatively permanent bodies of water connected to traditional navigable waters and wetlands with a continuous surface connection to those waters “so that there is no clear demarcation between ‘waters’ and wetlands.” 598 U.S. 651, 678 (quoting *Rapanos*, 547 U.S. at 742, 755 (plurality opinion)). The Court concluded that the significant nexus standard was “inconsistent with the text and structure of the [Clean

Water Act].” *Id.* at 679. Instead, the Court held that the *Rapanos* plurality was correct: the [Clean Water Act]’s use of ‘waters’ encompasses ‘only those relatively permanent, standing or continuously flowing bodies of water “forming geographic[al] features” that are described in ordinary parlance as “streams, oceans, rivers, and lakes.”’” *Id.* at 671 (quoting *Rapanos*, 547 U.S. at 739). The Court also “agree[d] with [the plurality’s] formulation of when wetlands are part of ‘the waters of the United States.’” *Id.* at 678, explaining:

In *Rapanos*, the plurality spelled out clearly when adjacent wetlands are part of covered waters. It explained that “waters” may fairly be read to include only those wetlands that are “as a practical matter indistinguishable from waters of the United States,” such that it is “difficult to determine where the ‘water’ ends and the ‘wetland’ begins.” That occurs when wetlands have “a continuous surface connection to bodies that are ‘waters of the United States’ in their own right, so that there is no clear demarcation between ‘waters’ and wetlands.”

Id. at 678 (citing *Rapanos*, 547 U.S. at 742, 755).

The *Sackett* Court also found that “[w]etlands that are separate from traditional navigable waters cannot be considered part of those waters, even if they are located nearby,” *id.* at 678, and that “‘adjacent’ cannot include wetlands that are not part of covered ‘waters,’” *id.* at 682. Additionally, the Court found it “instructive” that section 101(b) of the Act expressly “protect[s] the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution” and “to plan the development and use . . . of land and water resources,” observing that “[i]t is hard to see how the States’ role in regulating water resources would remain ‘primary’ if the [agencies] had jurisdiction over anything defined by the presence of water.” *Id.* at 674. Finally, the Court emphasized that “the CWA does not define the EPA’s jurisdiction based on ecological importance” and instead draws a careful balance that recognizes States’ “primary authority to combat water pollution by regulating land and water use.” *Id.* at 683.

B. The Agencies’ Rules and Regulatory Regimes

In May 1973, the EPA issued its first set of regulations to implement the new NPDES permit program established in the 1972 Federal Water Pollution Control Act amendments. Those regulations defined the phrase “navigable waters” as:

- All navigable waters of the United States;

²¹ See U.S. EPA and U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States* at 1 (December 2, 2008) (“*Rapanos* Guidance”), available at https://www.epa.gov/sites/production/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf.

- Tributaries of navigable waters of the United States;
- Interstate waters;
- Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes;
- Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce; and
- Intrastate lakes, rivers, and streams which are utilized for industrial purposes by industries in interstate commerce.

38 FR 13528, 13529 (May 22, 1973) (codified at 40 CFR 125.1 (1973)).

In 1974, the Corps issued its first set of regulations defining the term “navigable waters” for the purpose of implementing section 404 of the Clean Water Act as well as sections 9, 10, 11, 13, and 14 of the Rivers and Harbors Act. 39 FR 12115, 12119 (April 3, 1974) (codified at 33 CFR 209.120). These regulations reaffirmed the Corps’ view at the time that its dredged and fill jurisdiction under section 404 was the same as its traditional jurisdiction under the Rivers and Harbors Act. Specifically, the Corps defined the “navigable waters” as waters that “are subject to the ebb and flow of the tide, and/or are presently, or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce.” *Id.*

Environmental organizations challenged the Corps’ 1974 regulation in the U.S. District Court for the District of Columbia, arguing that the Corps’ definition of “navigable waters” was inadequate because it did not include tributaries or coastal marshes above the mean high tide mark or wetlands above the ordinary high water mark. In a brief summary judgment order, the district court held that the term “navigable waters” is not limited to the traditional tests of navigability and ordered the Corps to revoke its definition and publish a new one “clearly recognizing the full regulatory mandate of the Water Act.” *Natural Resources Defense Council, Inc. v. Callaway*, 392 F. Supp. 685 (D.D.C. 1975).

In response to this decision, the Corps issued interim regulations in 1975 that defined the term “navigable waters” to include periodically inundated coastal wetlands contiguous with or adjacent to navigable waters, periodically inundated freshwater wetlands contiguous with or adjacent to navigable waters, and, as in the EPA’s 1973 regulations, certain intrastate waters based on non-transportation impacts on interstate commerce. The Corps revised the definition in 1977 to encompass traditional navigable waters, tributaries to navigable waters, interstate waters,

adjacent wetlands to those categories of waters, and “[a]ll other waters” the “degradation or destruction of which could affect interstate commerce.” 42 FR 37122, 37144 (July 19, 1977).

The agencies have revised the definition of “waters of the United States” multiple times since then.²² In fact, since 2015, EPA and the Army have finalized five rules revising the definition of “waters of the United States.” Additional information regarding the agencies’ prior rulemakings on “waters of the United States,” including the 2015 Clean Water Rule and the 2019 Repeal Rule, can be found in the preambles for the agencies’ prior rules.²³ The remainder of section IV.B of this preamble focuses on the agencies’ most recent rules and regulatory regimes—namely, the pre-2015 regulatory regime, the 2020 Navigable Waters Protection Rule, the 2023 Rule, the Conforming Rule, and resulting Amended 2023 Rule regulatory regime.

1. Pre-2015 Regulatory Regime (Prior to Sackett)

The “pre-2015 regulatory regime” refers to the agencies’ pre-2015 regulations defining “waters of the

²² The Corps has revised the definition of “navigable waters” or “waters of the United States” for its section 404 regulations in 1975 (40 FR 31320, 31324, 31326 (July 25, 1975) (interim final regulations)), 1977 (42 FR 37122, 37144 (July 19, 1977) (including a definition of “wetlands”; “freshwater wetlands” had been defined in 1975)), 1982 (47 FR 31794 (July 22, 1982) (interim final regulations)), 1984 (49 FR 39478 (October 5, 1984)), and 1986 (51 FR 41250 (November 13, 1986)). For its part, EPA has revised the definition of “navigable waters” or “waters of the United States” in 1979 (44 FR 32854 (June 7, 1979) (promulgating the waste treatment system exclusion)), 1980 (45 FR 48620 (July 21, 1980) (revising the waste treatment system exclusion in its NPDES regulations only at 40 CFR 122.3) and 45 FR 48620 (July 21, 1980) (suspending a portion of the waste treatment system exclusion in its NPDES regulations)), 1983 (48 FR 14146, 14157 (April 1, 1983) (republishing the waste treatment system exclusion in its NPDES regulations at 40 CFR 122.2)), 1988 (53 FR 20764, 20774 (June 6, 1988) (revising EPA’s section 404 program definitions at 40 CFR 232.2)), and 2002 (67 FR 47042 (July 17, 2002) (revising the definition of “waters of the United States” in EPA’s section 311 regulations at 40 CFR part 112 to ensure consistency with other Clean Water Act programs)). The agencies have also issued several joint revisions to their regulations, including in 1993 (58 FR 45008, 45031 (August 25, 1993) (adding an exclusion for prior converted cropland)), 2015 (80 FR 37045 (June 29, 2015) (“Clean Water Rule: Definition of ‘Waters of the United States’” or 2015 Clean Water Rule)), 2019 (84 FR 56626 (October 22, 2019) (“Definition of ‘Waters of the United States’—Recodification of Pre-Existing Rules” or the 2019 Repeal Rule)), 2020 (85 FR 22250 (April 21, 2020) (“Navigable Waters Protection Rule”)), and 2023 (88 FR 3004 (January 18, 2023) (“Revised Definition of ‘Waters of the United States’”) and 88 FR 61964, 61968 (September 8, 2023) (“Revised Definition of ‘Waters of the United States’; Conforming”)).

²³ See *supra* note 22.

United States,” implemented in light of relevant case law and longstanding practice, as informed by applicable guidance, training, and experience. The pre-2015 regulations are commonly referred to as “the 1986 regulations.”

In 1986, the Corps consolidated and recodified its regulations defining “waters of the United States” for purposes of implementing the section 404 program to align with clarifications that the EPA had previously promulgated. See 51 FR 41206, 41216–17 (November 13, 1986). While EPA and the Corps have maintained separate regulations defining the statutory term “waters of the United States,” their interpretations, reflected in the 1986 regulations, were identical and remained largely unchanged from 1977 to 2015. See 42 FR 37122, 37124, 37127 (July 19, 1977).²⁴ EPA’s comparable regulations were recodified in 1988. See 53 FR 20764 (June 6, 1988). While the Corps stated in 1986 that the recodified regulation neither reduced nor expanded jurisdiction, its previous exclusion for ditches was moved from the regulatory text to the final rule preamble. *Id.* at 41216–17. And the Corps added to the preamble what later became known as the “Migratory Bird Rule,” which claimed jurisdiction over any waters which are or may be used by birds protected by migratory bird treaties, waters which may be used as habitat for birds flying across State lines, waters which may be used by endangered species, and waters used to irrigate crops sold in interstate commerce. *Id.* at 41217.

The 1986 regulatory text identified the following waters as “waters of the United States” (33 CFR 328.3 (2014)):²⁵

²⁴ Multiple provisions in the Code of Federal Regulations contained the definition of the phrases “navigable waters” and “waters of the United States” for purposes of implementing the Clean Water Act, 33 U.S.C. 1362(7), and other water pollution protection statutes such as the Oil Pollution Act, 33 U.S.C. 2701(21). Some EPA definitions were added after 1986, but each conformed to the 1986 regulations except for variations in the waste treatment system exclusion. See, e.g., 55 FR 8666 (March 8, 1990); 73 FR 71941 (November 26, 2008); see also *supra* note 22.

²⁵ For convenience, the agencies generally refer to the Corps’ regulations throughout this document at 33 CFR 328.3. The EPA’s codification of the definition of “waters of the United States” is found at 40 CFR 120.2. EPA’s regulations defining “waters of the United States” or “navigable waters” at 40 CFR 110.1, 112.2, 116.3, 117.1, 122.2, 230.3, 232.2, 300.5, 302.3, 401.11, and Appendix E to Part 300 all refer to the definition at 40 CFR 120.2.

²⁶ “Waters of the United States” is defined in both the U.S. Army Corps of Engineers’ regulations, at 33 CFR part 328, and in the EPA’s regulations, at 40 CFR part 120. For the sake of convenience, in this preamble the agencies will generally just refer to the Corps’ regulations at 33 CFR 328.3.

- All traditional navigable waters,²⁷ interstate waters, and the territorial seas;
- All impoundments of jurisdictional waters;
 - All “other waters” such as lakes, ponds, and sloughs the “use, degradation, or destruction of which would or could affect interstate or foreign commerce” (“other waters”);
 - Tributaries of traditional navigable waters, interstate waters, impoundments, or “other waters”; and
 - Wetlands adjacent to traditional navigable waters, interstate waters, the territorial seas, impoundments, tributaries, or “other waters” (other than waters that are themselves wetlands).

33 CFR 328.3(a)(1)–(7) (1987). The 1986 regulations also excluded “waste treatment systems” from the definition of “waters of the United States,” consistent with the EPA’s regulatory definition. *Id.* 328.3 (a)(7), (b) (1987); *see also* 44 FR 32854 (June 7, 1979).²⁸ Additionally, the 1986 regulations defined “adjacent” to mean “bordering, contiguous, or neighboring,” and specified that “[w]etlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are ‘adjacent wetlands.’”

On August 25, 1993, the agencies amended the regulatory definition of “waters of the United States” to categorically exclude “prior converted croplands.” 58 FR 45008, 45031 (August 25, 1993) (“1993 Rule”) (codified at 33 CFR 328.3(a)(8) (1994)). The stated purpose of the amendment was to promote “consistency among various Federal programs affecting wetlands,” in particular the Food Security Act of 1985 programs implemented by the U.S. Department of Agriculture (USDA) and the Clean Water Act programs implemented by the agencies.²⁹ 58 FR

45031. The agencies did not include a definition of “prior converted cropland” in the text of the Code of Federal Regulations but noted in the preamble to the 1993 Rule that the term was defined at that time by the USDA National Food Security Act Manual (NFSAM). *Id.* The agencies at that time also declined to establish regulatory text specifying when the prior converted cropland designation is no longer applicable. In the preamble to the 1993 Rule, the agencies stated that “[t]he Corps and EPA will use the [Natural Resources Conservation Service’s] provisions on ‘abandonment,’ thereby ensuring that [prior converted] cropland that is abandoned within the meaning of those provisions and which exhibit[s] wetlands characteristics will be considered wetlands subject to Section 404 regulation.” *Id.* at 45034. The agencies summarized these abandonment provisions by explaining that prior converted cropland which meets wetland criteria is considered to be abandoned unless: at least once in every five years the area has been used for the production of an agricultural commodity, or the area has been used and will continue to be used for the production of an agricultural commodity in a commonly used rotation with aquaculture, grasses, legumes, or pasture production. *Id.*

Congress amended the Food Security Act wetland conservation provisions in 1996 to state that USDA certifications of wetland delineation maps for purposes of the Food Security Act (*e.g.*, determinations by the Natural Resources Conservation Service (NRCS) that particular areas constitute prior converted cropland) “shall remain valid and in effect as long as the area is devoted to an agricultural use or until such time as the person affected by the certification requests review of the certification by the Secretary [of Agriculture].” Public Law 104–127, 322(a)(4), 110 Stat. 888 (1996); 16 U.S.C. 3822(a)(4). Thus, for purposes of farm program eligibility, the 1996 amendments meant that prior converted cropland would only be abandoned if the area was no longer devoted to an agriculture use, while the 1993 preamble abandonment principles

C of 7 CFR part 12. Due to the unique statutory provisions of the Food Security Act, USDA wetland determinations may identify certain areas as exempt under the 1985 Act but remain subject to the requirements of the Clean Water Act. To avoid potential confusion, USDA clearly informs program participants that USDA wetland determinations are for purposes of implementing the wetland conservation provisions only, and that participants should contact the Corps for information as to whether a particular activity will require a Clean Water Act section 404 permit.

would have disqualified such areas for the Clean Water Act exclusion if their specific conditions were not met. The agencies did not update their prior converted cropland regulations for purposes of the Clean Water Act following the 1996 amendments to wetland conservation provisions of the Food Security Act, as those regulations neither defined prior converted cropland nor specified when a valid prior converted cropland determination might cease to be valid. However, in 2005, the Army and the USDA issued a joint Memorandum to the Field (the 2005 Memorandum) in an effort to align the Clean Water Act section 404 program with the Food Security Act wetland conservation provisions.³⁰ The 2005 Memorandum provided that a “certified [prior converted] determination made by [USDA] remains valid as long as the area is devoted to an agricultural use. If the land changes to a non-agricultural use, the [prior converted] determination is no longer applicable and a new wetland determination is required for CWA purposes.” 2005 Memorandum at 4.

The 2005 Memorandum did not clearly address the abandonment principle that the agencies had been implementing since the 1993 rulemaking. The change in use policy was also never promulgated as a rule and was declared unlawful by one district court because it effectively modified the 1993 preamble language without any rulemaking process. *New Hope Power Co. v. U.S. Army Corps of Eng’rs*, 746 F. Supp. 2d 1272, 1282 (S.D. Fla. 2010). As discussed in section V.F.2 of this preamble, USDA and the Army rescinded the 2005 Memorandum in 2020 in light of promulgation of the NWPR.³¹ Thus, under pre-2015 practice, EPA and the Army once again began implementing the abandonment principle to determine if an area has lost its prior converted cropland status.

The agencies have implemented the pre-2015 regulatory regime consistent

³⁰ U.S. Department of Agriculture, Natural Resources Conservation Service and U.S. Department of the Army, Office of the Assistant Secretary of the Army (Civil Works). *Memorandum to the Field on 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://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2508>.

³¹ U.S. Department of the Army, Office of the Assistant Secretary of the Army (Civil Works), and U.S. Department of Agriculture, Natural Resources Conservation Service. 2020. “Memorandum for the Field: Rescission of the 2005 Joint Memorandum to the Field Regarding Guidance on Conducting Wetland Determinations for the Food Security Act of 1985 and Section 404 of the Clean Water Act.” January 28, 2020. Available in the docket for this action.

²⁷ “Traditional navigable waters” (or waters that are traditionally understood as navigable) refers to all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide.

²⁸ There are some variations in the waste treatment system exclusion across the EPA’s regulations defining “waters of the United States.” The placement of the waste treatment system and prior converted cropland exclusions also varies in the EPA’s regulations.

²⁹ Title XII of the Food Security Act of 1985, as amended, encourages participants in USDA programs to adopt land management measures by linking eligibility for USDA program benefits to farming practices on highly erodible land and wetlands (*i.e.*, the wetland conservation provisions). USDA policy guidance regarding implementation of the wetland conservation provisions is found in the current edition of the Natural Resources Conservation Service National Food Security Act Manual (NFSAM), including the procedures for how to delineate wetlands and make wetland determinations in accordance with Subpart

with *SWANCC* and *Rapanos* after those Supreme Court decisions were issued in 2001 and 2006, respectively. The agencies issued guidance on *SWANCC* in 2001 and then in 2003. 68 FR 1991 (January 15, 2003) (superseding the agencies' 2001 guidance). To ensure that any assertion of jurisdiction over the "other waters" category (*i.e.*, paragraph (a)(3) waters in the 1986 regulations) is consistent with the Supreme Court's ruling in *SWANCC*, the agencies have required that field staff get approval from headquarters before exercising jurisdiction over an (a)(3) water. As a practical matter, field staff have rarely, if ever, sought such approval and therefore the agencies have not asserted jurisdiction under the "other waters" category of the 1986 regulations since *SWANCC*.

For nearly a decade after *Rapanos*, the agencies did not revise their regulations but instead determined jurisdiction under the 1986 regulations consistent with the two standards established in *Rapanos* (the plurality's relatively permanent standard and Justice Kennedy's significant nexus standard) and by using guidance issued jointly by the agencies. *See Rapanos* Guidance. Under the *Rapanos* Guidance,³² the agencies concluded that Clean Water Act jurisdiction exists if a water meets either the relatively permanent standard or the significant nexus standard. The agencies' assertion of jurisdiction over traditional navigable waters and their adjacent wetlands remained unchanged by *Rapanos*. Under the relatively permanent standard, the guidance stated that the agencies would assert jurisdiction over: non-navigable tributaries of traditional navigable waters that typically flow year-round or have continuous flow at least seasonally; and wetlands that directly abut such tributaries. *Id.* at 4–7. The guidance further stated that the agencies would determine jurisdiction under the significant nexus standard for the following waters: non-navigable tributaries that are not relatively permanent, wetlands adjacent to non-navigable tributaries that are not relatively permanent, and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary. *Id.* at 8–12. The agencies generally did not assert jurisdiction over non-wetland swales or erosional features (*e.g.*, gullies and small washes characterized by low volume or

infrequent or short duration flow) or ditches (including roadside ditches) excavated wholly in and draining only uplands and that did not carry a relatively permanent flow of water. *Id.* at 11–12.

Even after promulgating a revised definition of "waters of the United States" that went into effect in 2015 (the 2015 Clean Water Rule), the agencies continued implementing the pre-2015 regulatory regime in certain States and, for a period of time, nationwide due to court orders staying implementation of the 2015 rule.³³ In 2018, the agencies again implemented the pre-2015 regulatory regime nationwide for about six months following the agencies' addition of an applicability date to the 2015 Clean Water Rule.³⁴ The next year, after proceeding through public notice and comment, the agencies published a final rule repealing the 2015 Clean Water Rule and recodifying the 1986 regulations without any changes to the regulatory text. 84 FR 56626 (October 22, 2019). The agencies indicated that they would implement the 1986 regulations informed by applicable agency guidance documents and consistent with Supreme Court decisions and longstanding agency practice, thus restoring implementation of the pre-2015 regulatory regime nationwide after the 2019 Repeal Rule went into effect on December 23, 2019.

2. The 2020 Navigable Waters Protection Rule

On January 23, 2020, the agencies signed the Navigable Waters Protection Rule: Definition of "Waters of the United States" (NWPR), a rule that for the first time defined "waters of the United States" based generally on the *Rapanos* plurality's standard. The NWPR was published on April 21, 2020,

³³ *See, e.g., North Dakota v. EPA*, 127 F. Supp. 3d 1047 (D.N.D. 2015) (preliminary injunction barring implementation of the 2015 Clean Water Rule in 13 States); *Georgia v. Pruitt*, 326 F. Supp. 3d 1356 (S.D. Ga. June 6, 2018) (same as to 11 States); *Texas v. EPA*, No. 3:15-cv-162, 2018 WL 4518230 (S.D. Tex. Sept. 12, 2018) (same as to three States). *See* section I.A. of the Technical Support Document for the Proposed "Revised Definition of 'Waters of the United States'" Rule ([available at https://www.regulations.gov/document/EPA-HQ-OW-2021-0602-0081](https://www.regulations.gov/document/EPA-HQ-OW-2021-0602-0081)), for a comprehensive history of the effects of the litigation against the 2015 Clean Water Rule.

³⁴ In February 2018, the agencies issued a rule that added an applicability date of February 6, 2020 to the 2015 Clean Water Rule. 83 FR 5200 (February 6, 2018) ("Applicability Date Rule"). The Applicability Date Rule was challenged in several district court actions, and on August 16, 2018 the rule was vacated and enjoined nationwide. *See S.C. Coastal Conservation League v. Pruitt*, 318 F. Supp. 3d 959 (D.S.C. Aug. 16, 2018); *see also Puget Soundkeeper All. v. Wheeler*, No. 15–01342 (W.D. Wash. Nov. 26, 2018) (vacating the Applicability Date Rule nationwide).

and went into effect on June 22, 2020. 85 FR 22250 (April 21, 2020).³⁵ The NWPR interpreted the term "the waters" within "the waters of the United States" to "encompass relatively permanent flowing and standing waterbodies that are traditional navigable waters in their own right or that have a specific surface water connection to traditional navigable waters, as well as wetlands that abut or are otherwise inseparably bound up with such relatively permanent waters." *Id.* at 22273. Specifically, the rule established four categories of jurisdictional waters: (1) the territorial seas and traditional navigable waters; (2) tributaries of such waters; (3) certain lakes, ponds, and impoundments of jurisdictional waters; and (4) wetlands adjacent to the above three categories of jurisdictional waters. *Id.* at 22273.

The NWPR defined the scope of each of these four categories. The territorial seas and traditional navigable waters were defined consistent with the agencies' longstanding interpretations of those terms. *Id.* at 22280–81. A "tributary" was defined as a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to a territorial sea or traditional navigable water in a typical year either directly or indirectly through other tributaries, jurisdictional lakes, ponds, or impoundments, or adjacent wetlands. *Id.* at 22286. A jurisdictional tributary was required to be perennial or intermittent in a typical year. *Id.* Additionally, the term "tributary" included a ditch that either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch is perennial or intermittent and contributes surface water flow to a traditional navigable water or territorial sea in a typical year. *Id.* at 22251. The NWPR's "tributary" definition did not include ephemeral features, which were defined as surface waters that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools. *Id.*

The NWPR defined "lakes and ponds, and impoundments of jurisdictional waters" as "standing bodies of open water that contribute surface water flow

³⁵ The NWPR went into effect on June 22, 2020 in all States except Colorado. 85 FR 22250 (April 21, 2020). In Colorado, the NWPR was subject to a preliminary injunction issued by the U.S. District Court for the District of Colorado. *Colorado v. EPA*, 445 F. Supp. 3d 1295 (D. Colo. 2020). The Tenth Circuit later reversed the Colorado district court's order on appeal; as a result, the NWPR went into effect in Colorado on April 26, 2021. *Colorado v. EPA*, 989 F.3d 874 (10th Cir. 2021); *Colorado v. EPA*, No. 20–1238, ECF No. 010110512604 (Doc. 10825032) (10th Cir. Apr. 26, 2021).

³² The agencies note that the guidance "does not impose legally binding requirements on EPA, the Corps, or the regulated community, and may not apply to a particular situation depending on the circumstances." *Rapanos* Guidance at 4 n.17.

in a typical year to a territorial sea or traditional navigable water either directly or through a tributary, another jurisdictional lake, pond, or impoundment, or an adjacent wetland.” *Id.* at 22251. A lake, pond, or impoundment of a jurisdictional water did not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through certain artificial or natural features. *Id.* Under the NWPR, a lake, pond, or impoundment of a jurisdictional water was also jurisdictional if it was inundated by flooding from a jurisdictional water in a typical year. *Id.*

As for wetlands, the NWPR interpreted “adjacent wetlands” to be those wetlands that abut jurisdictional waters and those non-abutting wetlands that are (1) “inundated by flooding” from a jurisdictional water in a typical year, (2) physically separated from a jurisdictional water only by certain natural features (e.g., a berm, bank, or dune), or (3) physically separated from a jurisdictional water by an artificial structure that “allows for a direct hydrologic surface connection” between the wetland and the jurisdictional water in a typical year. *Id.* at 22338, 22240. Wetlands that did not have these types of connections to other waters were not jurisdictional under the NWPR.

The NWPR’s regulatory text expressly provided that waters that did not fall into its jurisdictional categories were not considered “waters of the United States.” *Id.* at 22338. Moreover, waters within these categories, including traditional navigable waters and the territorial seas, were not “waters of the United States” if they also fit within the NWPR’s broad exclusions. *See id.* at 22325 (“If the water meets any of the [] exclusions, the water is excluded even if the water satisfies one or more conditions to be a [jurisdictional] water.”).³⁶ The rule excluded groundwater, including groundwater drained through subsurface drainage systems; ephemeral features; diffuse stormwater runoff and directional sheet flow over upland; ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations; prior converted cropland; artificially irrigated areas; artificial lakes and ponds; water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity; pits

excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel; stormwater control features constructed or excavated in upland or in non-jurisdictional waters; groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and waste treatment systems. *Id.* at 22338–39.

Similar to other rulemakings to revise the definition of “waters of the United States,” the NWPR was subject to multiple legal challenges. On August 30, 2021, the U.S. District Court for the District of Arizona remanded the NWPR and vacated the rule. *Pascua Yaqui Tribe v. EPA*, No. 4:20-cv-00266, 2021 WL 3855977 (D. Ariz. Aug. 30, 2021). On September 27, 2021, the U.S. District Court for the District of New Mexico also issued an order vacating and remanding the NWPR. *Navajo Nation v. Regan*, No. 2:20-cv-00602 (D.N.M. Sept. 27, 2021). Six courts also remanded the NWPR without vacatur or without addressing vacatur.³⁷

Following vacatur of the NWPR, the agencies resumed implementing the pre-2015 regulatory regime across the country.

3. January 2023 Rule

In January 2023, the EPA and the Army once again revised the definition of “waters of the United States.” 88 FR 3004 (January 18, 2023). The 2023 Rule incorporated the two jurisdictional standards from *Rapanos* into the definition of the term “waters of the United States.” First, the “relatively permanent standard” under the 2023 Rule referred to the test to identify: relatively permanent, standing or continuously flowing tributaries connected to traditional navigable waters, the territorial seas, or interstate waters; relatively permanent, standing or continuously flowing additional waters with a continuous surface connection to such relatively permanent

waters or to traditional navigable waters, the territorial seas, or interstate waters; and, adjacent wetlands and certain impoundments with a continuous surface connection to such relatively permanent waters or to traditional navigable waters, the territorial seas, or interstate waters. *See* 88 FR 3006, 3038–39. Second, the “significant nexus standard” under the 2023 Rule referred to the test to identify waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters. *Id.* at 3006. The regulatory text also defined “significantly affect” for purposes of the significant nexus standard. *Id.* Under the 2023 Rule, waters were jurisdictional if they met either standard. *Id.*

The 2023 Rule also defined the term “adjacent” with no changes from the agencies’ longstanding regulatory definition of “adjacent” as “bordering, contiguous, or neighboring.” 88 FR 3116–17. Wetlands separated from other “waters of the United States” by man-made dikes or barriers, natural river berms, beach dunes and the like were defined as “adjacent” wetlands. *Id.*

While the 2023 Rule was not before the Supreme Court in *Sackett*, the Court did review the rule’s two jurisdictional standards and concluded that the significant nexus standard was “inconsistent with the text and structure of the [Clean Water Act].” 598 U.S. at 679.

4. Conforming Rule

In September 2023, EPA and the Army published a final rule amending the 2023 Rule’s definition of “waters of the United States” in response to the Supreme Court decision in *Sackett*. “Revised Definition of ‘Waters of the United States’; Conforming,” 88 FR 61964, 61968 (September 8, 2023) (“Conforming Rule”). The Conforming Rule published in the **Federal Register** and became effective on September 8, 2023.

The Conforming Rule amended the provisions of the 2023 Rule that were invalid under the Supreme Court’s interpretation of the Clean Water Act in *Sackett*. *See* 88 FR 61964. In particular, the agencies revised the 2023 Rule to remove the significant nexus standard and to amend its definition of “adjacent” as these provisions were rendered invalid by *Sackett*. *Id.* at 61965–66. Per *Sackett*, waters are not jurisdictional under the Clean Water Act based on the significant nexus standard. *Id.* In addition, under the decision in

³⁶ The NWPR’s exclusion for ditches, however, explicitly did not encompass ditches that are traditional navigable waters or jurisdictional tributaries. 33 CFR 328.3(b)(5) (2020).

³⁷ Order, *Pueblo of Laguna v. Regan*, No. 1:21-cv-00277, ECF No. 40 (D.N.M. Sept. 21, 2021) (declining to reach issue of vacatur in light of the *Pascua* decision); Order, *California v. Wheeler*, No. 3:20-cv-03005, ECF No. 271 (N.D. Cal. Sept. 16, 2021) (same); *Waterkeeper All. v. Regan*, No. 3:18-cv-03521, ECF No. 125 (N.D. Cal. Sept. 16, 2021) (same); Order, *Conservation Law Found. v. EPA*, No. 1:20-cv-10820, ECF No. 122 (D. Mass. Sept. 1, 2021) (same); Order, *S.C. Coastal Conservation League v. Regan*, No. 2:20-cv-01687, ECF No. 147 (D.S.C. July 15, 2021) (remanding without vacating); Order, *Murray v. Wheeler*, No. 1:19-cv-01498, ECF No. 46 (N.D.N.Y. Sept. 7, 2021) (same). In this litigation, EPA and the Army had filed motions for remand without vacatur. *See, e.g.*, U.S. Motion for Remand without Vacatur, *Conservation Law Found. v. EPA*, No. 1:20-cv-10820, ECF No. 112 (D. Mass. June 9, 2021).

Sackett, wetlands are not defined as “adjacent” or jurisdictional under the Clean Water Act solely because they are “bordering, contiguous, or neighboring . . . [or] separated from other ‘waters of the United States’ by man-made dikes or barriers, natural river berms, beach dunes and the like.” *Id.* at 61965. Therefore, waters cannot be found to be jurisdictional because they meet the significant nexus standard; nor can wetlands be found to be jurisdictional based on the definition of “adjacent” previously codified in the 2023 Rule. *Id.* Consistent with the *Sackett* decision, the agencies in the Conforming Rule revised the definition of “adjacent” to mean “having a continuous surface connection.” *Id.* Furthermore, because *Sackett* invalidated the significant nexus standard, the agencies removed the provision for assessment of streams and wetlands under the additional waters provision of paragraph (a)(5) as no longer valid since any jurisdictional streams or wetlands would fall within paragraphs (a)(1) through (4) of the 2023 Rule.³⁸ *Id.*

Finally, the agencies removed “interstate wetlands” from the 2023 Rule to conform with the decision in *Sackett*. *Id.* at 61966. The Supreme Court in *Sackett* examined the Clean Water Act and its statutory history and found the predecessor statute to the Clean Water Act covered and defined “interstate waters” as “all rivers, lakes, and other waters that flow across or form a part of State boundaries.” 598 U.S. at 673 (citing 33 U.S.C. 1160(a), 1173(e) (1970 ed.)) (emphasis in original). The Court concluded that the use of the term “waters” refers to such “open waters” and not wetlands. *Id.* As a result, under *Sackett*, the provision authorizing the assertion of Clean Water Act jurisdiction over wetlands simply because they are interstate is invalid. 88 FR 61966.

5. Current Applicable Regulatory Regimes

As noted above, the agencies refer to the regulations defining “waters of the United States” under the 2023 Rule, as amended by the Conforming Rule, as the “Amended 2023 Rule.” The Amended 2023 Rule is the regulatory regime that is currently codified in the Code of Federal Regulations and that serves as

³⁸ Lakes and ponds, however, may still have been jurisdictional under paragraph (a)(5) of the 2023 Rule if they did not fall within paragraphs (a)(1) through (3) of the 2023 Rule (for example, if they were not tributaries connected to waters identified in paragraph (a)(1) or (2)) and they were relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (3).

the baseline for the regulatory impact analysis for this proposal. In this action, the agencies are proposing to revise the Amended 2023 Rule.

Due to preliminary injunctions of the Amended 2023 Rule in several States, the agencies are implementing two regulatory regimes across the country as of the signature date of this proposed rule.³⁹ The EPA and the Army are implementing the Amended 2023 Rule in 24 States, the District of Columbia, and the U.S. Territories. In the other 26 States, the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime and the Supreme Court’s *Sackett* decision.⁴⁰

6. March 12, 2025, “Continuous Surface Connection” Guidance

On March 12, 2025, the EPA and the Army signed a joint memorandum to provide guidance to the agencies’ field staff regarding implementation of “continuous surface connection” for adjacent wetlands. “Memorandum to the Field between the U.S. Department of the Army, U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency Concerning the Proper Implementation of ‘Continuous Surface Connection’ under the Definition of ‘Waters of the United States’ under the Clean Water Act” (March 12, 2025) (“continuous surface

³⁹ States and business groups challenged the 2023 Rule in three courts. Two district courts preliminarily enjoined the 2023 Rule as to the plaintiff-States. *Texas v. EPA*, 662 F. Supp. 3d 739 (S.D. Tex. 2023); *West Virginia v. EPA*, 669 F. Supp. 3d 781 (D.N.D. 2023). The Eastern District of Kentucky dismissed on standing and ripeness grounds. *Kentucky v. EPA*, No. 3:23-cv-7 (E.D. Ky. Mar. 31, 2023). Subsequently, the Sixth Circuit granted an injunction pending appeal of the Eastern District of Kentucky’s order to Kentucky and business plaintiffs, which dissolved when the Sixth Circuit’s mandate issued on September 23, 2024, following the Sixth Circuit’s ruling vacating and remanding the district court’s dismissal. Order, *Kentucky v. EPA*, No. 23–5345, ECF No. 28 (6th Cir. May 10, 2023); Opinion, *Kentucky v. EPA*, No. 23–5345, ECF No. 56–2 (6th Cir. July 29, 2024); Mandate Issued, *Kentucky v. EPA*, No. 23–5345, ECF No. 57 (6th Cir. Sept. 23, 2024). Kentucky then amended its complaint, and the business plaintiffs filed a notice of voluntary dismissal. Amended Complaint, *Kentucky v. EPA*, No. 3:23-cv-7, ECF No. 78 (E.D. Ky. Nov. 8, 2024); Notice of Voluntary Dismissal, *Kentucky v. EPA*, No. 3:23-cv-7, ECF No. 73 (E.D. Ky. Oct. 4, 2024). While these cases were pending, the Supreme Court decided *Sackett* and the agencies issued the Conforming Rule. After the agencies issued the Conforming Rule, plaintiffs challenging the 2023 Rule amended their complaints to challenge the Amended 2023 Rule and certain aspects of the Conforming Rule and 2023 Rule. See also *White v. EPA*, No. 24–00013 (E.D.N.C.); *White v. EPA*, No. 24–1635 (4th Cir.). As of the signature date of this proposed rule, this ongoing litigation is in abeyance.

⁴⁰ The latest information on the status of this litigation can be found on the EPA’s Rule Status and Litigation Update web page at <https://www.epa.gov/wotus/definition-waters-united-states-rule-status-and-litigation-update>.

connection guidance”), available at <https://www.epa.gov/system/files/documents/2025-03/2025cscguidance.pdf>. Consistent with this guidance, and consistent with *Sackett*, the agencies are interpreting “continuous surface connection” to mean abutting (or touching) a requisite jurisdictional water. The agencies issued the guidance in response to requests for clarification on the scope of adjacent wetlands in light of the Supreme Court’s decision in *Sackett*.

Specifically, the agencies had heard from a variety of co-regulators and stakeholders that the preamble to both the 2023 Rule and the Conforming Rule did not include adequate direction or guidance on the meaning of the “continuous surface connection” requirement, and the agencies’ case-specific policy memoranda⁴¹ issued post-*Sackett* neither provided national guidance on the topic nor clear and transparent direction for the public or the agencies. The agencies determined that the case-specific policy memoranda also contained conclusions which are inconsistent with the discussion of “continuous surface connection” as described in the pre-2015 regulatory regime guidance documents and the *Sackett* decision.

C. WOTUS Notice and Summary of Stakeholder Outreach

On March 21, 2025, the agencies signed a **Federal Register** document publicizing a series of listening sessions and a 30-day recommendations docket to solicit feedback on key aspects of the definition of “waters of the United States.” “WOTUS Notice: The Final Response to SCOTUS” (90 FR 13428, March 24, 2025). The agencies accepted written pre-proposal recommendations from members of the public from March 24, 2025, to April 23, 2025, which can be found in the docket (Docket ID EPA–HQ–OW–2025–0093). The agencies held a series of stakeholder and co-regulator listening sessions to hear pre-proposal input and recommendations including specific meetings in March, April, May and June of 2025 with Tribes, States and State associations, local governments, industry, environmental organizations, agricultural organizations, small businesses and congressional staff, and

⁴¹ The agencies issued several case-specific policy memoranda in 2024 and 2025 as part of the process in place at the time for coordination of Corps draft AJDs. Such case-specific policy memoranda were issued by the agencies to provide guidance to the respective EPA regional and Corps district offices. Additional information regarding the agencies’ coordination processes is available on EPA’s website at <https://www.epa.gov/wotus/coordination-process-approved-jurisdictional-determinations-and-field-memoranda>.

two in-person public listening sessions held in communities outside of Washington, DC. A summary of the agencies' pre-proposal listening sessions is available in the docket (Docket ID No. EPA-HQ-OW-2025-0322) for this proposed rule.

The **Federal Register** announcement outlined three key topics the agencies were particularly interested in receiving recommendations on, including the scope of "relatively permanent" waters and to what features this phrase applies, the scope of "continuous surface connection" and to which features this phrase applies, and the scope of jurisdictional ditches. The agencies also sought input on implementation challenges related to these key topic areas.

Additionally, the agencies engaged State and local governments in a 60-day federalism consultation period during development of this proposed rule, beginning with an initial federalism consultation meeting on April 3, 2025, and concluding on June 2, 2025. The agencies also initiated a 60-day consultation period with federally recognized Indian Tribes, beginning March 21, 2025, and concluding May 20, 2025. Information about the federalism and Tribal consultation can be found in sections VII.F and VII.G of this preamble, respectively, and in the federalism and Tribal consultation reports, available in the docket (Docket ID No. EPA-HQ-OW-2025-0322) for this proposed rule.

The agencies received input from a wide variety of Tribes, States, local governments, environmental organizations, industry, agriculture organizations, small businesses, and the public through virtual meetings, consultation letters, and recommendation letters submitted to the docket. Of the more than 45,000 recommendations received, the docket included 48 letters from States and State associations, 25 letters from Tribes and Tribal associations, 97 letters from industry, 31 letters from agriculture organizations, 65 letters from environmental organizations, 37 letters from local governments and local government associations, two letters from Federal agencies, four from other non-governmental organizations, approximately 3,900 letters from the general public, and over a dozen mass mail campaigns. Through the conclusion of all listening sessions, the agencies documented 228 individual verbal remarks.

The agencies received broad support for robust stakeholder outreach and the development of a rule that is consistent with Supreme Court precedent. Many

stakeholders also emphasized the importance of regional geographic variability across the United States, and some stakeholders suggested the agencies consider regionally specific criteria for jurisdictional waters. Most recommendations focused on the three key topics for which the agencies solicited input ("relatively permanent" waters, "continuous surface connection," and ditches), as well as consideration for implementation and further exclusions.

1. Relatively Permanent Waters

A broad range of recommendations were submitted on the scope of "relatively permanent" from a diverse array of stakeholder and co-regulator groups. One common theme across most stakeholder and co-regulator recommendations included the need for the definition to account for regional differences in hydrologic variability across the country. Of those who submitted recommendations, most of the States, State associations, agriculture organizations and many industry groups recommended that relatively permanent waters be defined as perennial waters only, or continuously flowing year-round. Conversely, of those who submitted recommendations, many Tribes, environmental advocacy groups, and some industry groups recommended against further revisions to the definition of "waters of the United States," stating that the Amended 2023 Rule accurately implements the *Sackett* decision. In addition, Tribal and environmental advocacy groups broadly recommended interpreting relatively permanent to include intermittent (including seasonal) and perennial waters. The majority of local governments providing feedback recommended that they and local flood control districts be responsible for making jurisdictional determinations and for oversight. Nearly all individual citizens providing recommendations called for broad protection of water resources, including protecting intermittent (including seasonal) and perennial waters. Some States and industry supported the use of the streamflow duration assessment methods (SDAMs) to identify relatively permanent waters and requested the methods be available for all States.⁴² Some agriculture organizations and industry stakeholders suggested SDAMs and ordinary high water mark (OHWM) not be used on their own to assess

⁴² Information on the SDAMs is available on EPA's website at <https://www.epa.gov/streamflow-duration-assessment>. The SDAMs are discussed in more detail in section V.5 of this preamble.

jurisdiction due in part to the implementation challenges they pose.

2. Continuous Surface Connection

The recommendations received on the scope of "continuous surface connection" focused mainly on whether discrete features such as natural or man-made features sever continuous surface connection for wetlands and whether wetlands separated by such features are "abutting," as that term has been understood by the Supreme Court. Of those providing feedback, most agriculture organizations, many industry groups, some local governments, and some States recommended that discrete features such as culverts and berms sever jurisdiction for wetlands. Of those providing recommendations, the majority of States, Tribes, environmental advocacy groups, some industry groups, some local governments, and nearly all individual citizens expressed that discrete features do not inherently sever jurisdiction. Many of those recommendations included a call for case-by-case consideration of seasonal dry period variations as well as precipitation-driven connectivity, whether the continuous surface connection has characteristics of a relatively permanent water, and evidence of a continuous surface connection. Individual citizens providing recommendations generally called for an inclusive interpretation of continuous surface connection, asserting that all water has connectivity, even in dry periods. Many recommendations from environmental advocacy stakeholders cited or broadly discussed connectivity, including the EPA's 2015 Connectivity Report.⁴³

3. Ditches

The recommendations received on ditches focused on whether ditches should be excluded from the definition of "waters of the United States" and whether the function of the ditch should be considered in identifying excluded ditches. Of those providing feedback, agriculture organizations, some industry stakeholders, some local governments, and a few States recommended excluding all ditches from the definition of "waters of the United States." On the other hand, of those providing feedback, most States, State associations, Tribes, some environmental advocacy groups,

⁴³ U.S. EPA. *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-14/475F, 2015. Available at <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414>.

several local governments, and some industry stakeholders recommended that ditches that function as natural, relatively permanent features should be jurisdictional. Many of these recommendations also stated that ditches excavated only in uplands or non-jurisdictional waters and ditches that have no more than ephemeral flow should be excluded. Many local governments and agriculture organizations providing recommendations showed support for the 2020 Ditch Exemption Memo,⁴⁴ though they recommended limited revisions to clarify the Clean Water Act section 404(f) exemptions for construction or maintenance of irrigation ditches and maintenance of drainage ditches.

4. Implementation

A wide variety of recommendations on the definition of “waters of the United States” and on Clean Water Act program process and implementation fell outside of the three key definition topics, including: (1) encouraging more voluntary incentives for landowners to protect wetlands, (2) offering compensatory mitigation solutions such as streamlining the mitigation bank review and approval process, (3) improving the process for obtaining a U.S. Department of Agriculture (USDA) determination for prior converted cropland, (4) updating training for field staff and developing regional guidance, (5) creating maps and tools to determine “waters of the United States,” and (6) including Tribes and States in further Federal rulemaking development.

5. Additional Feedback Including Further Exclusions

Some States recommended that the intrastate waters category (*e.g.*, paragraph (a)(5) of the Amended 2023 Rule) not be included as a separate basis of jurisdiction. Stakeholders and co-regulators expressed different views about which exclusions should be included in a revised definition of “waters of the United States.” Many States recommended excluding certain water features such as permafrost wetlands, ephemeral waters that only periodically provide drainage for rainfall or conveyances for irrigation water, isolated and artificial ponds, and excluding wetlands generally unless they qualify as waters on their own. Many stakeholders expressed support for the waste treatment system exclusion and prior converted cropland

exclusions. Some stakeholders expressed support for adding other exclusions, such as an exclusion for groundwater and an exclusion for stormwater control features that do not exhibit continuous surface water flow to navigable waters. Some industry stakeholders recommended excluding features specific to mining operations until such time as they are reclaimed as part of a created or enhanced wetlands complex.

The agencies have thoroughly reviewed and considered the recommendations received for purposes of developing the proposed rulemaking. The agencies welcome feedback on this proposed rule through one of the upcoming public meetings and the 45-day public comment period initiated through publication of this action, as discussed in section II of this preamble. The agencies will consider all comments received during the comment period on this proposal during the development of the final rule and supporting documents.

V. Proposed Revised Definition

A. Basis of the Proposed Rule

The agencies are proposing to amend certain portions of the Amended 2023 Rule, as discussed below, with amendments to reflect the agencies’ determination of the statutory limits on the scope of the “waters of the United States” consistent with, and informed by, Supreme Court precedent. Section I.B of this preamble contains a summary of the agencies’ proposed revisions. All other aspects of the agencies’ regulations defining “waters of the United States” would remain unchanged. Under the agencies’ proposed rule, the term “waters of the United States” would include (1) traditional navigable waters and the territorial seas; (2) most impoundments of “waters of the United States;” (3) relatively permanent tributaries of traditional navigable waters, the territorial seas, and impoundments; (4) wetlands adjacent (*i.e.*, having a continuous surface connection) to traditional navigable waters, impoundments, and tributaries; and (5) lakes and ponds that are relatively permanent and have a continuous surface connection to a traditional navigable water, the territorial seas, or a tributary. The agencies are also proposing to amend the exclusions for waste treatment systems, prior converted cropland, and certain ditches, and to add an exclusion for groundwater. Finally, the agencies are proposing to add definitions for “continuous surface connection,”

“ditch,” “prior converted cropland,” “relatively permanent,” “tributary,” and “waste treatment system.”

The proposed rule reflects the balance Congress struck between the Clean Water Act section 101(a) statutory objective to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” and the policy in Clean Water Act section 101(b) to “recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution” and “to plan the development and use . . . of land and water resources.” 33 U.S.C. 1251(a) and (b). In developing an appropriate regulatory framework for the proposed rule, the agencies recognize and respect the primary responsibilities and rights of States to regulate their land and water resources. *Id.* 1251(b), *see also id.* 1370. The oft-quoted objective of the Clean Water Act at 101(a) must be implemented in a manner consistent with Congress’ directives to the agencies. The Supreme Court long ago recognized the distinction between Federal waters traditionally understood as navigable and waters “subject to the control of the States.” *Daniel Ball*, 77 U.S. (10 Wall.) at 557. Over a century later, the Supreme Court in *SWANCC* reaffirmed “the States’ traditional and primary power over land and water use.” *SWANCC*, 531 U.S. at 174; *accord Rapanos*, 547 U.S. at 738 (Scalia, J., plurality opinion). And in *Sackett*, the Supreme Court confirmed that the balance between State and Federal authority embodied in the Act cannot be redrawn in response to ecological concerns. 598 U.S. at 683. While Clean Water Act section 101(b) does not specifically identify Tribes, the policy of preserving States’ sovereign authority over land and water use is equally relevant to ensuring the primary authority of Tribes to address pollution and plan the development and use of Tribal land and water resources. This proposed rule recognizes and preserves the autonomy of Tribes just as it recognizes and preserves the authority of States.

Ensuring that States and Tribes retain authority over their land and water resources, reflecting the policy in section 101(b), helps carry out the overall objective of the Clean Water Act and ensures that the agencies are giving full effect and consideration to the entire structure and function of the Act. *See, e.g., Sackett*, 598 U.S. at 674 (“It is hard to see how the States’ role in regulating water resources would remain ‘primary’ if the EPA had jurisdiction over anything defined by the presence of water.”); *Rapanos*, 547

⁴⁴ https://www.epa.gov/sites/default/files/2020-07/documents/final_ditch_exemption_memo_july_2020_with_epa.pdf.

U.S. at 755–56 (Scalia, J., plurality opinion) (“[C]lean water is not the *only* purpose of the statute. So is the preservation of primary state responsibility for ordinary land-use decisions. 33 U.S.C. 1251(b).”) (emphasis in original). That includes the dozens of non-regulatory grant, research, nonpoint source, groundwater, and watershed planning programs that were intended by Congress to assist the States in controlling pollution in the Nation’s waters, not just its navigable waters. These non-regulatory sections of the Clean Water Act reveal Congress’ intent to restore and maintain the integrity of the Nation’s waters using Federal assistance to support State, Tribal, and local partnerships to control pollution of the Nation’s waters in addition to a Federal regulatory prohibition on the discharge of pollutants to its navigable waters. *See, e.g., Rapanos*, 547 U.S. at 745 (“It is not clear that the state and local conservation efforts that the CWA explicitly calls for, *see* 33 U.S.C. 1251(b), are in any way inadequate for the goal of preservation.”). Including *all* of the Nation’s waters within the Act’s Federal regulatory mechanisms would call into question the need for the more holistic planning provisions of the Act and the State partnerships they entail. Therefore, by recognizing the distinctions between the Nation’s waters and its navigable waters and between the overall objective and goals of the Clean Water Act and the specific policy directives from Congress, the agencies would fully implement the entire structure of the Act while respecting the specific word choices of Congress. *See, e.g., Bailey*, 516 U.S. at 146; *Nat’l Fed’n of Indep. Bus.*, 567 U.S. at 519, 544 (2012).

The proposed rule is also consistent with and informed by the Supreme Court’s seminal decision in *Sackett*. In developing the proposed rule, the agencies considered the text and structure of the statute, other relevant precedents, and the agencies’ experience and expertise implementing the definition of “waters of the United States.” The limitations in the proposed rule both reflect consideration of the comprehensive nature and objective of the Clean Water Act and avoid assertions of jurisdiction that exceed the agencies’ statutory authority or raise federalism concerns. The *Sackett* decision clarifies where the agencies draw the boundaries of Federal jurisdiction in keeping with Congress’s objective while preserving and protecting the responsibilities and rights of the States, as Congress recognized in

the Clean Water Act. The proposed rule’s limitations conform with the *Sackett* decision and thereby ensure that Clean Water Act regulatory programs will apply where waters meet the definition of “waters of the United States.” States and Tribes have authority to regulate waters that do not meet the proposed rule’s definition of “waters of the United States” as they deem appropriate. Finally, the proposed rule would also achieve the agencies’ goals of ensuring clarity, simplicity, and improvements that will stand the test of time, while providing for durable, stable, and more effective and efficient jurisdictional determinations and permitting actions.

The Regulatory Impact Analysis for the Proposed Rule provides information about the potential differences between current implementation and the proposed rule. The assessment can be found in the docket for this proposed action.

When preparing an approved jurisdictional determination,⁴⁵ which is typically made at the request of a landowner or applicant, the agencies bear the burden of proof in demonstrating that an aquatic resource meets the requirements under the proposed rule to be jurisdictional or excluded. The agencies’ jurisdictional determinations must adequately document the basis of jurisdiction—that is, summarize the indicators that support the determination such as the information that demonstrates that the waters, including any wetlands, at issue meet the requirements of paragraphs (a) or (b) of the proposed rule, as applicable. Under any definition of “waters of the United States,” the agencies will rely on a weight of evidence approach when determining whether a water meets the regulatory requirements for asserting Federal jurisdiction. This means that if the agencies do not have adequate information to demonstrate that a water meets the jurisdictional standards to be a “water of the United States,” the agencies would find such a water to be non-jurisdictional. The agencies invite comment on approaches for increasing predictability in jurisdictional determinations, including options for leveraging data and tools discussed

⁴⁵ For convenience, EPA decisions on jurisdiction are referred to as jurisdictional determinations throughout this document, but such decisions are not “approved jurisdictional determinations” as defined and governed by the Corps’ regulations at 33 CFR 331.2. Approved jurisdictional determinations are typically made at the request of a landowner or applicant. *See, e.g.,* Regulatory Guidance Letter (RGL) 16–01, available at <https://usace.contentdm.oclc.org/utifs/getfile/collection/p16021coll9/id/1256>.

infra in section V of this preamble and in section 3 of the Regulatory Impact Analysis for the Proposed Rule.

This proposal does not propose to change the scope of paragraph (a)(1)(i), addressing traditional navigable waters. However, the agencies are considering whether clarifications to the scope of that provision may be warranted in the final rule preamble or in a separate administrative action. Specifically, the agencies are considering whether it may be necessary to elucidate what it means for a water to be “susceptible to use in interstate or foreign commerce.” The agencies welcome comments from members of the public about any experiences they may have had with findings that waters are “susceptible to use in interstate or foreign commerce,” any concerns they may have with current or potential future implementation of that provision, or other aspects of this provision that may warrant additional clarification or interpretation by the agencies. In addition, the agencies solicit input on whether the agencies should reinstate the joint agency coordination memorandum issued on June 30, 2020, requiring elevation of certain traditional navigable waters determinations (*See* U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps) Process for Elevating and Coordinating Specific Draft Determinations under the Clean Water Act (CWA), available in the docket for this proposed rule).

The agencies also solicit comment on an alternative approach to the proposed rule, whereby “waters of the United States” would encompass traditional navigable waters, tributaries that directly flow into these waters, and wetlands with a continuous surface water connection to such waters. All other waters would be excluded. This alternative is informed by Justice Thomas’s concurring opinion in *Sackett*, which emphasized that “the term ‘navigable waters’ refers solely to the aquatic channels of interstate commerce over which Congress traditionally exercised authority.” 598 U.S. at 697 (Thomas, J., concurring). The agencies seek comment on whether the statute and the relevant history of Federal authority over navigable waters support this approach, or whether they support the agencies’ proposal to include a broader category of tributaries and adjacent wetlands within the scope of “navigable waters,” based on the plain meaning of the term “waters” (informed by the qualifier “navigable”) and the continuous surface connection between such waters and wetlands.

B. Interstate Waters

The proposed rule would remove the category of interstate waters from the definition of “waters of the United States.” Because this category can encompass bodies of water that are not relatively permanent, standing, or continuously flowing or that are not themselves connected to a downstream traditional navigable water or the territorial seas, either directly or through one or more waters or features that convey relatively permanent flow, its removal would ensure consistency with the *Sackett* decision as well as the Clean Water Act. This approach would also address persistent litigation over this category. Under the proposal, interstate waters would only be “waters of the United States” if they fall within another jurisdictional category in the definition. The change would likely have few practical impacts and would not undermine significant reliance interests, as the agencies rarely identify waters as jurisdictional solely because they are interstate as they often fall under one of the other categories of “waters of the United States” (e.g., the waters are also traditional navigable waters or jurisdictional tributaries). Based on an analysis of data associated with approved jurisdictional determinations finalized by the Corps between August 28, 2015, and September 18, 2025, a total of 15 waters were found to be jurisdictional as interstate waters during that time frame. Under the proposed rule, rivers like the Amargosa River, which flows from Nevada into a dry playa in Death Valley, California, would not be jurisdictional simply because they cross a state boundary. Rather, these rivers would only be covered by Federal jurisdiction if they are themselves jurisdictional by some other means, such as being traditional navigable waters or jurisdictional tributaries.

The agencies previously eliminated the category of interstate wetlands from the interstate waters category in the Conforming Rule, see 88 FR 69166–69169 (September 8, 2023), meaning that the proposed rule’s elimination of the interstate waters category water by itself would not impact the jurisdictional status of interstate wetlands like the Great Dismal Swamp, which crosses the border between Virginia and North Carolina—under both current implementation and the proposed rule, such wetlands are only jurisdictional if they meet another category of “waters of the United States” (e.g., wetlands subject to the ebb and flow of the tide or adjacent wetlands).

Given the proposed deletion of the (a)(1)(iii) interstate waters category, the agencies are also proposing a ministerial change to paragraph (a) to add an “or” after the (a)(1)(i) category and delete the “or” after the (a)(1)(ii) category. This revision would be necessary as there would be only two remaining water types under category (a)(1) with the proposed deletion of interstate waters. The agencies are not proposing any other changes to the (a)(1)(i) or (ii) categories.

1. Basis for Eliminating as an Independent Basis for Jurisdiction

Removing the category of “interstate waters” as an independent basis for jurisdiction reflects the language of the Clean Water Act, as interpreted by the Supreme Court, as well as the history of the Act and Congress’ authority under the Constitution to regulate “waters of the United States.” The Supreme Court has interpreted “waters” in the context of the Clean Water Act to encompass “only those relatively permanent, standing or continuously flowing bodies of water ‘forming geographic[al] features’ that are described in ordinary parlance as ‘streams, oceans, rivers, and lakes.’” *Sackett*, 598 U.S. at 671 (citing *Rapanos*, 547 U.S. at 739 (plurality opinion)). Specifically with respect to “waters of the United States,” the *Sackett* Court held that a “water of the United States” must be “a relatively permanent body of water connected to traditional interstate navigable waters” or “wetland[s] [with] a continuous surface connection with that water.” *Id.* at 678 (citing *Rapanos*, 547 U.S. at 742, 755); see section IV.A of this preamble. Nothing in *Sackett* or the *Rapanos* plurality opinion suggests that Congress intended to separately regulate interstate waters that do *not* meet this test.

As discussed in section IV.A of this preamble, the Court has made clear that Congress’ authority for enacting the Clean Water Act is derived from “[i]ts traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made.” *SWANCC*, 531 U.S. at 172. The Court explained in *SWANCC* that nothing in the legislative history of the Clean Water Act Amendments “signifies that Congress intended to exert anything more than its commerce power over navigation.” *Id.* at 168 n.3. The scope of the agencies’ regulation must therefore reflect the limits imposed by the term, “navigable waters.” The agencies propose that regulating all interstate waters—from isolated ponds to ephemeral washes—regardless of their connection to navigability would

impermissibly “read[] the term ‘navigable waters’ out of the statute.” See *id.* at 172.

The history of the Clean Water Act supports the agencies’ proposed removal of the category of interstate waters. The original Water Pollution Control Act (WPCA) of 1948 regulated the “pollution of interstate waters,” defined as “all rivers, lakes, and other waters that flow across, or form a part of, State boundaries.” WPCA of 1948, 2(d)(1), (4), 10(e), 62 Stat. 1155, 1156–57, 1161. In 1961, Congress amended the statute to substitute the term “interstate or navigable waters” for “interstate waters” in the statute’s enforcement provision while making minor changes to the definition of “interstate waters.” See Public Law 87–88, 75 Stat. 208 (1961). In 1965, Congress again amended the statute to require States to develop water quality standards for all “interstate waters” within their borders. See Public Law 89–234, 79 Stat. 908 (1965). In the 1972 Amendments, however, establishing the current statutory structure, Congress selected the term “navigable waters” as the operative term for the major regulatory programs established by the 1972 amendments, dropping the definition of “interstate waters” from the statute. See, e.g., 33 U.S.C. 1362(7) (defining “navigable waters” as “waters of the United States”). In doing so, however, Congress allowed States to retain existing water quality standards for interstate waters developed under the pre-1972 statutory program. See 33 U.S.C. 1313(a). Congress specifically did not carry the term “interstate waters” forward as the operative phrase for Federal jurisdiction. Following basic canons of statutory construction, the agencies now interpret Congress’ removal of the term “interstate waters” as intentional. See, e.g., *Stone v. INS*, 514 U.S. 386, 397 (1995) (“When Congress acts to amend a statute, we presume it intends its amendment to have real and substantial effect.”).

Congress’ removal of the prior term, “interstate waters,” and its replacement of that term with “navigable waters,” supports the agencies’ view that interstate waters can only be jurisdictional if they have the requisite connection to traditional navigable waters and fall within the Supreme Court’s interpretation of “waters of the United States.” After considering Congress’ constitutional authority over navigable waters that forms the basis for Clean Water Act jurisdiction (see section IV.A of this preamble), the Supreme Court’s interpretation of the term “waters of the United States,” and the history of the statute, the agencies

are proposing that only those interstate waters that would fall within another category in this proposed rule are jurisdictional. Other interstate waters fall beyond the agencies' authority under the Clean Water Act and are more appropriately regulated by the States and Tribes under their sovereign authorities.

The agencies evaluated their longstanding interpretation prior to 2020, and reinstated in 2023, which included interstate waters as a standalone jurisdictional category (though the agencies clarified that "waters of the United States" does not include "interstate wetlands" in the Conforming Rule following *Sackett*). 88 FR 61966. As discussed in section IV.B of this preamble above, the EPA promulgated its first regulatory definition for the term "navigable waters" in 1973. 38 FR 13528 (May 22, 1973). In that regulation, the EPA established "interstate waters" as a separate category of "waters of the United States," distinct from the traditional navigable waters category, retained it as such until 2020, and restored it in 2023. The agencies are now proposing that the best interpretation of "waters of the United States" is that it only encompasses those interstate waters that meet the jurisdictional test laid out by the Supreme Court in *Sackett* and the *Rapanos* plurality opinion. As noted above, the agencies are not proposing any other changes to the (a)(1)(i) or (ii) categories.

In support of their prior interpretation, the agencies have argued that the term "waters of the United States" unambiguously covers "interstate waters." The agencies have asserted that "interstate waters" are waters of the several States and, thus, the United States. However, the agencies now recognize that nothing in the *Rapanos* plurality or *Sackett* opinions provides a basis for interpreting interstate waters as jurisdictional if they are not themselves traditional navigable waters or the territorial seas, relatively permanent tributaries of traditional navigable waters or the territorial seas, wetlands with a continuous surface connection to these waters, or impoundments of otherwise jurisdictional waters.

The agencies have referred to section 303(a) of the Clean Water Act as further textual evidence that Congress intended "interstate waters" to be retained as an independent category of jurisdictional waters. That provision authorizes water quality standards for "interstate waters" developed following the 1965 amendments to remain in effect, subject

to revision under the new statutory program. 33 U.S.C. 1313(a). Yet the legislative history of the 1972 amendments indicates that Congress did not consider interstate waters and navigable waters to be two distinct categories; rather, they referred to terms in the pre-1972 statutory regime conjunctively as "interstate navigable waters." S. Rep. No. 92-414, at 2 (1971) ("Each State was required by the 1965 Act to develop standards for water quality within its boundaries. These standards were to be applied to all *interstate navigable waters* flowing through the State; interstate waters were not included.") (emphasis added); *id.* at 4 ("The setting of water quality standards for *interstate navigable waters* . . . is the keystone of the present program for control of water pollution.") (emphasis added); *id.* ("The States have first responsibility for enforcement of their standards. When approved by the [EPA], however, the standards for *interstate navigable waters* become Federal-State standards.") (emphasis added). In 1976, the Supreme Court shared the same view of the pre-1972 statutory scheme: "Before it was amended in 1972, the Federal Water Pollution Control Act employed ambient water quality standards specifying the acceptable levels of pollution in a State's *interstate navigable waters* as the primary mechanism in its program for the control of water pollution." *EPA v. California*, 426 U.S. 200, 202 (1976) (emphasis added) (footnote omitted). In light of this history, the section 303(a) provision relating to existing water quality standards for "interstate waters" may be best understood as referring to "interstate navigable waters," rather than *any* interstate waters regardless of their connection to traditional navigable waters.

The agencies also historically relied on two Supreme Court cases—*Illinois v. City of Milwaukee*, 406 U.S. 91 (1972) and *City of Milwaukee v. Illinois*, 451 U.S. 304 (1981)—addressing interstate water pollution to support their prior interpretation. Yet neither case addressed the specific question of whether "interstate waters" and "navigable waters" are separate categories of jurisdictional waters under the Clean Water Act. They instead addressed interstate water pollution generally, and the water at issue in those cases was Lake Michigan, a water that is *both* interstate *and* navigable. The 1972 case, which was decided prior to the 1972 Federal Water Pollution Control Act amendments, refers to the two categories in the disjunctive,

implying that the Court viewed the pre-1972 statutory program as encompassing two separate categories. *See Illinois*, 406 U.S. at 102 ("it is federal, not state, law that in the end controls pollution of *interstate or navigable waters*") (emphasis added). However, the 1981 decision refers to the 1972 Amendments as a "total restructuring" and "complete rewriting" of the existing water pollution legislation considered in that case." *Milwaukee*, 451 U.S. at 317 (citing legislative history of the 1972 Federal Water Pollution Control Act amendments). While *Milwaukee* refers to the 1972 Amendments of the Federal Water Pollution Control Act as affecting "interstate waters," its language generally supports the agencies' interpretation that prior iterations of the statute referring to both interstate waters and navigable waters were replaced with a completely new program in 1972. The agencies therefore no longer find these cases a persuasive basis for regulating "interstate waters" as a distinct category of "waters of the United States."

The proposed rule's approach to interstate waters is consistent with a district court decision that ruled on a motion for summary judgment on this issue following *SWANCC* and *Rapanos*. In *Georgia v. Wheeler*, the court directly addressed the 2015 Clean Water Rule's assertion of authority over all interstate waters, including nonnavigable interstate waters. 418 F. Supp. 3d 1336, 1358–59 (S.D. Ga. 2019). The court noted that under that rule, "a mere trickle, an isolated pond, or some other small, non-navigable body of water would be under federal jurisdiction simply because it crosses a state line or lies along a state border." *Id.* at 1359. The court concluded that "the inclusion of all interstate waters," including those with "little or no connection to navigable-in-fact waters," exceeds the agencies' authority under the Clean Water Act, as discussed in *SWANCC*. *Id.* The agencies find persuasive the court's analysis and conclusion in *Georgia v. Wheeler*.

C. Relatively Permanent Waters

1. Definition and Scope of "Relatively Permanent" Waters

In this proposal, the agencies define "relatively permanent" to mean "standing or continuously flowing bodies of surface water that are standing or continuously flowing year-round or at least during the wet season." Consistent with the *Sackett* decision, ephemeral waters (*i.e.*, those with surface water flowing or standing only in direct response to precipitation (*e.g.*,

rain or snow fall)) are not jurisdictional because they are not relatively permanent. The phrase “at least during the wet season” is intended to include extended periods of predictable, continuous surface hydrology occurring in the same geographic feature year after year in response to the wet season, such as when average monthly precipitation exceeds average monthly evapotranspiration. As proposed, surface hydrology would be required to be continuous throughout the entirety of the wet season. The temporal component for wet season is intended to be an extended period where there is continuous surface hydrology resulting from predictable seasonal precipitation patterns year after year. The agencies acknowledge that surface hydrology may not always exactly overlap with the wet season, for example in regions exhibiting a time lag or delay in demonstration of surface hydrology due to various factors. The latter may occur, for example, as a result of snowpack melt occurring several months after repeated snowfall creates a snowpack. In another example, some streams experience delayed (*i.e.*, lagged) surface hydrology during the transition from the dry season to the wet season, as it may take some time for the water table to rise due to seasonal precipitation patterns.

Under the proposed rule, “relatively permanent” applies to both tributaries under paragraph (a)(3) and lakes and ponds under paragraph (a)(5). The proposed definition of “relatively permanent” would also apply to determining when wetlands are adjacent to impoundments that are relatively permanent, standing or continuously flowing bodies of water. *See* section V.C.5.a of this preamble for additional information about implementation of “relatively permanent.” In light of the *Sackett* decision, the agencies solicit comment on the definition of “relatively permanent” in this proposed rule, including implementation of the definition and regional implications of the proposed approach.

2. Basis for the Proposed Definition

This proposed definition is based on the text of the Clean Water Act and recent Supreme Court decisions interpreting the term “waters of the United States,” as well as the agencies’ expertise and desire to establish a clear and easily implementable definition. As discussed in section IV.A of this preamble, the plurality opinion in *Rapanos* interpreted the term “waters of the United States” as covering “relatively permanent, standing or continuously flowing bodies of water” that are connected to traditional

navigable waters, as well as wetlands with a “continuous surface connection” to such waterbodies. 547 U.S. at 739, 742 (Scalia, J., plurality opinion). The *Rapanos* plurality noted that its reference to “relatively permanent” waters did “not necessarily exclude streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought,” or “seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.” *Id.* at 732 n.5 (emphasis in original).

In *Sackett*, the Supreme Court concluded that the *Rapanos* plurality was “correct” in interpreting “waters of the United States” (for purposes of surface waters, as opposed to wetlands) as “encompassing ‘only those relatively permanent, standing or continuously flowing bodies of water forming geographic[al] features that are described in ordinary parlance as streams, oceans, rivers, and lakes.’” 598 U.S. at 671 (quoting *Rapanos*, 547 U.S. at 739).

The agencies’ proposed definition of “relatively permanent” implements the Court’s interpretation of “waters of the United States” in the *Rapanos* plurality decision, adopted by the majority in *Sackett*, in an understandable and implementable way for both ordinary citizens and expertly trained scientists. It is faithful to the *Rapanos* plurality opinion and the *Sackett* decision because bodies of water that have standing or flowing surface water year-round are, by definition, permanent. And while the *Rapanos* plurality noted that waters of the United States do not include “ordinarily dry channels through which water occasionally or intermittently flows,” 547 U.S. at 733, it would “not necessarily exclude seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.” *Id.* at 732 n.5. The proposed definition of “relatively permanent” includes water features that are standing or flowing continuously “at least during the wet season,” which is consistent with the plain meaning of “waters,” “lakes” and “streams” and with the *Rapanos* plurality’s intent to avoid excluding seasonal waters. The *Sackett* decision adopted the *Rapanos* plurality’s interpretation of “relatively permanent,” 598 U.S. at 671, although the agencies acknowledge that the *Sackett* decision did not specifically address the reference to seasonal waters in the *Rapanos* plurality. Having standing or continuous flow at least during the wet season most typically occurs in surface waters at the same time each year; for example, during

times when groundwater tables are elevated or when snowpack runoff produces relatively permanent flow, returning on an annual basis during the wet season in known, fixed geographic locations. The proposed definition is thus consistent with the *Rapanos* plurality’s concepts of “relatively permanent,” as explicitly endorsed by the *Sackett* decision, and “seasonal,” while not capturing features that are ephemeral. Moreover, while excluding features that lack flow during the wet season, the agencies are implementing Clean Water Act section 101(b), which “protect[s] the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution” and “to plan the development and use . . . of land and water resources.” 33 U.S.C. 1251(b); *see also Sackett*, 598 U.S. at 674 (“It is hard to see how the States’ role in regulating water resources would remain ‘primary’ if the EPA had jurisdiction over anything defined by the presence of water.”) 33 U.S.C. 1251(b); *see also Sackett*, 598 U.S. at 674 (“It is hard to see how the States’ role in regulating water resources would remain ‘primary’ if the EPA had jurisdiction over anything defined by the presence of water.”)

Finally, the proposed definition incorporates terms that are easily understood in ordinary parlance and should be implementable by both ordinary citizens and trained professionals. In a similar way, scientists, environmental consultants, and other water resource professionals, including the agencies’ staff, have used the concept of the “wet season” for decades to assess water features—including to assess if observations made during a site visit or through interpretation of aerial photography are made under normal, wetter than normal, or drier than normal climatic conditions, and to assist with delineating wetlands—and the concept of a body of surface water that is standing or continuously flowing year-round has been a part of the relatively permanent standard since the *Rapanos* guidance. Indeed, the agencies apply the concept of “wet season” in the use of the Corps’ Antecedent Precipitation Tool (APT),⁴⁶ which is routinely used to inform wetland delineations and jurisdictional determinations.⁴⁷ *See*

⁴⁶ Available at <https://github.com/erdc/Antecedent-Precipitation-Tool/releases>.

⁴⁷ Sparrow, K.H., Brown, S.W., French, C.E., Gutenson, J.L., Hamilton, C.O., and Deters, J.C. 2025. *Antecedent Precipitation Tool (APT) Version 3.0: Technical and User Guide*. U.S. Army Corps of Engineers. ERDC/TN WRAP–25–1. Available at <https://erdc-library.erdcdren.mil/items/af14290ced08-411b-ae5d-effa5b5b947d>.

section V.C.5.b of this preamble for further discussion of implementation of “relatively permanent.” The agencies intend to use the metrics from the Web-based Water-Budget Interactive Modeling Program (WebWIMP), which are reported in the APT, as a primary source for identifying the wet season.⁴⁸ The agencies also believe that the incorporation of wet season into the proposed definition of “relatively permanent” can be viewed as a bright line test, as it would provide a required duration threshold for which a water must have standing or flowing water in order to be considered jurisdictional. Unlike typical bright line approaches, however, the agencies’ proposed approach would also allow for regional variation given the range of hydrology and precipitation throughout the country. The line the agencies propose to draw between relatively permanent and non-relatively permanent waters enhances administrative efficiency and reflects a balancing of the law, common sense, science, and stakeholder input received pre-proposal.

3. Alternative Approaches

The agencies considered proposing to limit the definition of “relatively permanent waters” to only “perennial” waters and solicit public comment as to whether the agencies should adopt this alternative definition. The agencies evaluated this interpretation because “perennial” streams are most obviously “permanent,” consistent with the *Sackett* decision and the *Rapanos* plurality opinion. The agencies are not proposing this approach, however, because the term “relatively” in *Sackett* and the *Rapanos* plurality suggests that Clean Water Act jurisdiction may not be limited to waters that are standing or continuously flowing every day or that always have standing water. Moreover, limiting the scope of relatively permanent waters to perennial streams would exclude waters that the *Rapanos* plurality stated are “not necessarily exclude[d]” (emphasis added): “streams, rivers, or lakes that might dry up in extraordinary circumstances, such

as drought,” or “seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.” 547 U.S. at 732 n.5 (emphasis in original); see also *Sackett*, 598 U.S. at 651, 671 (“we conclude that the *Rapanos* plurality was correct.”). While this approach would exclude the “seasonal” streams that the *Rapanos* plurality may have not necessarily intended to exclude, the absence of an explicit reference to such “seasonal” streams in *Sackett* could be interpreted to mean that *Sackett* defined the scope of “relatively permanent” to exclude such water features.

Perennial streams are common in wetter parts of the country but are rare in the arid West, so this approach may result in Federal regulatory jurisdiction over a greater proportion of water bodies in certain parts of the country compared to other regions. However, as an implementation matter, limiting “relatively permanent” waters to “perennial” features may simplify implementation of the rule. If members of the public see that waters dry up on a regular basis other than in times of drought, they would know those waters are not jurisdictional simply by observation, without the need for any further analysis or professional consultation. However, it may be more challenging to identify whether a stream flows year-round or a few days less than year-round. Such methods or the use of remote tools may require repeated or continuous monitoring over the course of a year or longer to ensure water is standing or flowing year-round. In addition, stream assessment methods are sometimes more accurate in identifying streams with at least seasonal flow (~82–95% accuracy) than identifying streams with perennial flow (~75–91% accuracy), as indicators are more readily identifiable between seasonal streams and those that only flow in direct response to precipitation.⁴⁹ The agencies solicit comment as to whether “relatively permanent” should be limited to perennial waters or should otherwise be defined differently than what the agencies propose here. The agencies also solicit comment on whether the extent of the agencies’ interpretation of “wet season” appropriately aligns with the *Rapanos* plurality’s discussion of “seasonal rivers”, or whether the

agencies should interpret “wet season” to reflect a flow duration that is more than during the wet season but less than perennial flow.

The agencies also considered an approach that would set certain minimum flow volume thresholds in the proposed definition of “relatively permanent.” The proposed definition of “relatively permanent” does not establish bright line requirements, such as for a particular flow volume. In 1977, the Corps proposed to use flow volumes (*i.e.*, normally less than five cubic feet per second) to define “headwaters” in the definition of “waters of the United States,” and instead finalized the use of flow volumes for implementation of their general permit program. 42 FR 37129 (July 19, 1977). Stream flow volume is challenging to measure directly, in particular in a stream where flow is not always present and may require multiple field-based measurements that can make implementation inefficient and result in delays in making a jurisdictional determination. While the proposed approach to “relatively permanent” may also be supported by field measurements, remote tools may also be used to observe presence or absence of flow and identify flow during the wet season. Those remote tools can assess flow frequency, and some can provide flow volume estimates.⁵⁰ In addition, the agencies have not identified a rationale for a threshold of specific flow volumes that would establish jurisdiction given the broad nationwide applicability of the proposed rule and the regional variability in flow volumes.

Additionally, the agencies considered, but are not proposing, a minimum flow duration metric (*e.g.*, 30, 90, or 270 days⁵¹) or bright lines set by region, *e.g.*, by requiring flow a minimum of 270 days east of the Mississippi River and a minimum of 30 or 60 days west of the Mississippi, for relatively permanent waters. One such bright line approach would not rely on the proposed wet season approach but could require a minimum 90-day flow duration requirement to be consistent with what

⁴⁸ The APT reports an interpretation of the average monthly water-balance metrics from WebWIMP (available at http://cyclops.deos.udel.edu/wimp/public_html/index.html), as an estimation of the approximate dates of the wet and dry seasons for the observation location, including whether the date of observation falls within the wet season or the dry season. The interpretation of wet season using the results from WebWIMP is that the wet season corresponds to all periods of the year where precipitation is estimated to, on average, exceed evapotranspiration. See “Additional Information on the Antecedent Precipitation Tool (APT),” available at <https://www.epa.gov/system/files/documents/2022-12/Additional%20Information%20on%20the%20APT.pdf>.

⁴⁹ See, *e.g.*, James, A., McCune, K., Mazor, R. 2021. *Review of Flow Duration Methods and Indicators of Flow Duration in the Scientific Literature, Northeast and Southeast of the United States*. Document No. EPA-840-B-22007. Available at <https://www.epa.gov/system/files/documents/2023-05/Literature-Review-Beta-SDAM-NE-and-SE.pdf>.

⁵⁰ See USGS Enhanced Runoff Method, or EROM, used to compute estimates of the mean annual flow for the National Hydrography Dataset (NHD) Plus flowline features in the NHDPlus High Resolution network. See also USGS Dynamic Surface Water Extent (DSWE). Available at: <https://www.usgs.gov/landsat-missions/landsat-dynamic-surface-water-extent-science-products>.

⁵¹ *Rapanos*, 547 U.S. at 739, n.5 (“By describing ‘waters’ as ‘relatively permanent,’ we do not necessarily exclude streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought. We also do not necessarily exclude seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.”).

is generally considered a “season” (*i.e.*, with each of the four “seasons” lasting three months of the year) or a 270-day flow duration requirement to exclude the driest of seasons. This bright line approach would provide transparency and regulatory certainty for landowners and is easy to understand. This alternative approach would also provide a strict threshold cutoff for establishing jurisdiction. The proposed definition considers streamflow duration in the flow classification definitions generally (*e.g.*, “flowing continuously year-round,” “flowing continuously during the wet season”) but without specifying an exact number of days of flow. The time period that encompasses flow during the wet season can vary across the country based upon climate, hydrology, topography, soils, and other conditions. While establishing a minimum duration of flow could ultimately enhance national consistency per the regulatory text, it would likely be inconsistent with the regionalized implementation of relatively permanent tributaries in the proposed rule. For example, streams with continuous flow during the wet season in the arid West are fundamentally different from such streams in the Southeast. Similar to identifying flow duration year-round, a bright line for minimum flow durations can pose implementation challenges to identify that flow has occurred for that exact duration threshold—even landowners familiar with their properties may not know the exact number of days a stream flows per year. However, the agencies acknowledge there are benefits to setting bright lines as they can provide clarity to stakeholders and may provide additional transparency on the requirements for flow duration of relatively permanent waters without the use of additional tools; therefore, the agencies solicit comment and would welcome any supporting rationales for particular thresholds that take into account the broad nationwide applicability of the proposed rule, as well as address any implementation challenges, in particular related to the minimum 90-day or 270-day flow duration requirement under this alternative approach and whether and how continuous flow could be identified under such a regime. This same alternative approach could also be applied to the “continuous surface connection” definition, where surface water inundation would be required for at least 90 days or 270 days as opposed to “surface water at least during the wet season,” as proposed. See section V.D.3 of this preamble for a similar discussion

on this alternative approach for continuous surface connection.

Furthermore, the agencies are not proposing to define “relatively permanent” using only physical indicators of flow, such as with a requirement for an ordinary high water mark and bed and banks. For purposes of implementation of the proposed rule, “bed and banks” means the substrate and sides of a channel, lake, or pond between which standing water or continuous flow is ordinarily confined, as discussed further in section V.5 of this preamble. Though the agencies consider indicators of flow to be appropriate for defining “tributary,” as discussed further below in section V.C.4 of this preamble, the agencies propose that physical indicators of flow would be inadequate to define relatively permanent because streams that flow only in direct response to precipitation, such as ephemeral streams, sometimes have an ordinary high water mark as well as bed and banks. The agencies and members of the public thus could struggle to consistently and effectively use physical indicators to distinguish between a non-relatively permanent stream flowing for a short duration only in response to precipitation and a jurisdictional relatively permanent tributary.

Similarly, the agencies solicit comment on whether relatively permanent should be defined consistent with the pre-2015 regulatory regime such that relatively permanent waters are those that typically have standing or flowing water year-round or that have standing or continuously flowing water at least seasonally (*e.g.*, typically three months).⁵² This approach explicitly incorporates the “seasonal” term used in the *Rapanos* plurality opinion, although some stakeholders believe the seasonal approach may not be consistent with *Sackett*. In addition, it reflects the approach taken by the agencies since the 2008 *Rapanos* Guidance, so practitioners would have experience implementing it. This approach allows for regionalization given the three-month example provided which could vary to account for seasonal differences across the

⁵² Three months was provided as an example of seasonal flow in the *Rapanos* Guidance, but under the pre-2015 regulatory regime the agencies have flexibility to determine what seasonally means in a specific case. See *Rapanos* Guidance at 6–7; U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. “Memorandum to Assert Jurisdiction for NWP–2007–945.” Available at <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll5/id/1437> (finding that two months of continuous flow was considered seasonal flow for site-specific tributaries in a semi-arid region).

country. This approach differs from the proposed rule’s approach because regions which have bodies of surface water that are standing or continuously flowing with seasonal flow for less than 90 days (*e.g.*, the arid West) would still be considered relatively permanent, while the rest of the country would simply need to demonstrate having at least seasonal flow, typically three months in duration, regardless of their specific wet season length. For example, under this alternative approach, even if the wet season is five months, continuous flow could occur for 90 days and be considered relatively permanent. Whereas under the proposed approach, the entire country would need to demonstrate flow at least during their regionally-specific wet season. Alternatively, the agencies could implement seasonal flow to mean continuous surface flow except during dry months.⁵³ This approach is similar to the proposed approach, incorporating concepts from the *Rapanos* plurality and *Sackett* while allowing for regional variation, and uses “dry months” language from the *Rapanos* plurality footnote, but could be read to require more extended periods of flow than the proposed approach. The agencies also solicit comment on these alternative approaches, including whether they are consistent with the *Rapanos* plurality and *Sackett*, as well as any accompanying implementation methods. The agencies welcome comments generally on the concept of a “seasonal” flow duration and what that term may include, as well as implementation tools that could be used to identify such flow duration.

The agencies also solicit comment on the most appropriate method to identify the wet season under the proposed definition of “relatively permanent.” The agencies propose to focus on precipitation as the one key driver for wet season identification and intend to use the WebWIMP outputs reported in APT as a primary tool to help identify the wet season when precipitation exceeds evapotranspiration rates. Streams that flow continuously during the wet season are distinct from streams that flow discontinuously or only in direct response to discrete precipitation events, such as ephemeral streams. The agencies recognize that the WebWIMP outputs reported in APT may not have complete functionality in certain territories, and the agencies are

⁵³ The *Rapanos* plurality noted that by describing “relatively permanent” waters, the plurality did “not necessarily exclude seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months.” 547 U.S. at 732 n.5 (emphasis in original).

exploring ways to improve functionality in those limited circumstances. Another method could be to identify when the majority of precipitation occurs in a given location or region based on percentages and utilize that to identify the wet season, which may better account for continuous streamflow that can occur in the arid West during monsoon season. This approach could identify in which months greater than 50% (or another percentage such as 70%) of the rainfall occurs at the identified location or region and identify that as the wet season. In another approach, the agencies could adopt the Wet Season Totals, which identify the climatologically wettest three months (91 days) of the year.⁵⁴ The agencies could ensure that this would include multiple years of data analysis. The agencies solicit comment on whether a definition of “wet season” should be added to the regulatory text to provide clarity and transparency. The agencies could adopt a definition that includes the months when precipitation exceeds evapotranspiration or the agencies could adopt any of the options described above for a definition.

The agencies propose to have the flow “at least during the wet season” be specifically bound by the wet season such that the number of months with continuous flow would need to be at least throughout the entirety of the wet season. For example, if a wet season extended for six months, the stream would need to flow for at least six months coincident with the identified wet season to be considered relatively permanent. The agencies solicit comment on whether this is an appropriate approach for identifying “at least during the wet season,” and whether implementation of this approach is feasible. The agencies also specifically solicit comment on how this might be implemented when there may be a lag in the surface hydrology response to seasonal precipitation as described at section V.C.1 of this preamble above. Such an approach could result in many streams in the arid West not meeting the proposed definition of “relatively permanent,” and the agencies solicit comment on the implications of such an approach in those arid West States. In an alternative approach, the agencies could interpret “at least during the wet season” where surface hydrology must occur for at least

a proportionate amount of time as the identified wet season duration which would be in response to the wet season but need not be coincident with the specific wet season timeframe. For example, if a wet season extended from December through March (a wet season of four months), the stream would need to flow for at least four months to be considered relatively permanent, even if the surface hydrology occurred for four months from February through May. In another alternative approach, the agencies could interpret “at least during the wet season” where surface hydrology must occur for at least some months in response to the wet season. Under this approach, the agencies would not require the flow to occur throughout the wet season but would still require flow to occur for at least some months of continuous flow. This duration would extend beyond merely weeks, or even one month, and would require flow for at least an extended period of time of some months during or in response to the wet season. This alternative approach differs from the one described immediately above in that the flow duration would not be required to be of equal duration as the duration of the wet season (e.g., a wet season extending from December through April, a five-month duration, but the stream has flow duration from March through May, a three-month duration; such surface hydrology is in response to the wet season but is not of equal duration). This approach may better account for climatological differences in certain regions, such as the arid West. The agencies request comment on whether this alternative approach is consistent with the plurality opinion in *Rapanos* and *Sackett*. To be clear, the agencies do not intend for the proposed approach or any of the alternative approaches to encompass ephemeral streams or any streams that flow only in direct response to discrete precipitation events.

Another aspect of the proposed definition of “relatively permanent” is to identify when surface hydrology occurs in a given waterbody at least during the wet season, and a number of implementation methods and tools could be used. The agencies acknowledge that landowners often know when surface hydrology is occurring in waterbodies on their land, and such visual observations and other local knowledge and records would be helpful when identifying the occurrence and duration of surface hydrology. One specific tool that could also be used would be the agencies’ regional streamflow duration assessment

methods (SDAMs),⁵⁵ which are rapid field-based methods that can be used to identify both streams that contain flowing water continuously during a year of normal rainfall, as well as streams that contain sustained flowing water for part of the year, typically during the wet season, where the streambed may be below the water table and/or where snowmelt provides sustained flow. See section V.C.5 of this preamble for additional discussion of the agencies’ regional SDAMs. Another tool that could be used under this approach is the USGS Enhanced Runoff Method, which provides mean annual flow estimates for streams mapped in the NHDPlus High Resolution. The agencies seek comment on whether any of these tools and approaches should be used to identify wet season, or whether there are other methods and tools available, and how such methods would be employed for lakes and ponds which would also require relatively permanent flow under either category (a)(3) or (a)(5).

The agencies also solicit comment on whether the terms “standing or continuously flowing” in the proposed definition of “relatively permanent” are a helpful clarification or if those terms should be deleted due to duplication of language in the paragraph (a)(3), (4), and (5) categories, which all use the phrase “relatively permanent, standing or continuously flowing.”

4. Definition of “Tributary”

The agencies propose to define “tributary” to mean “a body of water with relatively permanent flow, and a bed and bank, that connects to a downstream traditional navigable water or the territorial seas, either directly or through one or more waters or features that convey relatively permanent flow.” Further, the agencies’ proposed definition of “tributary” clarifies that a “tributary does not include a body of water that contributes surface water flow to a downstream jurisdictional water through a feature such as a channelized non-jurisdictional surface water feature, subterranean river, culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, wetland, or similar natural feature, if such feature does not convey relatively permanent flow. When the tributary is part of a water transfer (as that term is applied under 40 CFR 122.3) currently in operation, the tributary would retain jurisdictional status.” Even if a waterbody does not satisfy the definition of “tributary,” it

⁵⁵ See <https://www.epa.gov/streamflow-duration-assessment>.

⁵⁴ Funk, C., Harrison, S., Alexander, L., Peterson, P., Behrangi, A., and Husak, G. 2019. “Exploring trends in wet-season precipitation and drought indices in wet, humid and dry regions.” *Environmental Research Letters* 14(11): 115002. Available at <https://iopscience.iop.org/article/10.1088/1748-9326/ab4a6c>.

may function as a point source (*i.e.*, “discernible, confined, and discrete conveyance,” 33 U.S.C. 1362(14)), such that discharges of pollutants from these features could require a Clean Water Act permit. *Rapanos*, 547 U.S. at 743–44 (Scalia, J., plurality opinion).

This proposed definition is informed by Supreme Court decisions and would also provide clarity to assist with implementation. Consistent with previous practice, tributaries under the proposed rule include natural, man-altered, and man-made waterbodies, such as rivers, streams, ditches, canals, lakes, ponds, and impoundments, so long as these waters meet the proposed definition of “tributary.” Under the proposed rule, tributaries can connect directly to a traditional navigable water or the territorial seas, or they may connect through other jurisdictional tributaries, adjacent wetlands that convey relatively permanent flow, certain jurisdictional impoundments, or jurisdictional paragraph (a)(5) lakes and ponds. Such waters would not sever upstream jurisdiction for tributaries if they have relatively permanent flow, or in the case of adjacent wetlands, if relatively permanent flow occurs through the wetlands, connecting the upstream and downstream portions of the tributary network. Tributaries under the proposed rule may also connect through certain features, both natural (*e.g.*, debris piles, boulder fields, beaver dams) and artificial (*e.g.*, culverts, ditches, pipes, tunnels, pumps, tide gates, dams), even if such features themselves are non-jurisdictional under the proposed rule, so long as those features convey relatively permanent flow. Features with non-relatively permanent flow, however, would sever jurisdiction upstream under the proposed rule, including flow through non-relatively permanent reaches or streams or wetlands, except when the tributary is part of a water transfer currently in operation. Features that sever jurisdiction under the proposed rule would only be relevant to the paragraph (a)(3) category. Additional information about implementation of “tributary” is discussed in section V.C.5.b of this preamble below.

With respect to tributaries specifically, the *Rapanos* plurality, which was adopted by *Sackett*, focuses in part on a tributary’s contribution of flow to and connection with traditional navigable waters. See *Rapanos*, 547 U.S. at 742 (interpreting surface waters to be jurisdictional if they are “relatively permanent bod[ies] of water connected to traditional interstate navigable waters”). The agencies’ proposed definition of “tributary” requires

relatively permanent flow and a connection to a downstream traditional navigable water, consistent with Supreme Court precedent.

In addition, the agencies’ proposal would require that tributaries have a bed and banks to clearly identify those waters that are considered tributaries under the proposed rule. The agencies believe that the proposed definition would provide clear and predictable jurisdictional boundaries to guide the agencies and the regulated community. This proposed requirement reflects the approach taken in the NWPR to ensure that the agencies would not exercise jurisdiction beyond the scope of clearly definable tributaries and is therefore familiar to the regulated community and practitioners in the field. Not all features with relatively permanent flow will have a bed and banks, however, and may instead display other ordinary high water mark indicators. Such geographical features with an ordinary high water mark would not be jurisdictional under the proposed rule. For example, certain features such as grassed waterways do not have bed and banks but may have relatively permanent flow and may still connect to a traditional navigable water or the territorial seas. The agencies propose that these features would fall beyond the scope of jurisdictional tributaries under the Clean Water Act, as grassed waterways are not the kind of “bodies of water ‘forming geographic[al] features’ . . . described in ordinary parlance as ‘streams, oceans, rivers, and lakes’” that the *Rapanos* plurality and *Sackett* opinions interpreted to be “waters of the United States.” *Sackett*, 598 U.S. at 671 (quoting *Rapanos*, 547 U.S. at 739).

In addition, lakes and ponds may be considered a tributary consistent with the agencies’ current implementation if they meet the proposed definition. Lakes, ponds, and impoundments that contain standing or continuous flowing water, year round or at least during the wet season, would be considered to be “a body of water with relatively permanent flow” under the proposed rule. Generally, lakes and ponds do have a bottom, or bed, as well as side slopes, or banks. These may look different than the bed and banks of more channelized version of streams which are tributaries, but the agencies intend that these in-line lakes and ponds that meet the proposed definition of “tributary” would be considered jurisdictional under paragraph (a)(3). Even though such waters are considered to be lentic or “still” systems, such waters still contribute flow downstream at the point that they outlet to the

tributary network and therefore the agencies have long concluded it is appropriate to consider such waters to be tributaries where they otherwise meet the requirements of the category.

This proposed definition of tributary identifies a category of rivers and streams that, due to their flow duration (*i.e.*, relatively permanent flow) and their connection to traditional navigable waters or the territorial seas, should be deemed federally jurisdictional. Through this proposed definition of “tributary,” the agencies would also acknowledge the policy direction from Congress to “recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution [and] to plan for the development and use (including restoration, preservation, and enhancement) of land and water resources.” 33 U.S.C. 1251(b); see also *Rapanos*, 547 U.S. at 737 (Scalia, J., plurality). The proposed approach to defining “tributary” is also intended to limit Federal jurisdiction over streams and features with non-relatively permanent flow and other ordinarily dry land features in order to “preserve, and protect the primary responsibilities and rights of States to . . . plan the development and use . . . of land . . . resources.” See *id.* at 738 (Scalia, J., plurality) (“Regulation of land use, as through the issuance of the development permits sought by petitioners in both [*Rapanos* and *Carabell*], is a quintessential state and local power.”); see also *Sackett*, 598 U.S. at 674 (“It is hard to see how the States’ role in regulating water resources would remain “primary” if the EPA had jurisdiction over anything defined by the presence of water.”).

With the proposed definition, the agencies seek to avoid “impairing or in any manner affecting any right or jurisdiction of the States with respect to waters (including boundary waters) of such States.” See 33 U.S.C. 1370. States and Tribes are free to address rivers, lakes, streams, ponds, and other features that do not meet the definition of “relatively permanent” as “waters of the State” or “waters of the Tribe” under their own laws to the extent they deem appropriate.

The agencies solicit comment on all aspects of the proposed definition of “tributary” and implementation of the definition. The agencies also seek comment on alternative approaches to the definition of “tributary,” such as whether to require “bed and banks or additional physical characteristics,” or whether the inclusion of “relatively permanent” is redundant given the regulatory text at paragraph (a)(3).

Additionally, the agencies request comment on the proposed provision of the “tributary” definition providing that a tributary does not include a body of water which contributes surface flow to a downstream jurisdictional water through a feature that does not convey relatively permanent flow and under what conditions that may happen. Hydrologic regime shifts of relatively permanent flow to non-relatively permanent flow back to relatively permanent flow may be commonly found in the arid West and mountainous regions. Under the proposed rule, these shifts from relatively permanent to non-relatively permanent flow would sever Federal jurisdiction of upstream reaches under the Clean Water Act. The proposed implementation of the definition of “tributary” would require knowledge of whether there are any non-relatively permanent features downstream of the review area that would sever jurisdiction.

The agencies also seek comment on the proposed treatment of natural and man-made features regarding the jurisdictional status of upstream waters, including whether these features can connect tributaries downstream when they convey relatively permanent flow or if they should sever downstream jurisdiction in all cases other than as part of a water transfer. The Supreme Court has not spoken directly to the question of whether a non-jurisdictional feature that lacks relatively permanent flow along or downstream of an otherwise jurisdictional tributary, lake, pond, or impoundment would sever jurisdiction of upstream waters. The agencies are interested in comments addressing whether the current approach is preferable because it avoids incentivizing the construction of certain features within the tributary network to prevent relatively permanent flow through the features with the intent to sever upstream jurisdiction. The agencies recognize, however, that the Supreme Court has stated that even when a barrier between a wetland and a water of the United States would ordinarily remove that wetland from Federal jurisdiction, a property owner may not carve out wetlands from Federal jurisdiction by illegally constructing a barrier on wetlands otherwise covered by the Clean Water Act. *Sackett*, 598 U.S. at 678 n.16.

The agencies also solicit comment on whether they should instead adopt the approach similar to the NWPR, whereby a tributary does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water through a channelized non-jurisdictional surface

water feature, through a subterranean river, through a culvert, dam, tunnel, or other similar artificial feature, or through a debris pile, boulder field, or similar natural feature. *See* 85 FR 22277, 22289 (April 21, 2020). The agencies solicit comment on whether the NWPR approach is easier to implement than the proposed approach and whether that approach better implements the objectives and policies of the Clean Water Act. Another approach could provide that a tributary would lose its jurisdictional status if it contributes surface water flow to a jurisdictional water through non-surface features (*e.g.*, subterranean rivers, underground tunnels), even if such features convey relatively permanent flow. The agencies solicit comment on such an alternative approach.

Similarly, the agencies seek comment on the proposed approach that adjacent wetlands with non-relatively permanent flow through them cannot serve as a connection and therefore sever jurisdiction upstream of the tributary network. This proposed approach is consistent with the other proposed approaches for non-relatively permanent flow features serving as breaks of upstream jurisdiction. The agencies believe this proposed approach is appropriate because the waterbody would not convey surface water to a paragraph (a)(1) water year-round or continuously for extended periods of time, and therefore would not exhibit relatively permanent flow. The agencies recognize that there are implementation challenges with the proposed approach as it may be difficult to ascertain if there are downstream wetlands located at any point in the tributary’s path to a traditional navigable water and whether those wetlands have relatively permanent flow through them.

The agencies are also interested in hearing from the public regarding the proposed approach related to water transfers for non-relatively permanent waters establishing breaks of jurisdiction. The NPDES permitting exemption under the Water Transfers Rule, 73 FR 33697 (June 13, 2008), does not require NPDES permits for water transfers between “waters of the United States” because they do not result in the “addition” of a pollutant. *Id.* at 33699. For example, in many regions of the country, particularly the arid West, inter- and intra-basin water transfers may originate in relatively permanent waters that may be disconnected from downstream waters by non-relatively permanent stream reaches. In many circumstances, those non-relatively permanent stream reaches may be caused by water management systems,

including through water transfers, water storage reservoirs, flood irrigation channels, and similar structures. The agencies recognize the importance of water management practices in the States and the explicit policy directives of Congress to recognize the authority of States to allocate and manage water resources within their respective jurisdictions. *See* 33 U.S.C. 1251(g), 1370. Under the proposed rule, if the upstream tributaries that are part of a water transfer ultimately flow through non-relatively permanent reaches that eventually connect to traditional navigable waters or the territorial seas, the upstream tributaries would retain their jurisdictional status as waters of the United States. The agencies believe this is appropriate to ensure vital water management practices continue as currently implemented regarding water transfers.

5. Implementation

a. Implementation of “Relatively Permanent”

The agencies are proposing “relatively permanent” to mean “standing or continuously flowing bodies of surface water that are standing or continuously flowing year-round or at least during the wet season.” Bodies of surface water that are “standing” are meant to encompass lakes, ponds, and similar features that have standing water year-round or at least during the wet season and that are part of the tributary system, as such waters that outlet to the tributary network and contribute relatively permanent flow downstream at the outlet point. “Continuously flowing” waterbodies under this proposed rule is meant to encompass streams, rivers, ditches, and similar features that are considered under the paragraph (a)(3) tributaries categories. In addition, a tributary’s frozen status for parts of the year does not preclude it from having flow year-round or at least during the wet season under this proposed rule. Such tributaries typically have flowing water underneath the frozen surface. Frozen segments of rivers and streams also are not intended to serve as features that sever jurisdiction. This section is meant to address implementation of the proposed definition of “relatively permanent” more broadly for both categories of waters. The agencies are seeking comment on all aspects of their proposed implementation of “relatively permanent,” including if there are additional tools and methods to assist with implementation.

A key factor the agencies typically consider when assessing the length and

timing of expected flow during the “wet season” is the geographic region. The time period, including duration, constituting a “wet season” varies across the country due to many relevant factors including climate, hydrology, topography, soils, and other conditions. For example, in parts of the Southeast, precipitation may be distributed somewhat uniformly throughout the year, but increased evapotranspiration during the growing season can reduce surficial ground water levels and lead to reduced or absent surface flows late in the growing season (e.g., late summer or early autumn). Consequently, “wet season” flows in the Southeast may typically occur in the winter or early spring. In other areas, snowmelt drives streamflow more than rainfall, with wet season flow coinciding with warming temperatures typically in the spring or early summer.⁵⁶ In some parts of the country, there may be two distinct wet seasons that are separated by drier months,⁵⁷ and in such cases, the tributary would need to have continuous surface hydrology at least during both wet seasons to meet the definition of “relatively permanent” under the proposed rule. Precipitation includes both rain and snow, as some wet seasons across the country encompass the winter months and the precipitation events may often include snowfall.

The agencies have experience evaluating if a water is standing or continuously flowing at least during the wet season and will continue to use multiple tools, including remote and field-based indicators to inform decisions. As stated earlier, the agencies intend to use the WebWIMP outputs as a primary tool for determining the wet season at a given location. The WebWIMP outputs reported by APT can also be used to assess the presence of drought conditions, as well as the approximate dates of the wet and dry seasons for a given location. APT provides outputs from WebWIMP,⁵⁸ which the agencies intend to use to calculate wet season. In general, dry months are calculated in WebWIMP

(and displayed in APT outputs) when potential evapotranspiration exceeds precipitation, resulting in drawdown of soil moisture storage and/or a moisture deficit. Conversely, the wet season would be calculated when precipitation exceeds evapotranspiration. In addition, other sources of information on identification of wet season could include NOAA,⁵⁹ NRCS,⁶⁰ and USGS⁶¹ sources, among others such as the Frequent Rainfall Observations on GridS (FROGS).⁶²

Implementation of “relatively permanent” in this proposed rule does not require that relatively permanent standing or continuously flowing water come from particular sources, such as groundwater, upstream contributions, effluent flow, or snowpack melts. This proposed rule’s approach is consistent with the plurality opinion in *Rapanos*, which lays out the relatively permanent standard and does not require that relatively permanent waters originate from any particular source. *See, e.g.*, 547 U.S. at 739.

In addition, in certain regions relatively permanent standing or continuously flowing water could result from a concentrated period of back-to-back precipitation events that leads to sustained standing or flowing water through a combination of runoff and upstream contributions of water or an elevated groundwater table that provides baseflow to the channel bed or groundwater inflow to lakes or ponds. However, in all circumstances, such flow must also occur for a duration that extends through at least the wet season. In contrast, under the proposed rule, tributaries would be determined to have non-relatively permanent flow where the feature flows only during, or shortly after, individual precipitation events (including rainfall or snowfall events), and lakes and ponds would be determined to be non-relatively permanent where the feature has standing water only during, or shortly after, individual precipitation events. Non-relatively permanent flowing or standing water may occur simply

because it is raining or has very recently rained, or because recent snowfall has melted, but in any case, would not be determined to be federally jurisdictional under this proposed rule. Streamflow that occurs during the monsoon season in certain parts of the country (typically June through September in the arid West) may be relatively permanent or non-relatively permanent under the proposed rule, depending on the whether there is flow at least continuously during the “wet season” and lakes and ponds that have standing water during the “wet season” would be considered relatively permanent waters under this proposed rule regardless of the source of water during the wet season.

Documenting jurisdiction is typically accomplished by the Corps,⁶³ including for determining if a water is relatively permanent. The Corps is responsible for conducting or verifying jurisdictional determinations on a case-by-case basis. The agencies do not intend for their analysis of any features outside of a jurisdictional determination review area to result in an official approved jurisdictional determination on those other water bodies. Jurisdictional determinations can be informed by observations made during one or more field investigations and/or the use of remote tools. When conducting field investigations, the Corps must determine whether the observations made during the field investigation represent normal climatic conditions, in other words, what is typical for the time of year the field investigation was performed. Conditions need not be normal at the time of the investigation (e.g., they may be wetter or drier than normal) but understanding whether field conditions represent normal climatic conditions helps the Corps know how to interpret observations made during the field investigation (e.g., the field investigator observed flowing water during drier than normal conditions). This proposal would consider these practices, and the Corps would utilize various types of tools, data, and methodologies to determine whether conditions are normal (e.g., the APT).

b. Implementation of Tributaries

Under the proposed rule, relatively permanent tributaries include rivers, streams, lakes, ponds, and other standing or continuously flowing bodies of surface water that are standing or continuously flowing year-round or at

⁵⁶ NOAA’s Climate Division Scale Palmer Drought Severity Index (PDSI) dataset is one drought index that may be used to observe dry and wet conditions in a given region, and the index is used to display monthly values in the APT. The PDSI integrates precipitation, evapotranspiration, and soil moisture data into the monthly drought index. The PDSI Divisional Time Series may be used to observe PDSI across States and ecoregion divisions on a monthly scale from a start year of 1895 to 2025. Available at <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series/0101/pdsi/1/0/1895-2025>.

⁵⁷ *See supra* note 47.

⁵⁸ *Id.*

⁵⁹ NOAA, NCEI Climate Normals available at <https://www.ncei.noaa.gov/products/land-based-station/us-climate-normals>; <https://www.nohrsc.noaa.gov/nsa/>.

⁶⁰ Snow and Climate Monitoring available at <https://www.nrcs.usda.gov/resources/data-and-reports/snow-and-climate-monitoring-predefined-reports-and-maps>.

⁶¹ Water Watch Streamflow conditions available at <https://waterwatch.usgs.gov/?id=wwsa>.

⁶² Available at <https://www.aeris-data.fr/catalogue/?uuiid=9d01e252-cc35-4849-9cc9-93c0a7e0fa7b>. Further metrics may be derived using precipitation indices from FROGS database to evaluate wet seasons such as the “Wet Seasons Totals (WST)” in Funk *et al.* 2019.

⁶³ *See, e.g.*, 33 CFR 331.2 and RGL 16–01, available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll9/id/1256>.

least during the wet season, that have a bed and banks, and connect to a downstream traditional navigable water or the territorial seas, either directly or through one or more waters or features that convey relatively permanent flow. Consistent with longstanding practice, streams that have been altered or relocated can be tributaries under the proposed rule. An altered tributary is one in which the flow or geomorphic conditions have been modified in some way, for example, by straightening a sinuous tributary, adding concrete or riprap to stabilize the banks of a tributary, reducing flow conditions from year-round to continuous flow during the wet season due to water withdrawals, or widening or adding physical features (such as riffle/pool complex restoration or check dams) to the tributary to reduce the velocity of flow. A relocated tributary is one in which a portion of the tributary may be moved to a different location, as when a tributary is rerouted around a city center to protect it from flooding or around a mining complex to enable extraction of commercially valuable minerals. The agencies do not intend for the proposed ditch exclusion to be applied to these relocated tributaries. To be considered a jurisdictional tributary under the proposed rule, such features must continue to meet the proposed definition of “tributary.” The agencies are seeking comment on all aspects of implementation of tributaries under the proposed rule discussed in this section, including if there are additional tools and methods to assist with implementation.

For purposes of implementation of the proposed rule, “bed and banks” means the substrate and sides of a channel, lake, or pond between which standing water or continuous flow is confined. The banks constitute a break in slope between the edge of the bed and the surrounding terrain, and may vary from steep to gradual. In many tributaries, the bed is that part of the channel below the ordinary high water mark, and the banks often extend above the ordinary high water mark. For other tributaries, such as those that are incised, changes in vegetation, changes in sediment characteristics, staining, or other ordinary high water mark indicators may be found within the vertical profile of the banks. In concrete-lined channels, the concrete acts as the bed and banks. The agencies are not proposing to change their longstanding implementation that ordinary high water marks define the lateral limits of jurisdiction in non-tidal waters, provided that the limits of jurisdiction

are not extended by adjacent wetlands. 33 CFR 328.4; RGL 05–05 at 1 (December 7, 2005). In addition, the agencies consider lakes and ponds to also have a bed (the bottom of lake or pond) and banks (the side slopes of the lake or pond), and as such, they would meet the definition of tributary and fall under category (a)(3) if they are a relatively permanent water.

Under this proposed rule, tributaries that meet the definition of “relatively permanent” are jurisdictional under the Clean Water Act as “waters of the United States,” as discussed in section V.C of this preamble. The agencies are proposing to evaluate tributaries to determine if they have relatively permanent flow on a “reach” basis utilizing the approach used in the NWPR, where “reach” would mean a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope.⁶⁴ If a relatively permanent tributary reach becomes non-relatively permanent and then relatively permanent and then non-relatively permanent again, it may be viewed as four separate reaches, especially if they also share other similarities with respect to depth, slope, or other factors. When such transitions of flow classification occur, the agencies would use best professional judgment and available tools to identify where the change in flow classification occurs under the proposed rule. The non-relatively permanent reaches would sever jurisdiction of upstream reaches under the proposed rule, except where the tributary is part of a water transfer currently in operation. In general, a reach can be any length of a stream or river, but the agencies are clarifying for implementation purposes for the proposed rule that such length is bounded by similar flow characteristics. The agencies seek comment on this approach to “reach.”

Potential tributaries can be identified on the landscape using direct observation or various remote sensing resources such as USGS stream gage data,⁶⁵ USGS topographic maps,⁶⁶ high-resolution elevation data and associated derivatives (e.g., slope or curvature

⁶⁴ See Connectivity Report at A–10, defining “reach” as “a length of stream channel with relatively uniform discharge, depth, area, and slope.” A similar definition is used by the USGS (USGS. “What is a reach?” Available at <https://www.usgs.gov/faqs/what-a-reach>) (describing a reach as “a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope”).

⁶⁵ <https://waterdata.usgs.gov/nwis/rt>.

⁶⁶ <https://www.usgs.gov/programs/national-geospatial-program/topographic-maps>.

metrics),⁶⁷ Federal Emergency Management Agency (FEMA) flood zone maps,⁶⁸ NRCS soil maps,⁶⁹ USGS hydrography datasets,⁷⁰ National Wetlands Inventory (NWI) data,⁷¹ USGS Landsat Dynamic Surface Water Extent (DSWE) Science Products,⁷² maps and geospatial datasets from State, Tribal, or local governments, and/or aerial or satellite imagery. Both direct field observations and remote tools may establish the presence of a bed and banks.

Visual observations of surface hydrology are a useful primary method to identify if a potential tributary has relatively permanent flow under the proposed rule. The agencies expect that landowners will often have sufficient knowledge to understand how water moves through their properties. The agencies also recognize that a single visual observation may not always be sufficient to accurately determine relatively permanent flow, and visual observations should generally be combined with precipitation and other climate data and expected flow seasonality to accurately determine flow duration. For example, observing flow only directly after a large rainfall or observing no flow during the dry season may not be good indicators of a stream’s typical flow duration.

In addition to visual observations of surface hydrology, the agencies may use field-based indicators and tools as another line of evidence to determine flow duration. Regionalized SDAMs that use physical and biological field indicators, such as the presence of hydrophytic vegetation and benthic macroinvertebrates, can also be used to help determine if potential tributaries have continuously flowing water year-round or at least during the wet season.⁷³ SDAMs are a rapid field

⁶⁷ USGS 3D Elevation Program, available at <https://www.usgs.gov/3d-elevation-program>.

⁶⁸ <https://msc.fema.gov/portal/home>.

⁶⁹ <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

⁷⁰ NHD, available at <https://www.usgs.gov/national-hydrography/national-hydrography-dataset>; 3D Hydrography Program (3DHP), available at <https://www.usgs.gov/3dhp>.

⁷¹ <https://www.fws.gov/program/national-wetlands-inventory/wetlands-data>.

⁷² <https://www.usgs.gov/landsat-missions/landsat-dynamic-surface-water-extent-science-products>.

⁷³ In the regional SDAMs developed by EPA and the Corps, ephemeral reaches are channels that flow only in direct response to precipitation. Water typically flows only during and/or shortly after large precipitation events, the streambed is always above the water table, and stormwater runoff is the primary water source. Intermittent reaches are channels that contain sustained flowing water for only part of the year, typically during the wet season, where the streambed may be below the

Continued

method that can be performed in a single site visit under normal climatic conditions. SDAMs are a regionally specific, publicly available, and time and cost effective alternative to prolonged hydrologic sampling methods. Other agencies have developed similar tools that may be useful in implementing this proposed rule.⁷⁴ Flow duration classifications can then be used to assist in determining the relative permanence of the tributary, as that term is defined in the proposed rule. Ultimately, multiple indicators, data points, and sources of information may be used to determine if the potential tributary has relatively permanent flow using the weight of evidence. The agencies are soliciting comment on implementation methods and tools that could be used to identify and distinguish relatively permanent flow durations from non-relatively permanent flow durations as defined in this proposal, including the tools and methods discussed in this section. The agencies are specifically interested in any challenges related to the use of SDAMs and comments related to how this tool could be refined to address such challenges moving forward. The proposed rule applies the same basic principles to the category of paragraph (a)(5) lakes and ponds to determine if they are relatively permanent waters. See section V.E of this preamble.

One step in determining whether a waterbody is a tributary under the proposed rule is to identify whether the waterbody is part of a tributary system of a paragraph (a)(1) water. A tributary under the proposed rule can connect to a downstream traditional navigable

water table and/or where the snowmelt from surrounding uplands provides sustained flow. The flow may vary greatly with stormwater runoff. Perennial reaches are channels that contain flowing water continuously during a year of normal rainfall, often with the streambed located below the water table for most of the year. Groundwater typically supplies the baseflow for perennial reaches, but the baseflow may also be supplemented by stormwater runoff and/or snowmelt. Although these terms are not synonymous with the terms non-relatively permanent and relatively permanent as used in this proposed rule, the SDAMs are still informative and can be used to demonstrate that a tributary is relatively permanent. Available at <https://www.epa.gov/streamflow-duration-assessment/learn-about-regional-sdams>.

⁷⁴ E.g., *Methodology for Identification of Intermittent and Perennial Streams and Their Origins*, developed by the North Carolina Division of Water Quality, available at https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Policies_Guides_Manuals/StreamID_v_4point11_Final_sept_01_2010.pdf. See also Fairfax County, 2003. *Perennial Stream Field Identification Protocol*. Fairfax County Stormwater Planning Division, Fairfax County, Virginia. 16 pp. Available at: https://www.fairfaxcounty.gov/publicworks/sites/publicworks/files/assets/documents/pdf/03_ps_protocol_ada.pdf.

water or the territorial seas through other relatively permanent tributaries, category (a)(2) impoundments, or category (a)(5) lakes and ponds. Under the proposed rule, a tributary can also connect to a downstream traditional navigable water or the territorial seas through certain artificial or natural features, including a channelized non-jurisdictional surface water feature, subterranean river, culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, wetland, or similar natural feature, so long as those features also convey relatively permanent flow. In evaluating the flowpath from a tributary to determine if it connects to a traditional navigable water or the territorial seas, the agencies can use USGS maps, NWI data, knowledge or maps developed at State, Tribal, or local levels, on the ground tests, including dye tests or tracers, field observations, or aerial and satellite imagery or other remote sensing information. The agencies can also use available models, including models developed by Federal, Tribal, State, and local governments, academia, and the regulated community.⁷⁵ These tools could be used in conjunction with field observations, data, and other desktop tools to evaluate whether a tributary flows to a paragraph (a)(1) water. The agencies seek input on other tools that may be helpful in such evaluation.

For tributaries that contribute flow to a downstream paragraph (a)(1) water through a ditch that is proposed to be excluded under paragraph (b)(3), so long as the ditch has relatively permanent flow, it does not sever jurisdiction upstream under the proposed rule. Under the proposed rule, adjacent wetlands that lie along the flowpath between the tributary and paragraph (a)(1) water⁷⁶ do not sever jurisdiction

⁷⁵ One such model includes the USGS StreamStats “Flow (Raindrop) Path” GIS tool which allows the user to click a point on a map, after which a flowpath is drawn to estimate where water may flow from that point to the stream network, eventually making its way to the ocean if the tributary network allows for it available at <https://streamstats.usgs.gov/ss/>. The StreamStats tool may potentially be used to identify the flowpath from the subject waters to the downstream paragraph (a)(1) water using the “Flow (Raindrop) Path” component of the tool. Digital elevation models may also be useful in helping to model stream networks and flowpaths (e.g., the National Elevation Dataset, available at <https://www.usgs.gov/publications/national-elevation-dataset>).

⁷⁶ These in-stream wetlands are sometimes called throughflow wetlands. See, e.g., Tiner, R.W. 2014. *Dichotomous Keys and Mapping Codes for Wetland Landscape Position, Landform, Water Flow Path, and Waterbody Type: Version 3.0*. U.S. Fish and Wildlife Service, National Wetlands Inventory Program, Northeast Region, Hadley, MA, 65 pp plus Appendices. Available at <https://www.fws.gov/>

where the wetlands have relatively permanent flow, connecting the upstream and downstream reaches of the otherwise jurisdictional tributary. This can be demonstrated with physical indicators of relatively permanent flow through the wetland, including through discernible flow features. Conveyance of relatively permanent flow can occur as discernible flow channels (such as rivulets through marshes) or can be demonstrated by physical indicators such as bent over or matted vegetation, both of which can help trace the flow through the wetland. However, additional evidence would be needed to determine such flow is relatively permanent. Aerial or satellite imagery may also demonstrate the presence of discernible flow features through the wetland as well as demonstrate that the flow is relatively permanent.⁷⁷ The agencies seek comment on these aspects of implementation of the proposed definition of “tributary.”

Even where there are downstream features that potentially sever jurisdiction upstream, additional analysis would be needed to see if the tributary is part of a water transfer in current operation exempt from NPDES permitting under EPA’s Water Transfers Rule, 73 FR 33697 (June 13, 2008), as discussed in section V.F.2 of the preamble. In such a case, the tributary would retain its jurisdictional status. The agencies may rely on the coordination aspect of cooperative federalism practices with individual States to identify any water transfers in current operation, as records on water transfers are often available from relevant State agencies. The agencies seek comment on this aspect of implementation of the proposed definition of “tributary,” including on sources of information that can be relied on to determine if a tributary is part of a water transfer.

[sites/default/files/documents/Dichotomous-Keys-and-Mapping-Codes-for-Wetland-Landscape-Position-Landform-Water-Flow-Path-and-Waterbody-Type-Version-3.pdf](https://www.fws.gov/sites/default/files/documents/Dichotomous-Keys-and-Mapping-Codes-for-Wetland-Landscape-Position-Landform-Water-Flow-Path-and-Waterbody-Type-Version-3.pdf). (Describing throughflow wetlands as those that receive surface water from a stream, other waterbody or wetland (i.e., at a higher elevation) and surface water passes through the subject wetland to a stream, another wetland, or other waterbody at a lower elevation; a flow-through system). Note that some wetlands along the flowpath of a potential tributary to a paragraph (a)(1) water may be considered bidirectional in this report, though not all bidirectional wetlands addressed in the report would be flowpath wetlands.

⁷⁷ See the USGS Dynamic Surface Water Extent dataset. Available at: <https://www.usgs.gov/landsat-missions/landsat-dynamic-surface-water-extent-science-products>.

D. “Continuous Surface Connection”

1. Definition and Scope of “Continuous Surface Connection”

The agencies are not proposing to revise the definition of “adjacent,” which means “having a continuous surface connection.” 33 CFR 328.3(c)(2), 40 CFR 120.2(c)(2). Under the proposed rule, and consistent with current implementation, both paragraph (a)(4) adjacent wetlands and paragraph (a)(5) relatively permanent lakes and ponds must have a continuous surface connection to a water of the United States to be jurisdictional. In this proposal, however, the agencies would define “continuous surface connection” for the first time to mean “having surface water at least during the wet season and abutting (*i.e.*, touching) a jurisdictional water.” Thus, the agencies’ proposed definition of “continuous surface connection” provides a two-prong test that requires both (1) abutment of a jurisdictional water; and (2) having surface water at least during the wet season.

The phrase “abutting” would be implemented consistent with the March 2025 Continuous Surface Connection Guidance to mean “touching.” The phrase “having surface water at least during the wet season” in the proposed definition is intended to include wetlands that have at least semipermanent surface hydrology that is persistent surface water hydrology uninterrupted throughout the wet season except in times of extreme drought and would not include wetlands without semipermanent surface hydrology, including wetlands with only saturated soil conditions supported by groundwater. Under this proposed approach, only those portions of a wetland with continuous surface hydrology at least during the wet season, and that are abutting, would be jurisdictional as adjacent wetlands, no matter the full delineated scope of the wetland. The use of “surface water at least during the wet season” does not require that the surface water be the result of flooding from an external waterbody or any other particular source, but rather the persistent presence of surface water uninterrupted throughout the wet season (*i.e.*, throughout the duration of the wet season) as described above. The agencies propose that wet season as used in the proposed continuous surface connection definition be implemented in the same manner as described under the proposed relatively permanent definition section of this preamble. As stated above, only the portion of an abutting wetland which demonstrates

surface water at least during the wet season would be jurisdictional—for example, if the wetland transitions from having surface water at least during the wet season (where it abuts the jurisdictional water) to seasonally saturated, only the portion that has surface water at least during the wet season would be considered to be adjacent under the proposed rule. *See* section V.D.4 of this preamble for additional information about implementation of “continuous surface connection.” The agencies solicit comment on all aspects of the definition of “continuous surface connection” in this proposed rule. The agencies acknowledge that the requirement for surface water at least during the wet season might result in few wetlands being found to have a continuous surface connection under the proposed rule, particularly in the arid West. The agencies solicit comment on the implications of this requirement in the arid West and other regions.

2. Basis for the Proposed Definition

The proposed requirement that paragraph (a)(4) adjacent wetlands and paragraph (a)(5) relatively permanent lakes and ponds must have a continuous surface connection to be jurisdictional, and the agencies’ proposed definition of “continuous surface connection,” reflects the agencies’ best efforts to interpret the *SWANCC*, *Rapanos* plurality, and *Sackett* holdings with respect to adjacency in an implementable way, informed by the agencies’ technical expertise in implementing the Clean Water Act for over fifty years.

The Supreme Court has articulated several key principles that have guided the agencies in determining the “point at which water[s] of the United States] end[] and land begins” for purposes of this proposed rule. *See Riverside Bayview*, 474 U.S. at 132. First, the plurality opinion in *Rapanos* and the *Sackett* decision have recognized that the Clean Water Act term “waters of the United States” covers at least some wetlands; specifically, those wetlands that are “adjacent” to surface waters. *Rapanos*, 547 U.S. at 741 (Scalia, J., plurality opinion) (citing 33 U.S.C. 1344(g)(1)); *Sackett*, 598 U.S. at 676 (citing 33 U.S.C. 1344(g)(1)). Such wetlands “must be indistinguishably part of a body of water that itself constitutes ‘waters’ under the CWA”—in other words, such wetlands are “‘includ[ed]’ within ‘the waters of the United States’” and may be federally regulated only when “indistinguishable” from the surface waters. *Sackett*, 598 U.S. at 677.

Second, and relatedly, the Supreme Court has defined the scope of adjacent wetlands to include only those with a continuous surface connection to jurisdictional surface waters. In *Rapanos*, the plurality held that “only those wetlands with a continuous surface connection to bodies that are ‘waters of the United States’ in their own right, so that there is no clear demarcation between ‘waters’ and wetlands, are ‘adjacent to’ such waters and covered by the Act.” *Rapanos*, 547 U.S. at 742 (Scalia, J., plurality opinion). In *Sackett*, the Supreme Court stated that it “agree[s] with this formulation of when wetlands are part of ‘the waters of the United States.’” *Sackett*, 598 U.S. at 678 (citing *Rapanos*, 547 U.S. at 742, 755). *Sackett* explicitly held that “the CWA extends to only those wetlands that are ‘as a practical matter indistinguishable from waters of the United States.’” *Id.* The Court stated that this test “requires the party asserting jurisdiction over adjacent wetlands to establish ‘first, that the adjacent [body of water constitutes] . . . ‘water[s] of the United States,’ (*i.e.*, a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the “water” ends and the “wetland” begins.’” *Id.* at 678–79. The *Sackett* decision recognized that temporary interruptions in surface connection may occur, such as during periods of drought or low tide. *Id.* at 678. Importantly, the *Rapanos* plurality also held that “adjacent” means “physically abutting,” and used “abutting” and “adjacent” interchangeably. *Rapanos*, 547 U.S. at 748; *see also id.* at 747 n.12 (“[T]he statutory definition [of ‘navigable waters’] can be read to include *some* wetlands—namely, those that directly ‘abut’ covered waters.”) (emphasis in original).

The proposed definition of “continuous surface connection” is based on two principles: the inclusion of “adjacent wetlands” in the scope of Clean Water Act jurisdiction and the interpretation of “adjacency” as a “continuous surface connection.” The agencies’ proposed interpretation of “continuous surface connection,” in turn, has two parts: first, a requirement for having surface water at least during the wet season; and second, a requirement that the relevant feature abut, *i.e.*, touch, a jurisdictional water. When these requirements are satisfied, the wetland has a continuous surface connection and can be said to be

indistinguishable from the surface waters that form the core of Federal jurisdiction under the Clean Water Act.

With respect to surface water at least during the wet season, all paragraph (a)(5) relatively permanent lakes and ponds contain surface water at least during the wet season and would easily meet this part of the definition. By definition, lakes and ponds contain surface water.⁷⁸ Not all water features that meet the agencies' definition of "wetlands" would meet the test of having surface water at least during the wet season, however. The agencies' current definition of "waters of the United States" defines "wetlands" as "those areas that are inundated or saturated by surface or ground water 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." 33 CFR 328.3(c)(1). The agencies are not proposing to alter this longstanding definition. However, meeting the agencies' "wetlands" definition would not automatically render that wetland jurisdictional. Only those wetlands that meet the regulatory definition of "wetlands," are abutting a water of the United States, and have surface water at least during the wet season would be jurisdictional as adjacent wetlands under the proposed rule. The agencies also believe that the incorporation of wet season into the proposed definition

of "continuous surface connection" can be viewed as a bright line test, as it would provide a duration threshold requirement for which an abutting wetland or an abutting lake or pond must have surface water in order to be considered jurisdictional. Unlike typical bright line approaches, however, the agencies' proposed approach would also allow for regional variation given the range in hydrology and precipitation throughout the country.

The proposed requirement of having surface water at least during the wet season implements the "indistinguishable" concept articulated in the *Rapanos* plurality and *Sackett* opinions. A wetland that lacks surface water during the wet season may often look like dry land and can be easily distinguishable from the surface waters to which it abuts. The agencies propose to conclude that such wetlands could be "clear[ly] demarcate[d]" from surface waters and therefore do not meet the *Rapanos* plurality and *Sackett* tests for adjacency. See *Rapanos*, 547 U.S. at 742 (Scalia, J., plurality opinion); *Sackett*, 598 U.S. at 678. The agencies acknowledge that during the dry season, when either relatively permanent surface waters or abutting wetlands are dry, or both, wetlands may potentially be more easily distinguishable from abutting waters. However, the agencies view indistinguishability during the wet season as sufficient to satisfy the *Sackett* test.

Requiring permanent indistinguishability based on permanent surface water in both the paragraphs (a)(1) through (3) and (a)(5) water and the adjacent wetland would read the modifier "relatively" out of the interpretation of "relatively permanent" (as discussed in section V.C.2 of this preamble) and render the vast majority of wetlands nonjurisdictional, which the agencies propose is not the best reading of the Clean Water Act under *Sackett*. It would also ignore the *Rapanos* plurality's statement that "relatively permanent" includes "seasonal" waters, such as those that do not flow during dry months. See *Rapanos*, 547 U.S. at 732 n.5. As discussed in the context of tributaries, the proposed definition of "relatively permanent" would require flow "at least during the wet season," which is consistent with the plain meaning of "waters," "lakes" and "streams" and with the *Rapanos* plurality's intent to avoid excluding seasonal waters. Using the "wet season" concept in the continuous surface connection standard would facilitate implementation because it would be consistent with implementation of the agencies'

proposed application of "relatively permanent." Moreover, it relies on available tools; WebWIMP already helps to identify the wet season. Additional information about implementation of this aspect of the proposed definition of "continuous surface connection" is discussed in section V.D.4.1 of this preamble.

The second part of the proposed definition of "continuous surface connection" requires that the paragraph (a)(4) wetland or paragraph (a)(5) relatively permanent lake or pond abut, *i.e.*, touch, a jurisdictional water. This requirement would directly implement the *Rapanos* plurality's interpretation of "adjacent" as meaning "physically abutting." See *Rapanos*, 547 U.S. at 742, 747–48 (Scalia, J., plurality opinion). It would similarly implement the *Sackett* opinion's understanding of "adjacent," which "agree[d]" with the *Rapanos* plurality's "formulation of when wetlands are part of 'the waters of the United States,'" and emphasized that adjacent wetlands must be "as a practical matter indistinguishable" from requisite jurisdictional waters. *Sackett*, 598 U.S. at 678 (quoting *Rapanos*, 547 U.S. at 755). Limiting the scope of "adjacent" water features to those having surface water at least during the wet season and that abut, *i.e.*, touch, a jurisdictional water is a clearly understandable and transparent approach to implementing the Court's reading of "adjacency" as "indistinguishable." This approach will also promote cooperative federalism by recognizing and preserving the primary responsibilities and rights of States to prevent pollution within their borders and to plan the development and use of their land and water resources. See 33 U.S.C. 1251(b). As the Supreme Court emphasized in *Sackett*, the Clean Water Act is not a land use statute, and Congress did not tie the outer bounds of Federal jurisdiction to ecological protection. Rather, Congress struck a balance between Federal authority (rooted in the navigability of waters used in interstate and foreign commerce) and traditional State prerogatives. See *Sackett*, 598 U.S. at 674, 683.

The agencies recognize that wetlands, lakes, and ponds that do not satisfy these two requirements may have some hydrological or ecological connections to paragraph (a)(1) waters. These features, particularly wetlands, may provide benefits and services, including flood control, pollutant filtration, and groundwater recharge that sustains baseflow in downstream traditional navigable waters. Such connections, however, do not provide a legal basis for

⁷⁸ See, e.g., Merriam-Webster.com Dictionary, available at <https://www.merriam-webster.com/> (defining "lake" as "a considerable inland body of standing water" and "pond" as "a body of water usually smaller than a lake"). Accessed July 7, 2025; USGS "Water Science Glossary," available at <https://www.usgs.gov/special-topics/water-science-school/science/lakes-and-reservoirs> (defining "lake" as "where surface-water runoff (and maybe some groundwater seepage) have accumulated in a low spot, relative to the surrounding countryside"); see also USGS "National Hydrography Dataset (NHD) Data Dictionary Feature Classes," available at <https://www.usgs.gov/ngp-standards-and-specifications/national-hydrography-dataset-nhd-data-dictionary-feature-classes> (describing the Lake/Pond category as "[s]tanding body of water with a predominantly natural shoreline surrounded by land). See also Richardson, M.J., Holgerson, M.A., Farragher, M.J., Hoffman, K.K., King, K.B.S., Alfonso, M.B., Andersen, M.R., Cheruveil, K.S., Coleman, K.A., Farruggia, M.J., Fernandez, R.L., Hondula, K.L., López Moreira Mazacotte, G.A., Paul, K., Peierls, B.L., Rabaey, J.S., Sadro, S., Sánchez, M.L., Smyth, R.L., and Sweetman, J.N. 2022. "A functional definition to distinguish ponds from lakes and wetlands." *Scientific Reports* 12(1):10472. Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC9213426/> (noting that although pond definitions differ across the world, across "the history of limnology, small and shallow waterbodies are widely referred to as ponds."

the agencies to include non-adjacent or physically isolated wetlands within the phrase “the waters of the United States.” See, e.g., *Rapanos*, 547 U.S. at 741–42 (Scalia, J., plurality opinion) (“SWANCC rejected the notion that the ecological considerations upon which the Corps relied in *Riverside Bayview*—and upon which the dissent repeatedly relies today . . . provided an independent basis for including entities like ‘wetlands’ (or ‘ephemeral streams’) within the phrase ‘the waters of the United States.’ SWANCC found such ecological considerations irrelevant to the question whether physically isolated waters come within the Corps’ jurisdiction.” (emphasis in original; internal citations omitted)). While ecological benefits are not the basis for the agencies’ line-drawing, the agencies understand that the *Sackett* and *Rapanos* plurality tests encompass those wetlands that are most likely to provide the greatest degree of certain key ecological benefits. Specifically, wetlands that abut and have surface water at least during the wet season are most closely connected to the jurisdictional waters they touch and therefore are most likely to provide certain hydrological and ecological benefits such as recharge of base flow and valuable fish and wildlife habitat. This understanding is consistent with the traditional Federal role in protecting and promoting the navigability of waters used in interstate commerce, as such functions advance the flow and water quality conditions that support navigable waters. Just as an improvement made to a navigable water for purposes of facilitating commerce could itself become part of the navigable water, so also may a water resource that is indistinguishable from a navigable water ultimately be viewed as within the scope of the term “navigable waters” for purposes of the Clean Water Act.

The agencies also propose that culverts do not inherently sever the continuous surface connection when the culvert serves to extend the relatively permanent water such that the water directly abuts a wetland, consistent with current implementation of the 2025 Continuous Surface Connection Guidance. This would be demonstrated by relatively permanent water flow being present through the culvert as well as an ordinary high water mark within the culvert which provides the lateral limits of a tributary extending through the culvert. This proposed approach would not include the culvert itself as a jurisdictional feature; however, the relatively permanent tributary flowing within the culvert

would be jurisdictional, with the wetland abutting the tributary also jurisdictional. The agencies also solicit comment on an approach where culverts which serve to connect wetland portions on either side of a road do not inherently sever jurisdiction, but only when the culvert carries relatively permanent water. The agencies solicit comment on whether this approach, and the consideration of such wetland portions as “one wetland,” is consistent with the concept of a continuous surface connection under *Rapanos* and *Sackett*.

The agencies propose to modify their approach to mosaic wetlands in this proposed rule, where mosaic wetlands would not be considered “one wetland,” but rather the agencies would delineate wetlands in the mosaic individually. In addition, only the portion of a delineated wetland in a wetland mosaic that meets the definition of continuous surface connection (“having surface water at least during the wet season and abutting (i.e., touching) a jurisdictional water”) would be adjacent under this proposed rule. This approach would also influence how the agencies identify permafrost wetlands as many permafrost wetlands are mosaic wetlands. See, e.g., Alaska Regional Supplement at 97.⁷⁹ The agencies received pre-proposal recommendations on permafrost wetlands that requested that such wetlands be categorically excluded from consideration as jurisdictional wetlands. While the agencies are not taking that approach in the proposed rule, they have considered other approaches to permafrost wetlands and believe that changes to how wetlands mosaics are considered will address many of the concerns raised in pre-proposal feedback.⁸⁰ In addition, the limitation to wetlands that have surface water at least during the wet season and abut a

⁷⁹ U.S. Army Corps of Engineers. 2007. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Alaska Region*. Version 2.0. ERDC/EL TR-07-24. Department of the Army, Vicksburg, MS. Available at <https://usace.contentdm.oclc.org/utis/getfile/collection/p266001coll1/id/7608>. (Noting that wetland mosaics occur in areas of discontinuous permafrost (e.g., north-facing slopes, and burned areas in permafrost-affected regions) and on discharge slopes in Southcentral Alaska).

⁸⁰ For example, Alaska provided the agencies with pre-proposal input on permafrost wetlands in their letter to the recommendations docket (see Docket ID No. EPA-HQ-OW-2025-0093-0506), their federalism consultation comment letter (see Summary Report of Federalism Consultation for the Proposed Rule: Updated Definition of Waters of the United States, available in the docket for the proposed rule), and their verbal recommendations during the State listening session (see Summary Report of Pre-Proposal Listening Sessions for WOTUS Notice: The Final Response to SCOTUS, available in the docket for the proposed rule).

jurisdictional water will further limit the scope of permafrost wetlands that are considered to have a continuous surface connection under the proposed rule. These proposed changes are intended to provide clarity and consistency to the continuous surface connection definition. Further description of how these approaches would be implemented in the field or on the ground are found in section V.D.4 of this preamble. The agencies solicit comment on whether these proposed changes to how the agencies identify adjacent wetlands are implementable and consistent with the law.

3. Alternative Approaches

The agencies seek comment on an alternative approach whereby wetlands, lakes, and ponds would have a “continuous surface connection” only if they abut, i.e., touch, a jurisdictional water and have a continuous surface water connection to that water. The agencies would interpret continuous surface water connection to mean the perennial presence of surface water (i.e., year-round) over the wetland, lake, or pond, for example, in a permanently flooded wetland. The agencies request input on whether this approach better implements the “indistinguishable” standard articulated in *Sackett*, see 598 U.S. at 678, and whether this approach would be consistent with the text of the Act and *Riverside Bayview*. This approach would be consistent with the way some courts have interpreted the *Rapanos* plurality and *Sackett*, which is that “‘continuous surface connection’ means a surface water connection.” *United States v. Sharfi*, 2024 WL 5244351, at *1 (S.D. Fla. Dec. 30, 2014); accord *United States v. Ace Black Ranches, LLP*, No. 1:24-cv-00113, 2024 WL 4008545, at *4 n.2 (D. Idaho Aug. 29, 2024) (dismissing the government’s complaint for failure to “connect any wetlands” it alleged to be waters of the United States with a traditional navigable water “via a sufficient surface-water connection”).

Under this reading of *Sackett*, physical abutment is necessary, but not sufficient, to establish a continuous surface connection. Only wetlands which have permanent surface water, in addition to abutting a jurisdictional water, would be adjacent under this alternative approach. Furthermore, only the portion of such a wetland that has permanent surface water would be jurisdictional. For example, if a wetland has permanent surface water where it abuts the jurisdictional water but as it extends farther inland shifts to seasonal surface water, only the portion of wetland that has permanent surface

water would be considered adjacent under this alternative approach. The agencies note that a wetland delineation would not necessarily be required for this approach given that the limiting factor is the requirement for the permanent presence of surface water. However, identification of permanent surface water may present implementation challenges. The agencies request comment on whether this approach is implementable, and on the impacts a continuous surface water connection requirement would have on the scope of wetlands, lakes, and ponds covered under the Clean Water Act, considering a very small percentage of wetland acreage in the United States is characterized by permanent surface water.

The agencies also request comment on whether “continuous surface connection” is best interpreted to mean simply abutting, *i.e.*, touching, consistent with the approach under the March 2025 Continuous Surface Connection Guidance currently being implemented. *See* section IV.B.6 of this preamble. This approach would categorically cover all wetlands and all lakes and ponds that abut a jurisdictional water, under paragraphs (a)(4) and (5) of the proposed rule, respectively, regardless of whether they are characterized by surface water at least during the wet season. The agencies request comment on whether wetlands, lakes, or ponds that simply abut a jurisdictional water should be considered “indistinguishable” from surface waters under *Sackett*. Under this alternative approach, a landowner or other interested party could determine immediately whether a wetland, lake or pond is jurisdictional by looking at its proximity to the jurisdictional water, without having to take an additional step of evaluating the wetland’s surface hydrology or assess records from other times during the year.

The agencies seek comment to an alternative approach to implementing “wet season” for continuous surface connection, which could require “having surface water for at least 90 days” or “having surface water for at least 270 days.” Similar to one of the alternative approaches discussed in section V.C.3 of this preamble above for relatively permanent waters, this alternative approach could require that a wetland assessed under paragraph (a)(4) or a lake or pond assessed under paragraph (a)(5) have surface water for at least 90 days, consistent with what is generally considered to be a season (*i.e.*, three months) or for at least 270 days, *see supra* section V.C.3 of this preamble. The agencies again note that this bright

line approach would provide transparency and regulatory certainty for landowners and is easy to understand. This alternative approach would also provide a strict threshold cutoff for establishing jurisdiction. The agencies also seek comment on implementation of such an alternative approach, including any implementation simplification or challenges of this approach.

As stated above, the agencies are proposing to modify their current approach to wetland mosaics and permafrost wetlands. *See* section V.D.4 of this preamble below. In addition, the agencies solicit comment on whether the agencies should add a regulatory provision that would mirror a provision in the Food Security Act definition of “wetland.” The Food Security Act provision excludes from the definition of “wetland” certain permafrost wetlands in lands with high agricultural potential in Alaska. 16 U.S.C. 3801(a)(27) (“this term shall not include lands in Alaska identified as having high potential for agricultural development which have a predominance of permafrost soils”). The USDA has a soil interpretation which can be used to help identify the relevant lands in Alaska and has procedures for identifying qualifying parcels that could be used for implementation of this potential provision.⁸¹ This alternative approach would enhance consistency between the Clean Water Act and the wetland conservation provisions of the Food Security Act (Pub. L. 99–198) with regard to wetlands, similar to the agencies’ approach to prior converted cropland. The USDA already defines “wetlands” similar to the agencies’ current regulations and uses the Corps’ 1987 Wetlands Delineation Manual and Regional Supplements, with a few exceptions. Adopting the Food Security Act’s exclusion of certain permafrost wetlands in the agencies’ definition of “wetland” would further align Federal wetland programs as well as provide additional clarity and support for cooperative federalism for the State of Alaska. This approach would also be consistent with the recent Executive Order addressing development in

⁸¹ *See* NRCS Web Soil Survey, available at <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. The Web Soil Survey in Alaska contains an interpretation called “Alaska Exempt Wetland Potential (AK),” which is designed to identify soils with high agricultural potential that are saturated due to permafrost, have the potential to thaw and drain when the insulating natural vegetation is removed, and are expected to be dry enough for normal tillage within five years of thawing.

Alaska.⁸² The agencies request comment on the proposed exclusion from the definition of “wetland” for certain permafrost wetlands in lands that have agricultural potential in Alaska, and also request comment on whether this proposed exclusion would be clearer if it were listed in the “exclusions” section of the definition of “waters of the United States,” 33 CFR 328.3(b), rather than in the definition of “wetlands” in section 328.3(c)(1).

4. Implementation of Adjacent Wetlands

Before determining if a wetland is jurisdictional, the agencies must first determine if the wetland in question meets the regulatory definition of “wetlands.” The agencies are not proposing to change the longstanding definition of “wetlands” in paragraph (c)(1). The agencies’ longstanding definition of wetlands, unchanged in this proposed rule, requires the three factors of hydrology, hydric soils, and hydrophytic vegetation under normal circumstances. Field work is often necessary to confirm the presence of a wetland and to accurately delineate its boundaries. However, in addition to field observations on hydrology, vegetation, and soils, remote tools and resources can be used to support the identification of a wetland, including USGS topographic maps,⁸³ NRCS soil maps and properties of soils including flood frequency and duration, ponding frequency and duration, hydric soils, and drainage class,⁸⁴ aerial or high-resolution satellite imagery, high-resolution elevation data,⁸⁵ and NWI maps.⁸⁶ State, Tribal, and local data sources may also be available to complement the national datasets.

Once a feature is identified as a wetland, if the wetland itself is not a traditional navigable water (*e.g.*, it is not a tidal wetland), the agencies assess whether it is adjacent to a traditional navigable water, the territorial seas, a jurisdictional impoundment, or a jurisdictional tributary. The agencies are not changing the current regulatory

⁸² *See, e.g.*, United States, Executive Office of the President [Donald J. Trump], Executive Order 14153: Unleashing Alaska’s Extraordinary Resource Potential, January 20, 2025, 90 FR 8347 (January 29, 2025). Available at <https://www.govinfo.gov/app/details/DCPD-202500120>.

⁸³ *See* <https://www.usgs.gov/the-national-map-data-delivery/topographic-map-access-points>.

⁸⁴ *See* <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>, or via the NRCS Gridded Soil Survey Geographic Database (gSSURGO) available at <https://www.nrcs.usda.gov/resources/data-and-reports/gridded-soil-survey-geographic-gssurgo-database>.

⁸⁵ *See* <https://apps.nationalmap.gov/downloader/#/>.

⁸⁶ *See* <https://www.fws.gov/program/national-wetlands-inventory/data-download>.

definition of “adjacent” which is defined as “having a continuous surface connection.” However, as discussed in section V.D.1 of this preamble, the agencies have proposed to define “continuous surface connection” for the first time in regulation. The agencies are also not proposing to change their longstanding implementation of the lateral limits of jurisdiction, which states that when adjacent wetlands are present, “jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.” 33 CFR 328.4. The proposed rule, however, would clarify the limits of wetlands that are considered to be “adjacent.” The agencies are seeking comment on all aspects of implementation of the proposed definition of “continuous surface connection” as it relates to adjacent wetlands discussed in this section, including the availability and efficacy of all of the tools and resources discussed and the availability and efficacy of tools that are not addressed in this section. Under the proposed definition of “continuous surface connection,” adjacent wetlands are those that have surface water at least during the wet season and are abutting (*i.e.*, touching) a jurisdictional water. The proposed rule thus, for the first time, requires an assessment of whether an adjacent wetland has surface water at least during the wet season. The proposed rule also requires a determination that the wetland is abutting.

A variety of visual observations and remote tools, including maps, high-resolution elevation data, aerial photographs, and high-resolution satellite imagery, can be used to assess if a wetland is abutting a jurisdictional water or to help identify if there are features that potentially sever the continuous surface connection between the wetland and a jurisdictional water, such as separations by uplands, a berm, dike, or similar feature. For example, USGS topographic maps, high-resolution elevation data, NHD data, and NWI data may identify a physical barrier or illustrate the location of the traditional navigable water, the territorial seas, the jurisdictional impoundment, or the jurisdictional tributary. Such resources may also be utilized to identify if a wetland is touching a jurisdictional water, the nature of any elevation changes between two aquatic resources, or support the calculation of simple indices based on topography to indicate where breaks in continuous surface connection may occur. FEMA flood zone or other floodplain maps may indicate

constricted floodplains along the length of the tributary channel with physical separation of flood waters that could indicate a break. Aerial photographs or high-resolution satellite imagery may illustrate hydrophytic vegetation from the boundary (*e.g.*, ordinary high water mark for non-tidal waters or high tide line for tidal waters) of the traditional navigable water, the territorial seas, the jurisdictional impoundment, or the jurisdictional tributary to the wetland boundary, or the presence of water or soil saturation or conversely upland vegetation along the tributary channel between the two features, or bright soil signatures indicative of higher ground. NRCS soil maps may identify the presence of hydric soil types and soil saturation and may provide evidence that a wetland is touching a jurisdictional water. Or conversely, mapped linear, upland soil types along a tributary channel that separates a wetland from a jurisdictional water may provide evidence that the wetland does not have a continuous surface connection. Additionally, methods that overlay depressions on the landscape with hydric soils and hydrophytic vegetation can be used to identify likely wetlands and whether those features are touching the jurisdictional water. Field work can help confirm the presence and location of the ordinary high water mark or high tide line of the traditional navigable water, the territorial seas, the jurisdictional impoundment, or the jurisdictional tributary, and whether the delineated wetland boundary touches a jurisdictional water. Field observations can also identify breaks that may sever the continuous surface connection (*e.g.*, by traversing the landscape from the tributary to the wetland and examining topographic and geomorphic features, as well as hydrologic and biologic indicators). Wetlands that are not (a)(1) waters and that do not abut a jurisdictional water would be non-jurisdictional under the proposed rule without the need for further analysis.

For wetlands that abut a jurisdictional water, the next step under the proposed rule would be to assess if the wetland has surface water at least during the wet season. In order to better characterize wetland habitats, the hydrologic regime of wetlands may be described with a modifier related to flooding status (*e.g.*, NWI water regime flooding modifiers) and help inform duration and timing of surface inundation.⁸⁷ For nontidal

wetlands, the NWI water regime modifiers include permanently flooded, intermittently exposed, semipermanently flooded, seasonally flooded, seasonally-flooded saturated, seasonally saturated, continuously saturated, temporarily flooded, intermittently flooded, and artificially flooded. The agencies are using a modified version of the “semipermanently flooded” definition used by NWI⁸⁸ to inform implementation of the surface water requirement for continuous surface connection in the proposed rule, where surface water must persist throughout the wet season without interruption. The agencies intend that this surface water requirement would occur predictably, year after year, except for in a period of extreme drought. Wetlands characterized as having less than surface water at least during the wet season, including wetlands with only saturated soil conditions supported by groundwater, would not be considered adjacent under this proposal. Under the proposed rule, wet season would be implemented the same way as for the proposed definition of “relatively permanent,” creating consistency in implementation. *See* section V.C.5.a of this preamble for discussion of implementation of wet season.

Unlike the NWI’s definition of “semipermanently flooded,” the agencies’ proposed definition of “continuous surface connection” utilizes wet season instead of growing season for consistency with the proposed rule’s definition of “relatively permanent.” Growing season, as used by the NWI, means, “[t]hat part of the year that begins with green-up and bud-break of native plants in the spring and ends with plant dieback and leaf-drop in the fall due to the onset of cold weather.”⁸⁹ Thus, growing season as used by the NWI is dependent on temperature and budding of vegetation, while wet season, as implemented in the proposed rule, would be driven by precipitation and evapotranspiration. In addition, the NWI’s definition of growing season differs from the definition in the Corps’ 1987 Wetland Delineation Manual, which is derived from the soil biological-zero temperature concept, though plant growth can be also used under the agencies’ current

<https://www.fws.gov/sites/default/files/documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States-2013.pdf>.

⁸⁷ Federal Geographic Data Committee. 2013. *Classification of Wetlands and Deepwater Habitats of the United States*. FGDC–STD–004–2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC. Available at

⁸⁸ The NWI defines “semipermanently flooded” as “[s]urface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land surface.” *Id.* at 38.

⁸⁹ *Id.* at 59.

implementation to help determine the growing season.⁹⁰ The 1987 Manual defines growing season to mean, “[t]he portion of the year when soil temperatures at 19.7 in. below the soil surface are higher than biologic zero (5 °C) For ease of determination, this period can be approximated by the number of frost-free days.”⁹¹ The agencies solicit comment on whether, instead, they should define “continuous surface connection” to be consistent with the NWI’s semipermanently flooded water regime and require surface water at least during the growing season. Under such an alternative approach, the agencies solicit comment on whether growing season should be implemented consistent with EPA and the Corps’ wetland delineation practices.

Direct observation and various remote tools can help assess if a wetland has surface water at least during the wet season. For example, visual observations of standing water throughout the wet season without interruption (and more than just after precipitation events) or visual observations of prolonged inundation during dry months when there has not been recent precipitation may help support a finding that a wetland has surface water at least during the wet season under the proposed rule. Landowners, farmers, outdoorsmen, and local communities, including indigenous communities in Tribal areas, may have extensive experience with, and knowledge about, the seasonal timing and extent of surface waters in wetlands. Remote sources of information that may be useful to help assess wetland hydrology (including duration of surface hydrology or inundation) include stream gage data, lake gage data, tidal gage data, flood predictions, NWI data, remotely sensed images, soil permeability data, information about vegetative cover, and historical record. Elevation⁹² may be informative, as areas of lower elevation in a wetland often have more frequent

periods of inundation and/or greater duration than most areas at higher elevations. *See* 1987 Wetlands Delineation Manual at 29. Aerial and satellite imagery may be helpful to determining if a wetland has surface water at least during the wet season, particularly if the imagery shows visible water on multiple dates during the wet season, or water that is present during the dry season when there has not been recent precipitation. The Global Surface Water Explorer,⁹³ and USGS Landsat Level-3 Dynamic Surface Water Extent (DSWE) product,⁹⁴ are both tools that may be useful for identifying surface water inundation on the landscape in certain geographic areas, and have both been assessed for detecting surface inundation in wetlands.^{95 96}

Under the proposed rule, if a wetland has surface water at least during the wet season at the point at which it touches a jurisdictional water but transitions in water regime to having less than surface water at least during the wet season as the wetland extends farther away from the jurisdictional water (*e.g.*, to seasonally saturated), only the portion of the wetland that demonstrates surface water at least during the wet season would be “adjacent.” Thus, under the proposed rule, the extent of surface water at least during the wet season in a wetland would need to be delineated when making jurisdictional determinations to draw the boundary between the jurisdictional portion of a wetland and the non-jurisdictional portion of a wetland. The tools discussed above can be used to determine if there are portions of a wetland that lack the required demonstration of surface water at least during the wet season. The agencies solicit comment on this proposed approach, including tools and resources for implementation, as well as the alternative approach that the entire wetland be considered “adjacent” if at least part of the wetland demonstrates a continuous surface connection.

The agencies are proposing to change implementation of wetland mosaics.

Wetland mosaics are landscapes where wetland and non-wetland components were previously considered too closely associated to be easily delineated or mapped separately. These areas often have complex microtopography, with repeated small changes in elevation occurring over short distances. For example, ridges and hummocks are often non-wetland but are interspersed throughout a wetland matrix having clearly hydrophytic vegetation, hydric soils, and wetland hydrology. In certain regions where wetland mosaics are common, such as in permafrost regions in Alaska, Corps regional wetland delineation manuals address how to delineate such wetlands. *See, e.g.*, Alaska Regional Supplement. Under current implementation, wetlands in the mosaic are considered collectively as one wetland. *See* 88 FR 3093 (January 18, 2023). Under the proposed rule, the agencies would delineate wetlands in the mosaic individually. Thus, only the delineated wetland portions of a wetland mosaic that meet the definition of “continuous surface connection” under the proposed rule would be jurisdictional as adjacent wetlands.

Wetland components of a mosaic are often not difficult to identify. The problem for the wetland delineator often is that microtopographic features may be quite small and intermingled, and there may be many such features per acre, creating challenges for accurate and efficient delineations and mapping. Field indicators can be used, for example, to find plots that meet the definition of “wetlands” and then, as accurately as possible, work outward to the uplands to see if a contiguous boundary can be drawn.⁹⁷ Remote tools such as high-quality aerial photography and others previously discussed in this section can also be used to assist with determinations of wetland and non-wetland components (*e.g.*, by determining the ridges versus wetlands through photo interpretation of topography and vegetation patterns or a site visit). The agencies seek comment on implementation of this approach, including tools and methods to assist with delineating wetland and non-wetland components in wetland mosaics.

As discussed in section V.C.2. of this preamble, the agencies have received

⁹⁰ Malone, K., and H. Williams. 2010. *Growing Season Definition and Use in Wetland Delineation: A Literature Review*. ERDC/CRREL CR-10-3, U.S. Army Corps of Engineers, Engineer Research and Development Center Hanover, NH. Available at <https://erdc-library.erdcdren.mil/items/81b728f7-5dd8-4ef8-e053-411ac80adeb3>.

⁹¹ U.S. Army Corps of Engineers. 1987. *Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Corps of Engineers, Waterways Experiment Station, Wetlands Research Program, Vicksburg, MS. Available at <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4530>.

⁹² High-resolution elevation data and associated derivatives (*e.g.*, slope or curvature metrics) are available from the USGS 3D Elevation Program (available at <https://www.usgs.gov/3d-elevation-program>).

⁹³ *See* <https://global-surface-water.appspot.com/>.

⁹⁴ *See* https://www.usgs.gov/landsat-missions/landsat-dynamic-surface-water-extent-science-products/qt-science-support_page_related_con=0#qt-science-support_page_related_con.

⁹⁵ Park, J., Kumar, M., Lane, C.R., and Basu, N.B. 2022. “Seasonality of inundation in geographically isolated wetlands across the United States.” *Environmental Research Letters* 17: 054005. Available at <https://doi.org/10.1088/1748-9326/ac6149>.

⁹⁶ Jones, J.W. 2019. “Improved Automated Detection of Subpixel-Scale Inundation—Revised Dynamic Surface Water Extent (DSWE) Partial Surface Water Tests.” *Remote Sensing* 11(4): 374. Available at <https://doi.org/10.3390/rs11040374>.

⁹⁷ Lichvar, R.W., Curtis, K.E., Gillrich, J.J., and Dixon, L.E. 2012. *Testing Wetland Delineation Indicators in New England Boulder Fields*. ERDC/CRREL TR-12-4. U.S. Army Corps of Engineers, U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH. Available at <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4402/>.

feedback both pre-proposal and in response to past rulemakings on the challenges of treating permafrost wetlands and wetland mosaics in Alaska in a manner similar to wetlands in other geographic areas. Specifically, requests have been made to the agencies that permafrost wetlands and wetland mosaics in Alaska be excluded from the definition of “waters of the United States” due to their unique nature, the lack of scientific certainty that such wetlands have meaningful connections to the tributary network (and in the case of wetland mosaics, that the wetlands are interconnected as a single unit), and the fact that such wetlands can span many acres in size. The agencies believe the proposed rule addresses many of these challenges by individually delineating wetlands in a wetland mosaic and by limiting wetlands with a continuous surface connection to those that are abutting and have surface water at least during the wet season as discussed in section V.C.2 of this preamble.

The agencies also seek comment on whether the jurisdictional reach of permafrost wetlands and wetland mosaics in Alaska that are found to be adjacent should be limited to a certain length from the jurisdictional water to the abutting wetlands—for example, only those portions of abutting wetlands up to 1,600 feet from the ordinary high water mark or the high tide line of a “water of the United States” and that otherwise meet the proposed definition of “continuous surface connection” would be found to be jurisdictional. In this approach, those portions of the continuous abutting wetlands beyond 1,600 feet would not be considered to be part of the adjacent wetland and would not be jurisdictional. The agencies solicit comment on implementation of this approach, and whether it would further address concerns raised about permafrost wetlands and wetland mosaics in Alaska.

E. Lakes and Ponds Assessed Under Paragraph (a)(5)

1. Deletion of “Intrastate”

The agencies are proposing to delete “intrastate” from paragraph (a)(5) of the Amended 2023 Rule. Paragraph (a)(5) of the Amended 2023 Rule covers “[i]ntrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.” With the proposed deletion of the interstate

waters category and the proposed deletion of “intrastate” from paragraph (a)(5), the (a)(5) category under the proposed rule would include both interstate and intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to a traditional navigable water, the territorial seas, or a paragraph (a)(3) tributary. As such, the agencies believe deleting “intrastate” from paragraph (a)(5) would be a ministerial change due to the proposed elimination of the interstate waters category under paragraph (a)(1)(iii) of the Amended 2023 Rule.

2. Alternative Approaches

As discussed above in section V.C.4 of this preamble, the agencies also seek comment on whether category (a)(5) of the proposed rule for lakes and ponds would be necessary in any final rule and whether non-navigable lakes and ponds would be most appropriately assessed for jurisdiction under the paragraph (a)(3) category for “tributaries” and under the proposed definition of “tributary” in light of *Rapanos* and *Sackett*. The agencies believe that lakes and ponds that are relatively permanent, standing or continuously flowing, and have a continuous surface connection under the proposed rule would likely meet the requirements of a paragraph (a)(3) tributary. The deletion of the paragraph (a)(5) category would also make the rule text simpler and more concise. The agencies seek comment, however, on whether there may be non-navigable lakes and ponds that would not be appropriate to assess for jurisdiction as a paragraph (a)(3) tributary.

3. Implementation

Consistent with longstanding practice, under the proposed rule the agencies would generally assess jurisdiction over aquatic resources based on the requirements in paragraphs (a)(1) through (4) under this proposed rule and ensure that they do not meet one of the paragraph (b)(1) exclusions before assessing jurisdiction over aquatic resources based on paragraph (a)(5). Thus, lakes and ponds that are traditional navigable waters, jurisdictional impoundments, or jurisdictional tributaries would not be assessed under paragraph (a)(5) of the proposed rule. The agencies would assess waters under paragraph (a)(5) to determine if they are relatively permanent using a similar approach to the one described for tributaries, as

discussed in section V.C.5.a of this preamble. The agencies would assess a continuous surface connection between waters assessed under paragraph (a)(5) and a paragraph (a)(1) water or a paragraph (a)(3) tributary using the approach described for adjacent wetlands, as discussed in section V.D.4 of this preamble. The agencies are also not proposing to change their longstanding implementation of the lateral limits of jurisdiction for this category, which would extend to the ordinary high water mark of the paragraph (a)(5) lake or pond, consistent with current practice and the Corps’ regulations at 33 CFR 328.4.

The field observations, tools, data, and methods discussed in sections V.C.5 and V.D.4 of this preamble, can be used for implementation of the lakes and ponds category under paragraph (a)(5) to assess whether the subject water meets the proposed definition of “relatively permanent,” and if it has a “continuous surface connection,” consistent with proposed definition of that term. The agencies solicit comment regarding those implementation resources for paragraph (a)(5) under the proposed rule, as well as any additional resources that would assist with implementation of this proposed category of waters. The agencies believe that lakes and ponds that meet the proposed definition of “relatively permanent,” and that abut a traditional navigable water, the territorial seas, or a paragraph (a)(3) tributary would also satisfy the proposed definition of “continuous surface connection” because they would have surface water at least during the wet season. Lakes and ponds assessed under paragraph (a)(5) that do not meet the proposed definition of “relatively permanent” would be non-jurisdictional. Similarly, relatively permanent lakes or ponds assessed under paragraph (a)(5) that do not have a “continuous surface connection” as defined in the proposed rule would also be non-jurisdictional.

F. Exclusions From the Definition of “Waters of the United States”

In paragraph (b) of the agencies’ regulations, EPA and the Army are proposing to modify three of the eight exclusions from the definition of “waters of the United States:” the paragraph (b)(1) exclusion for waste treatment systems, the paragraph (b)(2) exclusion for prior converted cropland, and the paragraph (b)(3) exclusion for certain ditches. In addition, the agencies are proposing to add an additional exclusion to the definition of “waters of the United States” for groundwater. Certain waters and features have been

expressly excluded from the definition of the “waters of the United States” since the 1970s. The agencies believe that the proposed revisions to the exclusions for waste treatment systems, prior converted cropland, and ditches, as well as the addition of the groundwater exclusion, will enhance implementation clarity. Waste treatment systems and prior converted cropland have been excluded for decades. As discussed in more detail below, certain ditches have either been expressly excluded in the regulatory text or considered generally not jurisdictional via preamble language or guidance since 1986. In addition, groundwater was expressly excluded in the regulatory text under the NWPR.

The agencies are not proposing to revise the current regulatory language which states that paragraph (b) exclusions apply to paragraph (a)(2) through (5) waters even in circumstances where the feature would otherwise be jurisdictional. Thus, consistent with longstanding practice, the agencies are proposing to continue the policy that exclusions do not apply to the paragraph (a)(1) traditional navigable waters and the territorial seas.

The proposed revised exclusions reflect the agencies’ proposed determinations of the lines of jurisdiction based on the case law and the agencies’ long-standing practice and technical judgment that certain waters and features are not subject to the Clean Water Act. The plurality opinion in *Rapanos* noted that there were certain features that were not primarily the focus of the Clean Water Act, such as channels that periodically provide drainage for rainfall. *See* 547 U.S. at 734. During pre-proposal outreach for this proposed rule, many States, regional groups, and national associations requested “distinct,” “specific,” and “clear” exclusions from the definition of “waters of the United States.” In this proposed rule, the agencies propose to thus draw lines and articulate that certain waters and features would not be subject to the jurisdiction of the Clean Water Act.

The agencies are not proposing to codify the additional exclusions that were added in the NWPR. The agencies acknowledge that clear exclusions from the definition of “waters of the United States” have been helpful for agency staff, States, and landowners in determining whether or not a feature requires additional investigation regarding its jurisdictional status. However, it is the position of the agencies that most of those exclusions covered features that would not be jurisdictional under the proposed rule,

either because they would meet the terms of one of the existing or revised exclusions, or because they would not meet the definition of “waters of United States” as proposed.⁹⁸ For example, proposing to codify the NWPR’s exclusion of ephemeral features is not necessary because ephemeral features would not satisfy the relatively permanent standard in *Sackett* as proposed in this rule so would already be non-jurisdictional. Thus, the agencies think it is not necessary to explicitly exclude them.

1. The Paragraph (b)(1) Waste Treatment System Exclusion and Paragraph (c)(11) Definition of “Waste Treatment System”

a. The Agencies’ Proposed Revisions to the Waste Treatment System Exclusion

The agencies propose to continue the paragraph (b)(1) exclusion for waste treatment systems, which has existed in EPA’s regulations since 1979 (44 FR 32854 (June 7, 1979)). The agencies, however, are proposing to modify the exclusion, including by adding a definition of “waste treatment system” under paragraph (c)(11) and deleting redundant language in paragraph (b)(1), so as to clarify which waters and features are considered part of a waste treatment system and therefore excluded. Under the proposed rule, a waste treatment system “includes all components of a waste treatment system designed to meet the requirements of the Clean Water Act, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either 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 intend for this proposed exclusion to apply only to waste treatment systems constructed in accordance with the requirements of the Clean Water Act and to all waste treatment systems constructed prior to the 1972 Federal Water Pollution Control Act amendments, as discussed further in section V.F.1.d of this preamble. The agencies’ proposal is consistent with the NWPR’s exclusion for waste treatment systems. The agencies seek comment on the proposed exclusion for waste treatment systems under paragraph (b)(1), including the proposed definition of “waste treatment system” under

⁹⁸ Stormwater control features and wastewater recycling structures that were excluded under NWPR and created in non-jurisdictional waters rather than in dry land, may not be excluded under the proposed rule. Many of these aquatic features, however, will continue to be non-jurisdictional because they do not satisfy the proposed rule’s definition of “waters of the United States.”

paragraph (c)(11) and implementation of the exclusion.

b. Basis for the Proposed Definition

EPA first promulgated the waste treatment system exclusion in a 1979 notice-and-comment rulemaking revising the definition of “waters of the United States” in the agency’s NPDES regulations. 44 FR 32854 (June 7, 1979). A “frequently encountered comment” was that “waste treatment lagoons or other waste treatment systems should not be considered waters of the United States.” *Id.* at 32858. EPA agreed, except as to cooling ponds that otherwise meet the criteria for “waters of the United States.” *Id.* The 1979 revised definition of “waters of the United States” thus provided that “waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.” *Id.* at 32901 (40 CFR 122.3(t) (1979)).

The following year, EPA revised the exclusion, but again only in its NPDES regulations, to clarify its application to treatment ponds and lagoons and to specify the type of cooling ponds that fall outside the scope of the exclusion. 45 FR 33290, 33298 (May 19, 1980). EPA also decided to revise this version of the exclusion to clarify that “treatment systems created in [waters of the United States] or from their impoundment remain waters of the United States,” while “[m]anmade waste treatment systems are not waters of the United States.” *Id.* The 1980 revised exclusion read: “[w]aste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.” The 1980 provision further provided that the exclusion “applies only to manmade bodies of water which neither were originally created in waters of the United States (such as a disposal area in wetlands) nor resulted from the impoundment of waters of the United States.” 45 FR 33424 (May 19, 1980) (40 CFR 122.3).

EPA subsequently revised the definition and codified it in the “waters of the United States” definitions. *See, e.g.*, 53 FR 20764, 20774 (June 6, 1988) (revising EPA’s section 404 program definitions at 40 CFR 232.2). Separately, the Corps’ 1986 updated definition of “waters of the United States” also contained the waste treatment system exclusion. 51 FR 41250 (November 13, 1986); 33 CFR 328.3 (1987).

The agencies believe that the proposed waste treatment system exclusion generally reflects the

agencies' current practice. Incorporating the revised exclusion into the proposed rule would further the agencies' goal of providing greater clarity over which waters are and are not jurisdictional under the Clean Water Act for both the regulated community as well as the regulators. Further, the agencies believe that the proposed approach of incorporating a definition of "waste treatment system" within the text of paragraph (c) itself rather than having to rely on guidance in the preamble is preferable for clarity, consistency, and transparency.

c. Alternative Approaches

The agencies seek comment on the alternative approach of retaining the current regulatory text for the waste treatment system exclusion, which excludes "[w]aste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act." The agencies are interested in hearing whether the proposed or current exclusion is clearer, particularly with regards for the need for the waste treatment system to comply with the requirements of the Clean Water Act, including for those systems which were constructed prior to the Federal Water Pollution Control Act amendments in 1972, as well as regarding the components that make up a waste treatment system, such as the inclusion of active and passive treatment components.

d. Implementation of the Waste Treatment System Exclusion

As discussed previously, the agencies are not proposing to change the longstanding approach to implementing the waste treatment system exclusion but rather seek to include additional clarity in the regulation text. As a result, the agencies would continue to apply the exclusion to systems that are treating water to meet the requirements of the Clean Water Act. To be clear, the proposed exclusion would not free a discharger from the need to comply with the Clean Water Act, including any effluent limitations guidelines and new source performance standards requirements applicable to the waste treatment system, and requirements applicable to the pollutants discharged from a waste treatment system to "waters of the United States"; only discharges into the waste treatment system would be excluded from the Act's requirements. As such, the agencies propose to continue their longstanding practice that any entity would need to comply with the Clean Water Act by obtaining a section 404 permit for a new waste treatment system

that will be constructed in "waters of the United States," and a section 402 permit if there are discharges of pollutants from a waste treatment system into "waters of the United States." Waste treatment systems constructed prior to the 1972 Federal Water Pollution Control Act amendments would be eligible for the exclusion under this proposed regulation and would also continue to be subject to regulation by the Clean Water Act section 402 permitting program for discharges from these systems to "waters of the United States." Under the section 402 permit, discharges from the waste treatment system would need to meet the requirements of applicable effluent limitations guidelines and new source performance standards, as well as any required water quality-based effluent limitations. Further, consistent with the agencies' general practice implementing the exclusion, under this proposed rule, a waste treatment system that is abandoned and otherwise ceases to serve the treatment function for which it was designed would not continue to qualify for the exclusion and could be deemed jurisdictional if it otherwise meets this proposed rule's definition of "waters of the United States."

Under past rulemakings, commenters have inquired as to whether stormwater systems and wastewater reuse facilities are considered part of a complete waste treatment system for purposes of the waste treatment system exclusion. The agencies note that cooling ponds that are created in jurisdictional waters pursuant to a Clean Water Act section 404 permit and that have Clean Water Act section 402 permits would be subject to the waste treatment system exclusion under previous rules and the proposed rule. Cooling ponds created to serve as part of a cooling water system with a valid State or Federal permit constructed in "waters of the United States" prior to enactment of the 1972 Federal Water Pollution Control Act amendments also would remain excluded under the proposed rule if they are in compliance with applicable Clean Water Act requirements. In the past, the public and the regulated community have expressed confusion regarding whether stormwater treatment features would be excluded under the waste treatment system exclusion. Such determinations would depend on the specific attributes of the control and the water feature and thus need to be made on a case-by-case basis. The agencies have previously provided guidance on

this topic,⁹⁹ stating that the waste treatment system exclusion generally does not apply to stormwater features, which must be assessed on a case-specific basis, and propose to continue this approach. The agencies seek comment on the proposed continuation of this approach, and whether it appropriately provides clarity on application of the exclusion, and if so, whether the content of the policy memorandum should be included in the preamble to any final rule. Stormwater features may be excluded under other exclusions in this proposed rule, such as certain ditches, or may not meet the proposed requirements of the categories of jurisdictional waters under paragraph (a).

2. Definition of "Prior Converted Cropland" Under Paragraph (c)(7) and Scope of the (b)(2) Prior Converted Cropland Exclusion

a. Basis for the Proposed Definition

The agencies propose to continue to exclude prior converted cropland in this proposed rule, a longstanding exclusion since 1993. *See* 58 FR 45034–36 (August 25, 1993); *see also* section IV.B of this preamble. Historically, the agencies have attempted to create consistency between the Clean Water Act and the Food Security Act of 1985 (16 U.S.C. 3801 *et seq.*) wetland conservation provisions for prior converted cropland. The agencies continue to believe that consistency across these programs is important for the regulated community (*see* 58 FR 45033, August 25, 1993) and therefore are proposing to continue to exclude prior converted cropland from the definition of "waters of the United States," as well as to include a definition for prior converted cropland under paragraph (c)(7). This exclusion is consistent with the policy of Congress articulated in CWA section 101(b), to "recognize, preserve and protect the primary responsibilities and rights of States" to address pollution and "to plan the development and use (including restoration, preservation, and enhancement) or land and water resources." 33 U.S.C. 1251. The extent

⁹⁹ The agencies clarified in that case-specific policy memorandum that in general, storm water features implemented to comply with a Clean Water Act section 402(p) NPDES permit would not be eligible for the waste treatment system exclusion. The agencies further clarified, however, that a waste treatment system that receives storm water or storm water runoff in addition to wastewater remains eligible for the waste treatment system exclusion so long as the system continues to serve the treatment function for which it was designed. *See* U.S. EPA and Army, 2024. "Memorandum on NWS-2023-923." Available at <https://www.epa.gov/system/files/documents/2024-12/memorandum-on-nws-2023-923.pdf>.

of protections for and development of areas used for farming falls squarely within the scope of section 101(b), and therefore the agencies propose to allow States full flexibility to determine whether and how to manage these areas.

The agencies are therefore proposing to clarify, consistent with the NWPR, that the prior converted cropland exclusion would no longer apply for Clean Water Act purposes when the cropland is abandoned (*i.e.*, the cropland has not been used for or in support of agricultural purposes for a period of greater than five years) and the land has reverted to wetlands. Importantly, even under these conditions and given the Supreme Court's new articulation of the necessity of a continuous surface connection in *Sackett*, a wetland would still need to be determined to be adjacent to a jurisdictional water, as the term is defined in paragraph (c)(2), to itself be determined jurisdictional. Simply put, just because land may lose prior converted cropland designation under this proposed approach does not automatically determine that land to contain a jurisdictional wetland. The agencies propose that prior converted cropland is considered abandoned if it is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. The five-year timeframe for maintaining agricultural purposes is consistent with the 1993 preamble. 58 FR 45033 (August 25, 1993). Agricultural purposes include land use that makes the production of an agricultural product possible, including, but not limited to, grazing and haying. This proposed rule would also clarify that cropland that is left idle or fallow for conservation or agricultural purposes for any period or duration of time remains in agricultural use (*i.e.*, it is used for, or in support of, agriculture purposes), and therefore maintains the prior converted cropland exclusion. The agencies believe that this revision is necessary to ensure that cropland enrolled in long-term and other conservation programs administered by the Federal Government or by State and local agencies that prevents erosion or other natural resource degradation does not lose its prior converted cropland designation as a result of implementing conservation practices.

In 1993, the agencies categorically excluded prior converted cropland from the definition of "waters of the United States." 58 FR 45034–36 (August 25, 1993). As further explained below, in keeping with the Food Security Act of 1985, the 1993 preamble defined prior converted cropland as "areas that, prior to December 23, 1985, were drained or

otherwise manipulated for the purpose, or having the effect, of making production of a commodity crop possible [and that are] inundated for no more than 14 consecutive days during the growing season." 58 FR 45031. As explained in detail in the 1993 preamble, due to the degraded and altered nature of prior converted cropland, the agencies determined that such lands should not be treated as jurisdictional wetlands for purposes of the Clean Water Act because regulating such lands does not further the objective of the Act. 58 FR 45032. The 1993 preamble also set out a mechanism to "recapture" prior converted cropland into the section 404 program when the land has been abandoned and wetland features return. 58 FR 45034. This approach is consistent with the principles in the 1990 Corps Regulatory Guidance Letter 90–7. Although included in the 1993 preamble and Regulatory Guidance Letter 90–7, these principles were not incorporated into the text of any promulgated rule until the NWPR. That rule represented the first time the agencies promulgated regulatory language to clarify the meaning of "prior converted cropland" for Clean Water Act purposes, the application of the exclusion, and a recapture mechanism based on abandonment and reversion to wetlands.

When the 1993 preamble was published, the abandonment principle was consistent with USDA's implementation of the Food Security Act. Three years later, the 1996 Food Security Act amendments modified the abandonment principle and incorporated a "change in use" policy. See Public Law 104–127, 110 Stat. 988 (1996). In 2005, the Army and the Natural Resources Conservation Service issued a joint "Memorandum to the Field" (the 2005 Memorandum)¹⁰⁰ in an effort to align the Clean Water Act section 404 program with the Food Security Act by adopting the amended Food Security Act's change in use policy. The 2005 Memorandum provided that, for Clean Water Act purposes, a "certified [prior converted] determination made by [USDA] remains valid as long as the area is devoted to an agricultural use. If the land changes to a non-agricultural use, the [prior

converted cropland] determination is no longer applicable, and a new wetland determination is required for CWA purposes." The 2005 Memorandum did not clearly address the abandonment principle that the agencies had been implementing since the 1993 rulemaking. The Army and USDA withdrew the 2005 Memorandum simultaneous with the effective date of the NWPR in 2020¹⁰¹ because the NWPR provided clarity about the prior converted cropland exclusion and how wetlands can be recaptured into Clean Water Act jurisdiction through the abandonment test.

In the 2023 Rule, the agencies changed course, providing that "prior converted cropland is not waters of the United States," and that such "exclusion would cease upon a change in use." 88 FR 3105–06. By incorporating the abandonment principles from the 1993 preamble and providing examples of "agricultural purposes," this proposed rule remains consistent with the concepts underlying the Food Security Act but differs in implementation from certain aspects of USDA's current wetland conservation authority. Returning to the abandonment principle would allow the agencies to appropriately manage certain wetland resources while providing better clarity and regulatory certainty to, and alleviating unnecessary burden on, the agricultural community. Moreover, by returning to the definition adopted in the NWPR, the agencies intend that this proposed rule would alleviate the burden placed on the USDA to process requests for prior converted cropland determinations that are not required for Food Security Act purposes.

The agencies' proposal is informed by stakeholder input. For example, agricultural stakeholders during the listening sessions and in the recommendations docket requested that the agencies re-codify the NWPR's exclusion and definition for prior converted cropland. Specifically, they support the approach whereby an area loses its prior converted cropland status for Clean Water Act purposes when it is abandoned (not used or in support of agriculture at least once in the preceding five years) and has reverted to wetlands. They also support the

¹⁰⁰ U.S. Department of Agriculture Natural Resources Conservation Service and U.S. Department of the Army Office of Assistant Secretary of the Army (Civil Works). 2005. "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 in the docket for this action.

¹⁰¹ U.S. Department of the Army, Office of the Assistant Secretary (Civil Works), and U.S. Department of Agriculture, Natural Resources Conservation Service. 2020. "Memorandum for the Field: Rescission of the 2005 Joint Memorandum to the Field Regarding Guidance on Conducting Wetland Determinations for the Food Security Act of 1985 and Section 404 of the Clean Water Act." January 28, 2020. Available in the docket for this action.

approach in the NWPR whereby a site can be prior converted cropland regardless of whether there is a prior converted cropland determination from either USDA or the Corps, as there is no specific requirement for issuance of a formal prior converted cropland determination, and USDA does not provide determinations unless a farmer is seeking benefits covered under the wetland conservation provisions. Recodifying the prior converted cropland exclusion and definition from the NWPR will reestablish an easier and less burdensome process for farmers to obtain an exclusion for prior converted cropland for Clean Water Act purposes and provide the agriculture community regulatory certainty.

Consistent with NWPR, agricultural purposes would include, but would not be limited to, idling land for conservation uses (e.g., habitat; pollinator and wildlife management; water storage, supply, and flood management; enrollment in any conservation easement); irrigation tailwater storage; crawfish farming; cranberry bogs; nutrient retention; and idling land for soil recovery following natural disasters like hurricanes and drought. While the list provided above is not meant to be exclusive, the uses listed above, in addition to crop production, haying, and grazing, would fall within the term “agricultural purposes” and, if documented, may maintain the prior converted cropland exclusion. Conservation practices, including those required or supported by USDA, State, and local programs (including recognized private sector programs that partner with government programs or that can provide verifiable documentation of participation) are critical to the success of agricultural systems across the country.

Conservation practices and programs also are conducted “for or in support of agricultural purposes” and therefore would be appropriate to maintain the prior converted cropland exclusion.

The agencies propose that a five-year timeframe for maintaining agricultural purposes is reasonable as it is consistent with the 1993 preamble (58 FR 45033) and with the five-year timeframe regarding the validity of an approved jurisdictional determination (2005 Corps Regulatory Guidance Letter (RGL) 05–02). The five-year timeframe is longstanding in the Clean Water Act section 404 program and would be familiar to both landowners and regulators, thereby increasing clarity in implementation. The agencies would consider documentation from USDA or other Federal or State agencies to determine if the land was used for or in

support of agricultural purposes in the immediately preceding five years to evaluate whether cropland has in fact been abandoned. The agencies’ proposal for the second component of the prior converted cropland losing its status as an exclusion under the Clean Water Act is reversion to wetland, consistent with all past regulatory regimes. That is, the area now meets the regulatory definition of “wetlands” as that term is defined in (c)(1) of the regulations (note that the agencies are not proposing to revise the longstanding definition of “wetlands”). As discussed previously in this section, even if the area loses its status as prior converted cropland, it would need to meet one of the categories of “waters of the United States” to be jurisdictional under the proposed rule (e.g., it would need to be abandoned, revert to wetlands, and meet the requirements to be an adjacent wetland).

b. Alternative Approaches

The agencies solicit comment on an alternative approach whereby the prior converted cropland exclusion would no longer be applicable when the cropland is abandoned as provided in this proposed rule; however, determinations about whether land is prior converted cropland would only be made by the USDA and then would be adopted by the agencies. USDA has decades of experience making prior converted cropland determinations as authorized by the Food Security Act. In addition, agricultural records are more easily accessible by USDA in making such determinations. The agencies solicit comment on whether this approach would be preferable for efficiency and consistency purposes in supporting exclusion determinations.

c. Implementation of the Prior Converted Cropland Exclusion

The USDA is responsible for making determinations as to whether land is prior converted cropland for its Food Security Act purposes, whereas the agencies would be responsible for determining applicability of the exclusion for Clean Water Act purposes under the proposed rule, consistent with the government’s longstanding interpretation of the agencies’ authority under the Clean Water Act. See 33 CFR 328.3(a)(8) (“Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.”); 58 FR 45008, 45036 (August 25, 1993); Civiletti Memorandum at 197. The agencies would be responsible for establishing

whether a parcel or tract of land is prior converted cropland and is therefore eligible for the prior converted cropland exclusion under this proposed rule. However, the agencies would recognize a USDA determination of prior converted cropland when making their own determination for purposes of the Clean Water Act. A landowner without an existing prior converted cropland determination may seek a new determination from either the USDA or the agencies. Although the proposed definition of prior converted cropland uses “agricultural product” while the Food Security Act uses “agricultural commodity,” the agencies would still recognize the USDA determination of prior converted cropland under this proposal.¹⁰² The USDA is subject to specific statutes designed to protect landowner privacy and, as such, is prohibited from making certain parcel-specific information available without the landowner’s consent. To ensure that the agencies can appropriately coordinate with USDA on a prior converted cropland determination or recognize an existing USDA prior converted cropland determination, the landowner would need to either provide a copy of the determination or provide the agencies with a signed consent form to allow the agencies access to the relevant information for the limited purposes of verifying USDA’s prior converted cropland determination or receiving information from USDA that may be used in the agencies prior converted cropland determination.¹⁰³ The agencies recognize that privacy and confidentiality issues concerning certain

¹⁰² The agencies note that the USDA’s regulatory definition of “prior converted cropland” in the Food Security Act and the definition being established in this proposed rule have different purposes and they are substantively different. Based on the Food Security Act’s statutory requirements, the USDA definition of “prior converted cropland” requires that agricultural commodity crop production be made possible prior to 1985. See 7 CFR 12.2(a)(8); 16 U.S.C. 3801 (defining converted wetland) and 16 U.S.C. 3822(b)(1)(A) (establishing the pre-1985 exemption). If commodity crop production was made possible on a particular parcel or tract of land prior to 1985, that land is eligible for the prior converted cropland exclusion in this proposed rule. Once eligibility is determined, the agencies will evaluate the land to determine if the exclusion currently applies, or if the land has been abandoned, as described in this proposed rulemaking.

¹⁰³ The agencies could establish a memorandum upon finalization of the rule to assist with coordination. See, e.g., “Memorandum to the Field Between the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), the U.S. Department of the Army, Corps Of Engineers (Corps), and the U.S. Environmental Protection Agency (EPA) Concerning Implementation of the Navigable Waters Protection Rule, Section 404 of the Clean Water Act and the Food Security Act (FSA) of 1985,” available in the docket for this rulemaking.

producer information is addressed at section 1619 of the Food, Conservation, and Energy Act of 2008 (7 U.S.C. 8791(b)) and section 1244(b) of the Food Security Act of 1985, as amended (16 U.S.C. 3844(b)). If a parcel is found to be prior converted cropland, as defined in this proposed rule, it is not a “water of the United States.”

Under the proposed rule, once a threshold determination has been made that certain lands are prior converted cropland, the EPA and the Corps would be responsible for implementing the prior converted cropland exclusion for Clean Water Act purposes and identifying (as further explained below) whether the lands have been abandoned and whether wetland conditions have returned such that they are no longer eligible for the prior converted cropland exclusion in this rule and thus may be “waters of the United States.” The agencies note that even if the prior converted cropland exclusion no longer applies, such wetland would need to be determined to have a continuous surface connection with, and therefore be adjacent to, a paragraph (a)(1), (a)(2), or (a)(3) water, as established by the Supreme Court in *Sackett*. In addition to working closely with USDA as appropriate, the agencies would consider documentation from a variety of other sources when evaluating whether a parcel of land may no longer be eligible for the Clean Water Act prior converted cropland exclusion under the proposed rule. In all cases, the burden to prove that such parcel is a “water of the United States” remains on the agencies. The agencies’ implementation of the prior converted cropland exclusion for Clean Water Act regulatory purposes under the proposed rule would not affect USDA’s administration of the Food Security Act or a landowner’s eligibility for benefits under Food Security Act programs.¹⁰⁴

As described previously, prior converted cropland would be considered abandoned under the proposed definition if it is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. In making an abandonment determination consistent with the proposed rule, the Corps would work with the landowner and USDA, as appropriate, to determine whether the land is currently or has been used for or in support of agricultural purposes at least once in the immediately preceding five years. As noted above, the agencies propose many uses to potentially fall

within this category. Some of those land uses may not be obvious to Corps field staff, so the agencies may rely on public or private documentation to demonstrate that the land is enrolled in a conservation program or is otherwise being used for or in support of agricultural purposes. Such information may include aerial photographs, topographical maps, cultivation maps, crop expense or receipt records, field- or tract-specific grain elevator records, and other records generated and maintained in the normal course of doing business, including government agency records documenting participation in a conservation program, and other documentation reasonably establishing one or more “agricultural purposes.” The agencies are also considering the issuance of a joint agency memorandum similar to one signed in 2020 to support the NWPR¹⁰⁵ to provide additional guidance on this topic. The agencies seek input on whether such a memorandum provides needed additional clarity for any final rule that may be issued.

In implementing the proposed rule, the agencies may consider documentation from USDA, NOAA, FEMA, and other Federal and State agencies to determine whether the land was used for or in support of agricultural purposes in the immediately preceding five years. For example, USDA administers multiple programs that track whether fields have been planted or harvested in the normal course, or enrolled in long-term conservation rotations, and that agency also manages a crop insurance program for years where those activities were halted for reasons covered under their insurance policies; NOAA tracks long- and short-term weather patterns and can provide information and data concerning flood or drought conditions that may cause or contribute to idling land in support of agricultural purposes; and FEMA administers emergency response programs for natural disasters, including hurricanes, wildfires, and other events that could also require idling land for soil recovery and other agricultural purposes. The agencies would take this information into

account, and additional documentation reasonably establishing “agricultural purposes” when evaluating whether cropland has been used for or in support of agricultural purposes in the immediately preceding five years under the proposed rule.

If the Corps determines that the land is abandoned under the proposed exclusion, then it must evaluate the current condition of the land to determine whether wetland conditions have returned. If wetlands as defined in the agencies’ longstanding definition of the term at paragraph (c)(1) are currently present on the property, the agencies would determine whether the wetlands are “adjacent” wetlands and therefore “waters of the United States,” consistent with this proposed rule. As the term “prior converted cropland” suggests, and as stated in the preamble to the 1993 Rule, land properly designated as prior converted cropland has typically been so extensively modified from its prior condition that it no longer exhibits wetland hydrology or vegetation, and no longer performs the functions it did in its natural and original condition as a wetland. 58 FR 45032. It is often altered and degraded, with long-term physical and hydrological modifications that substantially reduce the likelihood of reestablishment of hydrophytic vegetation. Consistent with longstanding agency policy and wetland delineation procedures, if a former wetland has been lawfully manipulated to the extent that it no longer exhibits wetland characteristics under normal circumstances, it would not meet the regulatory definition of “wetlands” and would not be jurisdictional under the Clean Water Act. The altered nature of prior converted cropland and its conditions constitute the “normal circumstances” of such areas. The agencies expect the majority of prior converted cropland in the nation to fall into this category and not to be subject to the Clean Water Act, even after it is abandoned.

3. Definition of “Ditch” and Scope of the (b)(3) Ditch Exclusion

The regulatory status of ditches has long created confusion for farmers, ranchers, irrigation districts, municipalities, water supply and stormwater management agencies, and the transportation sector, among others. To address this confusion, the agencies propose revising the exclusion of certain ditches from the definition of “waters of the United States” to be simple and clear. Under the proposed rule, ditches (including roadside ditches) that are constructed or excavated entirely in dry land are not “waters of the United

¹⁰⁵ See Memorandum to the Field between the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), the U.S. Department of the Army, Corps of Engineers (Corps), and the U.S. Environmental Protection Agency (EPA) Concerning Issues Related to the Implementation of Section 404 of the Clean Water Act (CWA) and the Food Security Act of 1985, as Amended (FSA). July 17, 2020. Available at https://www.epa.gov/sites/default/files/2020-07/documents/final_joint_memo_army_epa_usda_on_issues_related_to_implementation_of_sec_404_of_cwa_and_fsa_july_2020.pdf.

¹⁰⁴ See 84 FR 4193 (February 14, 2019) for a summary of how the agencies historically implemented and enforced this exclusion.

States.” The agencies also propose defining the term “ditch” at paragraph (c)(4) of the agencies’ regulations to mean “a constructed or excavated channel used to convey water,” consistent with the definition the agencies use for other Clean Water Act purposes regarding activities occurring in certain ditches. In addition to consistency, the proposed definition would provide clarity for identifying ditches excluded under this proposed rule. The agencies believe the proposed definition accurately captures the purpose and intent of ditches as well as their basic characteristics. These changes maintain the agencies’ longstanding position that certain ditches are not “waters of the United States” and more closely align the exclusion with the Clean Water Act’s statutory text.

a. Basis for the Proposed Definition

During the 1970s, the Corps interpreted its authorities under section 404 of the Clean Water Act as excluding non-navigable¹⁰⁶ drainage and irrigation ditches from the definition of “waters of the United States.” *See, e.g.*, 40 FR 31320, 31321 (July 25, 1975) (“Drainage and irrigation ditches have been excluded.”). A similar ditch exclusion was expressly stated in regulatory text in the Corps’ 1977 regulations. 33 CFR 323.2(a)(3) (1978); 42 FR 37122, 37144 (July 19, 1977) (“manmade nontidal drainage and irrigation ditches excavated on dry land are not considered waters of the United States under this definition”). As the Corps explained in 1977: “nontidal drainage and irrigation ditches that feed into navigable waters will not be considered ‘waters of the United States’ under this definition. To the extent that these activities cause water quality problems, they will be handled under other programs of the FWPCA, including Section 208 and 402.” 42 FR 37127 (July 19, 1977). Similar statements occurred in preambles to the Corps’ proposed rules from the early 1980s (45 FR 62732, 62747 (September 19, 1980); 48 FR 21466, 21474 (May 12, 1983)).

The general exclusion for non-tidal drainage and irrigation ditches excavated in dry land continued through 1986, although the Corps modified its earlier statements that year by noting in preamble text that “we generally do not consider” such features to be “waters of the United States,” and indicating that the agency would

evaluate certain ditches on a case-by-case basis. 51 FR 41206, 41217 (November 13, 1986).¹⁰⁷ The EPA also included similar language in the preamble to their 1988 Rule. 53 FR 20764 (June 6, 1988). The Corps further clarified the treatment of ditches in its nationwide permit regulation in March 2000, stating that “non-tidal drainage ditches are waters of the United States if they extend the [ordinary high water mark] of an existing water of the United States.” 65 FR 12818, 12823 (March 9, 2000). In other words, if flow or flooding from a jurisdictional non-tidal river or stream inundated a drainage ditch, the agencies would have asserted jurisdiction over the portion of that ditch that extends the ordinary high water mark of the river or stream. This proposed action clarifies the regulatory status of ditches in a manner that is more consistent with the agencies’ 1977 and 1986 approaches to ditches, with some modifications to provide a clear and simple definition that also falls within the scope of the agencies’ authority under the Clean Water Act.

The proposed rule’s exclusion of certain ditches from the definition of “waters of the United States” is consistent with Congress’ intent that some, but not all, ditches may be jurisdictional. When Congress enacted the 1972 amendments to the Federal Water Pollution Control Act, it specifically included ditches and related artificial features as “point sources,” declaring them to be “discernible, confined, and discrete conveyances . . . from which pollutants are or may be discharged.” Public Law 92–500, 86 Stat. 816, 887 (1972) codified at 33 U.S.C. 1362(14). Congress envisioned protecting the quality of navigable waters by regulating the discharge of pollutants from “point sources” to “waters of the United States,” and defined “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source.” *Id.* at 1362(12). The *Rapanos* plurality examined this language and noted that, “[t]he definition of ‘discharge’ would make little sense” if the categories of “point sources” (*e.g.*, ditches) and “navigable waters” “were significantly overlapping.” *Rapanos*, 547 U.S. at 735–36 & n.7. Consistent with the statutory language and the *Rapanos* plurality which clearly indicate that not all ditches are “navigable waters,” the

proposed rule excludes certain ditches from the definition of “waters of the United States.”

The proposed rule’s exclusion of certain ditches from the definition of “waters of the United States” is also consistent with the ordinary meaning of the term “waters of the United States.” The proposed rule excludes ditches (including roadside ditches) that are constructed or excavated entirely in dry land. These excluded ditches are not part of the naturally occurring tributary system and do not fall under the ordinary meaning of the term “waters” within the scope of the Clean Water Act. The agencies also note that the proposed exclusion is consistent with the agencies’ prior approach of excluding certain ditches constructed or excavated in dry land.

The agencies are not proposing to change their longstanding interpretation that ditches satisfying any of the conditions of a paragraph (a)(1) water are “waters of the United States” as paragraph (a)(1) waters. This includes tidal ditches and navigable-in-fact ditches that transport people, goods, and services in interstate and foreign commerce, as those ditches—more commonly referred to as “canals”—can provide important commercial navigation services to the nation and operate more like other waterbodies traditionally understood as “navigable.” *See, e.g., id.* at 736 n.7 (Scalia, J., plurality) (“a permanently flooded man-made ditch used for navigation is normally described, not as a ‘ditch,’ but a ‘canal’”).

Under the proposed rule, the agencies limit the exclusion to those non-navigable ditches (including roadside ditches) that are constructed or excavated entirely in dry land, even if those ditches have relatively permanent flow and connect to a jurisdictional water. The agencies also propose to retain their longstanding position that the channelization or relocation of a tributary does not modify the jurisdictional status of that water. If a tributary is channelized, its bed and/or banks are altered in some way (*e.g.*, reinforced with concrete or modified slopes), it is re-routed and entirely relocated, or its flow is modified through water diversions or through other means, then it remains jurisdictional under the proposed rule as long as it continues to satisfy the conditions in the proposed definition of “tributary.” *See* section V.C of this preamble. The agencies note, however, that the mere interface between the excluded ditch constructed or excavated entirely in dry land and a jurisdictional water does not make that ditch

¹⁰⁶ Non-navigable in this context refers to ditches that are not traditional navigable waters, such as non-tidal ditches.

¹⁰⁷ The Corps also moved the ditch exclusion from rule text to preamble language in 1986 but stated that this was not a substantive change and that jurisdiction was not expanded. 51 FR 41206, 41216–17 (November 13, 1986).

jurisdictional consistent with longstanding practice. For example, a ditch constructed or excavated entirely in dry land that connects to a tributary would not be considered a jurisdictional ditch under the proposed rule.

Under the proposed rule, ditches (including roadside ditches) that are constructed or excavated in a wetland are not excluded because they were not constructed or excavated entirely in dry land. This approach aligns the proposed rule with the Clean Water Act section 404(f) permitting exemption for the maintenance but not construction of drainage ditches and the associated concern expressed during the legislative process for the 1977 Clean Water Act amendments related to draining swamps and wetlands.

b. Alternative Approaches

The agencies solicit comment on an alternative approach to excluding ditches which would exclude all ditches that carry less than a relatively permanent flow of water regardless of where and how the ditch was constructed or excavated or what purpose it serves. This approach is similar to the agencies' current implementation in light of *Rapanos* and *Sackett* and would be consistent with the *Rapanos* plurality's emphasis on determining jurisdiction based on the permanence of flow in a waterbody.

The agencies also solicit comment on another alternative approach that would exclude all non-navigable irrigation and drainage ditches, regardless of flow duration or if the ditch is constructed or excavated entirely in dry land. Potential definitions of irrigation ditch and drainage ditch are in the agencies' 2020 Ditch Memorandum.¹⁰⁸ Such an approach would be consistent with the Corps' original exclusion from 1975. Most non-navigable ditches likely serve the purpose of providing irrigation or drainage and thus would meet the terms of such an exclusion. Many modified streams would potentially also meet the terms of this alternative exclusion. The agencies seek comment on whether this alternative approach is consistent with the Clean Water Act.

¹⁰⁸ U.S. Department of the Army and U.S. Environmental Protection Agency. 2020. "Joint Memorandum to the Field Between the U.S. Department of the Army, Corps of Engineers and the U.S. Environmental Protection Agency Concerning Exempt Construction or Maintenance of Irrigation Ditches and Exempt Maintenance of Drainage Ditches Under Section 404 of the Clean Water Act" (July 24, 2020). Available at https://www.epa.gov/sites/default/files/2020-07/documents/final_ditch_exemption_memo_july_2020_with_epa.pdf.

c. Implementation of Ditch Exclusion

The agencies seek comment on the implementation of the ditch exclusion as discussed in this section. When assessing the jurisdictional status of a ditch, under the proposed rule the agencies would first consider if the ditch is a traditional navigable water or part of the territorial seas. If a ditch is a traditional navigable water or part of the territorial seas, it would not be excluded under the proposed rule, consistent with current and longstanding practice. For ditches that are not paragraph (a)(1) waters, the agencies would then assess if the ditch (including a roadside ditch) is constructed or excavated entirely in dry land. As discussed in section V.F.3.a of this preamble, ditches (including roadside ditches) that are constructed or excavated in tributaries, relocate a tributary, or are constructed or excavated in wetlands or other aquatic resources are not considered to be constructed or excavated entirely in dry land. Such ditches would be assessed to see if they meet the definition of "tributary" under paragraph (c)(9) of the proposed rule and thus would be a paragraph (a)(3) water. See section V.C.4 of this preamble for discussion of implementation of tributaries under the proposed rule. If a ditch (including a roadside ditch) is found to be constructed or excavated entirely in dry land, it would be excluded under the proposed rule. Even if a ditch is excluded from the definition of "waters of the United States," it may function as a point source (*i.e.*, "discernible, confined, and discrete conveyance," 33 U.S.C. 1362(14)), such that discharges of pollutants from these features could require a Clean Water Act permit. Identifying if a ditch was constructed or excavated entirely in dry land may be challenging, such as where historic records are not available. The agencies encourage stakeholders to identify and discuss these situations in their comments to assist in clarifying implementation.

With respect to implementing the proposed rule's paragraph (b)(5) exclusion for certain ditches, the reach of a ditch that meets paragraph (a)(1) of the proposed rule is considered a "water of the United States," with "reach" interpreted similarly to how it is used for tributaries in section V.C.4.b of this preamble (*i.e.*, a section of a ditch along which similar hydrologic conditions exist, such as discharge, depth, area, and slope). When a ditch (including a roadside ditch) constructed or excavated entirely in dry land connects to and extends the length of a paragraph (a)(3)

tributary, even if that ditch has relatively permanent flow, it would be considered a separate reach from the tributary and would be excluded under the proposed rule. In such a case, the excluded ditch is a separate reach from the tributary because the ditch's excavated nature means that its hydrologic conditions, such as depth, area, and slope, differ from the natural tributary. In addition, the entirety of an excluded ditch reach would be non-jurisdictional even when the relatively permanent flow from a tributary to which the ditch drains enters the ditch and extends the ordinary high water mark of the tributary into the lower portion of the ditch reach. In another example, a ditch (including a roadside ditch) constructed or excavated entirely in uplands with non-relatively permanent flow that transitions to relatively permanent flow would have two different reaches due to different flow durations, even though both reaches would be excluded under the proposed rule.

The agencies will use the most accurate and reliable resources to support their decisions regarding whether a feature is an excluded ditch under the proposed rule. This will typically involve the use of multiple sources of information, and those sources may differ depending on the resource in question or the region in which the resource is located. Along with field data and other current information on the subject waters, historic tools and resources may be used to determine whether a feature is an excluded ditch. Several sources of information may be required to make such determination. Information sources may include historic and current topographic maps, historic and recent aerial photographs, Tribal, State, and local records and surface water management plans (such as county ditch or drainage maps and datasets), NHD or NWI data, agricultural records, street maintenance data, precipitation records, historic permitting and jurisdictional determination records, certain hydrogeomorphological or soil indicators, wetlands and conservation programs and plans, and functional assessments and monitoring efforts. For example, when a USGS topographic map displays a tributary located upstream and downstream of a potential ditch, this may indicate that the potential ditch was constructed or excavated in, or served to relocate, a tributary. As another example, an NRCS soil survey displaying the presence of specific soil series which are linear in nature and generally parallel to a

potential ditch may be indicative of alluvial deposits formed by a tributary in which the potential ditch was constructed. Additionally, the presence of a pond in a historic aerial photograph that lies along the flowpath of the potential ditch, for example, may provide an indication that the potential ditch (including a roadside ditch) was not constructed or excavated entirely in dry land. The agencies seek comment on these resources and their uses in relation to the proposed ditch exclusion. The agencies also seek recommendations for additional resources that are available to assist with implementation of the proposed ditch exclusion and how such additional resources can be used.

Under the proposed rule, the burden of proof lies with the agencies to demonstrate that a ditch serves to relocate a tributary or was constructed or excavated in a tributary or other aquatic resources. Where the agencies cannot satisfy this burden, the ditch at issue would be considered non-jurisdictional under the proposed rule. For example, if the agencies are not sure whether a non-navigable ditch (including a roadside ditch) was constructed or excavated entirely in dry land given the physical appearance and functionality of the current ditch, the agencies will review the available information to attempt to discern when the ditch was constructed or excavated and the nature of the landscape before and after construction or excavation. If the evidence does not demonstrate that the ditch (including a roadside ditch) was constructed or excavated in an aquatic resource (e.g., a stream, river, lake, pond, or a wetland), the ditch would be non-jurisdictional under this proposed rule. This approach to proving the jurisdictional status of a ditch is a change from the agencies' approach in the Amended 2023 Rule, *see* 88 FR 3105, but is consistent with the agencies' approach in the NWPR, *see* 85 FR 22299. The agencies are proposing that the approach to the ditch exclusion articulated in the NWPR is the best interpretation of the statute because excluded ditches are not part of the naturally occurring tributary system and therefore do not fit within the ordinary meaning of the term "waters" within the scope of the Clean Water Act. The agencies note that with a reasonable explanation, they can change their position, which is offered above. *See* section (a) of this section, *supra*. The agencies solicit comment on whether they should consider additional reliance interests.

4. The Paragraph (b)(9) Groundwater Exclusion

a. Basis for the Proposed Exclusion

In proposed paragraph (b)(9), the agencies would exclude groundwater, including groundwater drained through subsurface drainage systems. The agencies have never interpreted "waters of the United States" to include groundwater and would continue that practice through this proposed rule by explicitly excluding groundwater.

The agencies are proposing to explicitly codify the NWPR's exclusion of groundwater because groundwater is not surface water and therefore does not fall within the possible scope of "navigable waters." The agencies propose that there is a need for a regulatory exclusion to provide clarity on this matter. This position is longstanding and consistent with Supreme Court case law. The agencies have never taken the position that groundwater falls within the scope of "navigable waters" under the Clean Water Act. *See, e.g.,* 80 FR 37099–37100 (June 29, 2015) (explaining that the agencies have never interpreted "waters of the United States" to include groundwater); 85 FR 22278 (April 21, 2020) (explaining that the agencies have never interpreted "waters of the United States" to include groundwater). This position was confirmed by the U.S. Supreme Court. *Maui*, 590 U.S. at 176–77 ("The upshot is that Congress was fully aware of the need to address groundwater pollution, but it satisfied that need through a variety of state specific controls. Congress left general groundwater regulatory authority to the States; its failure to include groundwater in the general EPA permitting provision was deliberate."). The agencies acknowledge the importance of groundwater as a resource and its role in the hydrologic cycle. But its regulation is most appropriately addressed by other Federal, State, Tribal, and local authorities.

The agencies acknowledge that, in certain circumstances, pollutants released to groundwater can reach surface water resources. However, the statutory reach of "waters of the United States" must be grounded in a legal analysis of the limits on Clean Water Act jurisdiction that Congress intended by use of the term "navigable waters," and an understanding and application of the limits expressed in Supreme Court opinions interpreting that term. This proposed rule would do that, while also supporting the agencies' goals of providing greater clarity, certainty, and predictability for the regulated public and regulators. While groundwater is

not jurisdictional under the statute and would not be under the proposed rule, many States include groundwater in their definitions of "waters of the State" and therefore may subject groundwater to State regulation. In addition, groundwater quality is regulated and protected through several other legal mechanisms, including the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and various Tribal, State, and local laws.

Given the proposed addition of the (b)(9) exclusion for groundwater, the agencies are also proposing a ministerial change to paragraph (b) to add an "and" to the (b)(8) category and delete the "and" in the (b)(7) category. This ministerial revision would be necessary to conform to the proposed addition of (b)(9).

b. Implementation of Groundwater Exclusion

The agencies propose to include an exclusion for groundwater under paragraph (b)(9), including groundwater drained through subsurface drainage systems. The agencies propose adding the subsurface drainage clarification to specify that even when groundwater is channelized in subsurface systems, like tile drains used in agriculture, it would still remain subject to the exclusion. However, under the proposed rule, the exclusion would not apply to surface expressions of groundwater, such as where groundwater emerges on the surface and becomes baseflow in relatively permanent streams.

G. Publicly Available Jurisdictional Information and Permit Data

The agencies have provided information on jurisdictional determinations that is readily available to the public. The Corps maintains a website, *available at* <https://permits.ops.usace.army.mil/orm-public>, that presents information on the Corps' approved jurisdictional determinations and Clean Water Act section 404 permit decisions. The website allows users to search and view basic information on approved jurisdictional determinations and permit decisions (including latitude and longitude) and to filter the determinations using different parameters like Corps District and year. The website also contains a link to an associated approved jurisdictional determination form. Similarly, EPA maintains a website, *available at* <https://watersgeo.epa.gov/cwa/CWA-JDs/>, that presents information on approved jurisdictional determinations made by the Corps under the Clean Water Act since August 28, 2015. EPA's website also allows users to search, sort, map,

view, filter, and download information on approved jurisdictional determinations using different search parameters (e.g., by year, location, State, watershed, regulatory regime). The website includes a map viewer that shows where waters have been determined to be jurisdictional or non-jurisdictional based on the approved jurisdictional determinations available on the site. These websites will incorporate information on approved jurisdictional determinations made under the revised definition of “waters of the United States.” The EPA also maintains on its website information on certain dischargers permitted under Clean Water Act section 402, including the Permit Compliance System and Integrated Compliance Information System database, available at <https://www.epa.gov/enviro/pcs-icis-overview>, as well as the EnviroMapper, available at <https://enviro.epa.gov/>, and How’s My Waterway, available at <https://www.epa.gov/waterdata/how-s-my-waterway>. The agencies also intend to provide links to the public to any guidance, forms, or memoranda of agreement relevant to the definition of “waters of the United States” on EPA’s website at <https://www.epa.gov/wotus>.

H. Severability

The purpose of this section is to clarify the agencies’ intent with respect to the severability of provisions of this rule. Each category and subcategory of jurisdictional waters in this rule is capable of operating independently. If any provision or jurisdictional category or subcategory of this rule is determined by judicial review or operation of law to be invalid, that partial invalidation will not render the remainder of this rule invalid.

For example, in the absence of jurisdiction over a subcategory of jurisdictional tributaries, adjacent wetlands, or paragraph (a)(5) waters, references to those subcategories of waters could be removed, and the agencies would continue to exercise jurisdiction under the remainder of this rule (including unaffected subcategories). Each exclusion in paragraph (b) and each definitional provision of paragraph (c) also operates independently of the other provisions in this rule and is intended to be severable. Moreover, the agencies intend applications of this rule to be severable from other applications, such that if the application of this rule to a given circumstance is held invalid, the rule remains applicable to all other circumstances.

VI. Supporting Information

A. Regulatory Impact Analysis

This section provides an overview of the potential effects of the proposed rule on Federal and State and Tribal regulatory programs and potential economic impacts of the proposed rule. Additional detail is contained in and described more fully in the Regulatory Impact Analysis for the Proposed Rule. A copy of this document is available in the docket for this proposed action.

The proposed rule will not impose direct requirements on entities of any size. Instead, the agencies are proposing to clarify the definition of “waters of the United States,” a foundational term in determining the scope of key Clean Water Act programs. The agencies anticipate that the proposed rule would result in indirect cost savings. Potential cost savings and forgone benefits would only be incurred as a result of actions taken under existing Clean Water Act programs (i.e., sections 303, 311, 401, 402, and 404) that would not otherwise be modified by this proposed rule. Entities currently are, and would continue to be, regulated under these programs that rely on the definition of “waters of the United States.” Each of these programs may subsequently impose costs as a result of implementation of their specific regulations. The agencies analyzed the forgone benefits and cost savings associated with the proposed rule relative to the baseline of the Amended 2023 Rule. They have prepared a qualitative economic analysis within the Regulatory Impact Analysis for the Proposed Rule to provide the public with information on the potential forgone benefits and cost savings associated with various Clean Water Act programs from the proposed rule’s reduced scope of jurisdiction as a response to the *Sackett* decision. The agencies prepared this economic analysis pursuant to the requirements of Executive Orders 12866 and 13563 to provide information to the public. The agencies are also evaluating options for development of a quantitative analysis of the effects of the proposed rule and solicit input on data and methods that could assist in that development.

The Amended 2023 Rule is stayed in certain States due to ongoing litigation, and the agencies have been implementing the pre-2015 regulatory regime in those jurisdictions, which, following *Sackett*, is very similar to the Amended 2023 Rule. This is why the agencies chose to use one baseline for the analysis. The agencies anticipate that the proposed rule would result in an increase in non-jurisdictional

findings in approved jurisdictional determinations compared to prior regulations and practice, and that compared to the baseline, the proposed rule would define fewer waters and wetlands as within the scope of the Clean Water Act.

The agencies have provided a qualitative assessment of the proposed changes to Clean Water Act jurisdiction under the proposed rule in light of the *Sackett* decision as compared to the baseline in the Regulatory Impact Analysis. The agencies analyzed the effects of the changes qualitatively and assessed the impacts of the proposed changes to the definitions of “continuous surface connection” and “tributary” (specifically, with respect to the latter, that tributaries are limited to bodies of water that contribute surface water flow to a downstream jurisdictional water through features that convey relatively permanent flow, unless the tributary is part of a currently operative water transfer), to be the most important in terms of reducing the scope of jurisdictional waters relative to the baseline. Further, the agencies assessed that the section 404 program would likely be the Clean Water Act program most impacted by the proposed rule, with projected reductions in the number of permits and required mitigation relative to the baseline. The agencies expect associated cost savings from the avoided 404 permits and impact minimization and mitigation actions, as well as forgone benefits from impact mitigation.

States and Tribes may choose to expand their coverage of their waters beyond “waters of the United States” to include other waters as “waters of the State” or “waters of the Tribe.” Although some States and Tribes already exceed the aquatic resource or surface water discharge protections of the proposed rule, the way States or Tribes would interpret and apply their own regulations as a result of the revised definition of “waters of the United States” is unknown. The agencies acknowledge that States and Tribes that seek to cover waters no longer jurisdictional under this proposed rule may incur new costs and administrative burdens. Such obligations are inherent in the exercise of the States’ and Tribes’ authority that Congress embedded in the Clean Water Act. They are free to evaluate the most effective means of addressing their waters and may weigh the costs and benefits of doing so. The agencies solicit input on whether States and Tribes might incur such burdens. The agencies also generally request comment on any significant reliance interests that may be

impacted by this proposed rule, including on any effects or data about such interests that could inform the agencies' Regulatory Impact Analysis.

B. Children's Health

This proposed action is not subject to the EPA's Children's Health Policy (<https://www.epa.gov/children/childrens-health-policy-and-plan>) because the proposed revised definition of "waters of the United States" is relevant to implementation of the Clean Water Act but does not itself concern human health because it is simply a definitional rule, and as such, does not directly authorize discharges into waters of the United States.

VII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review; Executive Order 13563: Improving Regulation and Regulatory Review

This proposed action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. The EPA and the Army prepared an economic analysis of the potential cost savings and forgone benefits associated with this action. This analysis is contained in the Regulatory Impact Analysis for the Proposed Rule, which is available in the docket and briefly summarized in section VI of this preamble, above.

While the economic analysis is informative in the rulemaking context, the agencies are not relying on the economic analysis performed pursuant to Executive Orders 12866 and 13563 and related procedural requirements as a basis for this proposed rule. *See, e.g., Nat'l Ass'n of Home Builders v. EPA*, 682 F.3d 1023, 1039–40 (D.C. Cir. 2012) (citing *FCC v. Fox Television Stations, Inc.*, 556 US. 502, 514–15 (2009), noting that the quality of an agency's economic analysis can be tested under the APA if the "agency decides to rely on a cost-benefit analysis as part of its rulemaking"). The information in the Regulatory Impact Analysis for the Proposed Rule was not used to establish the proposed regulatory text for the definition of "waters of the United States." Instead, the basis for this proposed rule is the text of the Clean Water Act, as informed by Supreme Court precedent, taking into account agency policy choices and other relevant factors.

B. Executive Order 14192: Unleashing Prosperity Through Deregulation

This proposed action is expected to be an Executive Order 14192 deregulatory action. This proposed rule is expected to provide burden reduction by narrowing the scope of waters that are jurisdictional under the Clean Water Act in response to the *Sackett* decision. Thus, the agencies anticipate that fewer Clean Water Act permits will be required, which will result in cost savings and reduced regulatory burden. Details on the avoided costs and forgone benefits associated with this proposed rule can be found in EPA and the Army's regulatory impact analysis in the docket.

C. Paperwork Reduction Act (PRA)

This proposed action does not impose an information collection burden under the PRA because it does not contain any information collection activities. However, this action may change terms and concepts used by the EPA and the Army to implement certain programs under the Clean Water Act. The agencies thus may need to revise some of their collections of information to be consistent with this action and will do so consistent with the PRA and implementing regulations. For example, Army sometimes collects information from project applicants to inform jurisdictional determinations under OMB Control Number 0710–0024, and rule changes may warrant changes to that collection.

D. Regulatory Flexibility Act (RFA)

The agencies certify that this proposed action would not have a significant economic impact on a substantial number of small entities under the RFA. The small entities that may be indirectly subject to this action are largely those entities whose activities are directly covered by the Clean Water Act sections 402, 404, and 311 programs. The proposed rule is expected to result in fewer entities subject to these programs, and a reduced regulatory burden for many of the entities that will still be subject to these programs. In addition, as the proposed rule is a definitional rule and would not result in any small entities being directly regulated by the rule, all impacts would be indirect in nature. As a result, small entities subject to these regulatory programs are unlikely to suffer adverse impacts as a result of regulatory compliance.

As addressed in the Regulatory Impact Analysis for the Proposed Rule, the proposed rule's clarification of the scope of Clean Water Act regulatory

jurisdiction over waters and wetlands in light of the *Sackett* decision may result in a reduction in the ecosystem services provided by some waters and wetlands, and as a result, some entities may be adversely impacted. Some business sectors that depend on habitat, such as those catering to hunters or anglers, or that require water treatment to meet production needs, could experience a greater impact relative to other sectors. Potential changes in ecosystem services are likely to be small, infrequent, and dispersed over wide geographic areas, thereby limiting the significance of these impacts on these business sectors. In addition, States and Tribes may already address waters potentially affected by a revised definition, thereby reducing forgone benefits. The sectors likely to be most impacted by the rule are mitigation banks and companies that provide aquatic resource restoration services. Because the agencies anticipate fewer waters would be subject to the Clean Water Act regulation under the proposed rule than are subject to regulation under the Amended 2023 Rule, there may be a reduction in demand for mitigation and restoration services under the section 404 permitting program. Assessing impacts to this sector is problematic, however, because this sector lacks a precise Small Business Administration small business definition, and many of the businesses that fall within this sector are also classified under various other North American Industry Classification System categories. Furthermore, impacts to this sector would not be the direct result of these businesses complying with the proposed rule, rather, they would be the indirect result of other entities no longer being required to mitigate for discharges of dredged or fill material into waters and wetlands that would no longer be jurisdictional under the final rule. In addition, potential impacts would be lessened when accounting for State and Tribal dredged and fill programs that would necessitate the purchase of mitigation credits or to take other actions under State or Tribal law to regulate discharges of dredged or fill material. For a more detailed discussion see the Sector Impact Assessment section of the Regulatory Impact Analysis for the Proposed Rule. As documented in the Regulatory Impact Analysis for the Proposed Rule located in the docket, the agencies do not expect the cost of the proposed rule to result in adverse impacts to a significant number of small entities, since the proposed rule would be expected to result in net cost savings for

all entities indirectly affected by this proposed rule.

E. Unfunded Mandates Reform Act (UMRA)

This proposed action does not contain an unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and would not significantly or uniquely affect small governments. The proposed action would impose no enforceable duty on any State, local, or Tribal governments or the private sector.

F. Executive Order 13132: Federalism

Under the technical requirements of Executive Order 13132 (64 FR 43255, August 10, 1999), the agencies have determined that this proposed rule may have federalism implications but believe that the requirements of the Executive Order will be satisfied, in any event.

The agencies believe that a revised definition of “waters of the United States” may be of significant interest to State and local governments. Consistent with the agencies’ policies to promote communications between the Federal government and State and local governments, the EPA and the Army consulted with representatives of State and local governments early in the process of developing the proposed rule to permit them to have meaningful and timely input into its development.

Consulting with State and local government officials, or their representative national organizations, is an important step in the process prior to proposing regulations that may have federalism implications under the terms of Executive Order 13132. The agencies engaged State and local governments over a 60-day federalism consultation period during development of this proposed rule, beginning with the initial federalism consultation meeting on April 3, 2025, and concluding on June 2, 2025. Fourteen intergovernmental organizations, including six of the ten organizations identified in EPA’s 2008 Executive Order 13132 Guidance, attended the initial Federalism consultation meeting, as well as three associations representing State and local governments. Organizations in attendance included the following: United States Conference of Mayors, Association of Clean Water Administrators, National Association of Counties, Western States Water Council, American Public Works Association, National Association of Wetland Managers, Association of State Drinking Waters Administrators, National Conference of State Legislatures, National Association of Towns and Townships, National League of Cities, and American Water Works Association.

In addition, the agencies held a briefing for the National Association of State Departments of Agriculture on April 17, 2025. The agencies also held a listening session for States and State associations on April 29, 2025, a listening session for local governments and their member associations on May 6, 2025, and a listening session for State and local governments and their member associations on May 28, 2025. All letters received by the agencies during this consultation may be found in the docket (Docket ID No. EPA–HQ–OW–2025–0322) for this proposed rule or in the pre-proposal recommendations docket (Docket ID No. EPA–HQ–OW–2025–0093).

These meetings and the letters provided by representatives provide a wide and diverse range of interests, positions, comments, and recommendations to the agencies. The agencies have prepared a report summarizing their federalism consultation and additional outreach to State and local governments and the results of this outreach. A copy of the report is available in the docket (Docket ID No. EPA–HQ–OW–2025–0322) for this proposed rule.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This proposed action may have Tribal implications. However, it will neither impose substantial direct compliance costs on federally recognized Tribal governments, nor preempt Tribal law. The EPA and the Army consulted with Tribal officials under the *EPA Policy on Consultation and Coordination with Indian Tribes* early in the process of developing this action to permit them to have meaningful and timely input into its development.

The agencies initiated a Tribal consultation and coordination process before proposing this rule by sending a “Notification of Consultation and Coordination” letter on March 21, 2025, to all 574 Tribes federally recognized at that time. The letter invited Tribal leaders and designated consultation representatives to participate in the Tribal consultation and coordination process. The agencies engaged Tribes over a 60-day Tribal consultation period during development of this proposed rule, including via a Tribal consultation kick-off webinar on March 31, 2025, in which the agencies answered questions directly from Tribal representatives and heard their initial feedback on the agencies’ rulemaking effort. The agencies also held a Tribal listening session on April 30, 2025, to hear pre-proposal input from Tribal governments

and Tribal organizations. The agencies convened eight one-on-one consultation meetings with individual Tribal governments. Additional one-on-one consultations may be requested by Tribes and scheduled after the rule is proposed. All letters received by the agencies during this consultation may be found in the docket (Docket ID No. EPA–HQ–OW–2025–0322) for this proposed rule or in the pre-proposal recommendations docket (Docket ID No. EPA–HQ–OW–2025–0093). The agencies have prepared a report summarizing the consultation and further engagement with Tribal nations. This report is available in the docket for this proposed rule (Docket ID No. EPA–HQ–OW–2025–0322).

During the Tribal consultation and engagement efforts and in Tribal consultation comments, many Tribes urged the agencies not to revise the definition and expressed concern that the proposed rule would reduce Federal jurisdiction or could adversely impact Tribal waters. One Tribe supported the agencies’ efforts to revise the definition of “waters of the United States” and noted that it would increase the Tribe’s ability to manage and regulate their own Reservation lands. The agencies acknowledge that because they generally implement Clean Water Act programs on Tribal lands, a reduced scope of Federal jurisdiction as a result of the *Sackett* decision will affect Tribes differently than it will affect States. Currently, of the Tribes that are eligible, most have not received treatment in a manner similar to a State (TAS) status to administer Clean Water Act regulatory programs. While some Tribes have established Tribal water programs under Tribal law or have the authority to establish Tribal programs under Tribal law, many Tribes are still building capacity and may lack resources to create a Tribal water program under Tribal law, to administer a program, or to expand programs that currently exist. Therefore, Tribes may disproportionately rely on the Federal Government for water program implementation and enforcement of water quality violations. Tribes may also be affected by pollution from adjacent jurisdictions. Many Tribes are located in the arid West, where there are fewer waters that may meet the relatively permanent standard. Nonetheless, the proposed rule preserves Tribal authority to choose whether to include waters that are not covered under the Clean Water Act under Tribal laws and regulations. Any decision by the Tribes to protect beyond the limits of the Clean Water

Act is not compelled by the statute or by this proposed rule.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risk

EPA and the Army interpret Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the agencies have reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2–202 of the Executive Order.

Therefore, this proposed action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk. Since this action does not concern human health, EPA’s Policy on Children’s Health also does not apply.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This proposed action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. This proposed action is a deregulatory action that would reduce regulatory burden, including to the energy sector, and thus is not anticipated to have an adverse effect on the supply, distribution or use of energy.

J. National Technology Transfer and Advancement Act

This proposed action does not involve technical standards.

List of Subjects

33 CFR Part 328

Administrative practice and procedure, Environmental protection, Navigation (water), Water pollution control, Waterways.

40 CFR Part 120

Environmental protection, Water pollution control, Waterways.

Adam Telle,

Assistant Secretary of the Army (Civil Works), Department of the Army.

Lee Zeldin,

Administrator, Environmental Protection Agency.

Title 33—Navigation and Navigable Waters

For the reasons set forth in the preamble, the Corps of Engineers proposes to amend 33 CFR part 328 as follows:

PART 328—DEFINITION OF WATERS OF THE UNITED STATES

■ 1. The authority citation for part 328 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*

- 2. Section 328.3 is amended by:
 - a. Revising paragraphs (a)(1)(i) and (ii);
 - b. Removing paragraph (a)(1)(iii);
 - c. Revising paragraph (a)(5);
 - d. Revising paragraphs (b)(1), (b)(2), (b)(3), (b)(7), and (b)(8);
 - e. Adding paragraph (b)(9);
 - f. Redesignating paragraph (c)(3) as (c)(5);
 - g. Redesignating paragraph (c)(4) as (c)(6);
 - h. Redesignating paragraph (c)(5) as (c)(9); and
 - i. Adding paragraphs (c)(3), (c)(4), (c)(7), (c)(8), (c)(10), and (c)(11).

The revisions and additions read as follows:

§ 328.3 Definitions.

* * * * *

(a) * * *

(1) * * *

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; or

(ii) The territorial seas;

* * * * *

(5) Lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

(b) * * *

(1) Waste treatment systems;

(2) Prior converted cropland;

(3) Ditches (including roadside ditches) constructed or excavated entirely in dry land;

* * * * *

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel 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;

(8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow; and

(9) Groundwater, including groundwater drained through subsurface drainage systems.

* * * * *

(c) * * *

(3) *Continuous surface connection* means having surface water at least during the wet season and abutting (*i.e.*, touching) a jurisdictional water.

(4) *Ditch* means a constructed or excavated channel used to convey water.

* * * * *

(7) *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. An area is no longer considered prior converted cropland for purposes of the Clean Water Act when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(1) 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 the final authority to determine whether prior converted cropland has been abandoned.

(8) *Relatively permanent* means standing or continuously flowing bodies of surface water that are standing or continuously flowing year-round or at least during the wet season.

* * * * *

(10) *Tributary* means a body of water with relatively permanent flow, and a bed and banks, that connects to a downstream traditional navigable water or the territorial seas, either directly or through one or more waters or features that convey relatively permanent flow. A tributary does not include a body of water that contributes surface water flow to a downstream jurisdictional water through a feature such as a channelized non-jurisdictional surface water feature, subterranean river, culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, wetland, or similar natural feature, if such feature does not convey relatively permanent flow. When the tributary is part of a water transfer (as that term is applied under 40 CFR 122.3) currently in operation, the tributary would retain jurisdictional status.

(11) *Waste treatment system* means all components of a waste treatment system designed to meet the requirements of the Clean Water Act, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either

actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

Title 40—Protection of Environment

For the reasons set forth in the preamble, the Environmental Protection Agency proposes to amend 40 CFR part 120 as follows:

PART 120—DEFINITION OF WATERS OF THE UNITED STATES

■ 1. The authority citation for part 120 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*

■ 2. Section 120.2 is amended by:

- a. Revising paragraphs (a)(1)(i) and (ii);
- b. Removing paragraph (a)(1)(iii);
- c. Revising paragraph (a)(5);
- d. Revising paragraphs (b)(1), (b)(2), (b)(3), (b)(7), and (b)(8);
- e. Adding paragraph (b)(9);
- f. Redesignating paragraph (c)(3) as (c)(5);
- g. Redesignating paragraph (c)(4) as (c)(6);
- h. Redesignating paragraph (c)(5) as (c)(9); and
- i. Adding paragraphs (c)(3), (c)(4), (c)(7), (c)(8), (c)(10), and (c)(11).

The revisions and additions read as follows:

§ 120.2 Definitions.

* * * * *

(a) * * *

(1) * * *

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; or

(ii) The territorial seas;

* * * * *

(5) Lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface

connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

(b) * * *

- (1) Waste treatment systems;
- (2) Prior converted cropland;
- (3) Ditches (including roadside ditches) constructed or excavated entirely in dry land;

* * * * *

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel 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;

(8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow; and

(9) Groundwater, including groundwater drained through subsurface drainage systems.

* * * * *

(c) * * *

(3) *Continuous surface connection* means having surface water at least during the wet season and abutting (*i.e.*, touching) a jurisdictional water.

(4) *Ditch* means a constructed or excavated channel used to convey water.

* * * * *

(7) *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. An area is no longer considered prior converted cropland for purposes of the Clean Water Act when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(1) 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 the final authority to determine whether prior converted cropland has been abandoned.

(8) *Relatively permanent* means standing or continuously flowing bodies of surface water that are standing or continuously flowing year-round or at least during the wet season.

* * * * *

(10) *Tributary* means a body of water with relatively permanent flow, and a bed and banks, that connects to a downstream traditional navigable water or the territorial seas, either directly or through one or more waters or features that convey relatively permanent flow. A tributary does not include a body of water that contributes surface water flow to a downstream jurisdictional water through a feature such as a channelized non-jurisdictional surface water feature, subterranean river, culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, wetland, or similar natural feature, if such feature does not convey relatively permanent flow. When the tributary is part of a water transfer (as that term is applied under 40 CFR 122.3) currently in operation, the tributary would retain jurisdictional status.

(11) *Waste treatment system* means all components of a waste treatment system designed to meet the requirements of the Clean Water Act, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

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DANIEL SCARPINE, P.E.
Principal Engineer

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daniels@aquariusenv.com

Daniel Scarpine is a licensed professional environmental engineer with technical expertise and professional experience dedicated to designing, developing and integrating technologies to treat water in various applications. For the last 30 years, his focus has primarily been on process engineering industrial water applications, ranging from recycling facility stormwater to ultra-high purity semiconductor process waters. Mr. Scarpine is the primary inventor for several water treatment equipment patents. He has managed stormwater and wastewater treatment evaluations for facilities in the semiconductor, galvanizing, cold steel rolling, metal recycling, and metal fabrication industries, focusing on removing heavy metals, suspended solids, organics, and pH control. He has provided assessment, authoring and engineer of record services for Spill Prevention Control and Countermeasure Plans for numerous industrial facilities. His significant experience as an expert witness brings additional negotiation, risk management and execution skills to the projects he manages.

REPRESENTATIVE PROJECT EXPERIENCE

- **Tyree Oil, Oregon & Washington Locations** – Multiple project services pertaining to SPCC, containment design and integration, risk assessment and stormwater. Engineer of Record for SPCC for multiple facilities across Oregon and Washington SPCC Plan. Technical support for Facility Response Plan assessment and risk analysis. Truck loading/unloading rack system containment design and site integration.
- **Holdner Farms, Columbia County, OR – Court Appointed Mitigation and Remediation Supervisor**– Engineer of Record and Project Lead for the mitigation and remediation of a 170-head cattle operation. Mitigation activities included feedlot waste containment, stormwater segregation and land application of feedlot wastewater. The corrected and mitigated system met the mitigation conditions of a felony water pollution conviction against the landowner.
- **Ballard Marine/Nova vs US Navy, Bremerton, WA**, Before the Armed Services Board of Contract Appeals, served as Plaintiff's expert witness. Provided engineering assessment of differing site conditions claim pertaining to Water Quality requirements. Analyze inorganic/organic compounds, including sampling and laboratory data in the context of acute and chronic water quality standards. Provide technical interpretation of water quality management and treatment plan in the context of state water quality standards.
- **Wilbur Ellis – Washington State** – In response to a crop oil and aerial spraying fuel transfer spill event, conduct a comprehensive site assessment at multiple crop oil and aviation facilities. Assessment led to revisions to oil transfer areas, operational controls for hot pit operations, an aviation/aerial spraying base, and improved containment management practices. Engineer of Record services for SPCC plan at multiple Tier 2 facilities.
- **Christensen Oil – Portland, OR** – Bulk oil terminal facility and warehouse. Engineer of record for Facility Response Plan and Risk Assessment. Technical consulting on SPCC Plan, containment suitability, and site operations. Provide technical guidance on the management of

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stormwater containment in the context of 1200z stormwater regulations, SPCC, and FRP requirements.

- **Port of Vancouver, WA – Kinder Morgan Copper Bulk Terminal**– Engineer of record for treatment upgrades and design at the Port of Vancouver at the Kinder Morgan Copper Bulk Terminal. Provided Engineering Report to document stormwater storage, treatment process, known and reasonable alternatives analysis, revised treatment chemistry, and solids handling. Supplemental services included preparing as-built documentation and an Operations and Maintenance Plan.
- **Industrial Stormwater Metals Removal System** – Principal inventor of the passive filtration system for metals removal from industrial stormwater with high concentrations of total suspended solids. Completed bench testing, pilot testing, and full-scale product development in less than one year. Led technical product integration in Ecology’s TAPE program and the Boatyard Stormwater Treatment Study. USPTO# 8002974
- **Hempler Food Group v. Associated Project Consultants, Whatcom County, WA** – Plaintiff’s expert witness for claims pertaining to the standard of care for wastewater improvements project. Provided consultative services on the standards outlined in the Washington Administrative Code relating to engineering reports, plans and submittals. Participated in depositions of defendants and data gathering for demonstrating a breach of the standard of care claim.
- **Quigg Brothers Marine, Aberdeen, WA – Level 3 Treatment Design and 3rd Party Litigation Expert Witness**– Engineer of record for industrial stormwater treatment system design for a 3-parcel marine construction staging and fabrication facility. Provide site assessment and conceptual design for the preparation of the Engineering Report pursuant to WAC 173-240. Perform engineering of record services for the construction and implementation of temporary and permanent treatment. Provide technical response and design services in support of the 3rd Party Litigation response.
- **Engineer of Record – CTAPE – Clear Creek Systems Chitosan Enhanced Sand Filtration** – Prepared the Technology Evaluation Engineering Report (TEER) for the Clear Creek Systems Chitosan Enhanced Sand Filtration (CESF) treatment system for General Use Level Designation (GULD) under Washington Department of Ecology’s rigorous CTAPE protocol. The scope included overall project management, revisions to the project Quality Assurance Project Plan (QAPP), engineering analysis of field data, and ultimately, the demonstration of performance through statistical evaluation.
- **Lafarge Cement, Seattle, WA**– Provided engineering services to optimize water use, segregate process water, prepare wastewater permitting documents, prepare a stormwater treatment engineering report, and prepare an interim and long-term stormwater treatment system design with water and solids recycling capabilities. Scope of work included demonstrating AKART, a comprehensive project implementation plan, regulatory assessment of liquid solids waste and recycling, preparing site record drawings, compiling water use, analyzing storage needs, and recommending piping revisions.
- **Independent Metals Plant 1, Seattle, WA** – Independent Metals’ (IM’s) Plant 1 has been in operation at its South Park facility since 1983. Its stormwater effluent connection has a “grandfathered” connection to the combined sewer system. Routine testing by King County noted concentrations of heavy metals and PCBs. AE was retained to provide a technical assessment of practices and technologies that would meet pretreatment standards. AE developed site management/cleaning protocols to minimize water use, maintain segregation of solids, and minimize hazardous waste disposal. Subsequent design work focused on site remediation

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alternatives with coagulation, settling, filtration, and active carbon treatment. The pretreatment facility was installed and operated with approval from King County Industrial Waste.

- **Steel Rolling and Coating Mill Wastewater, Kalama, WA**– Comprehensive evaluation and strategic plan for optimization and upgrade of 125,000-gallon-per-day heavy metals removal wastewater treatment system discharging to the Columbia River. Engineering report preparation, including AKART analysis, comprehensive single line diagrams, process modeling, and statistical process control parameters. Upon completion of the proposed process changes, the facility became fully compliant with all operating permits. Reviewed and approved under Ecology’s SW Region team. Engineer of Record for Facility SPCC Plan.

WORK HISTORY

Aquarius Environmental, LLC – Founder & Principal Engineer	Current
StormwaterRx – Founder & Vice President of Engineering	2006-2008
CONTECH Stormwater Solutions / Stormwater Management, Inc. – Project Engineer	2002-2006
Intel Corporation – Facilities Chemical Engineer	1997-2002
GE Water & Process Technologies (formerly Ecolochem)- Field Service Engineer	1996-1997
Virginia Department of Transportation – Environmental Specialist	1994-1996

EDUCATION

Bachelor of Science, Civil & Environmental Engineering	1996
Virginia Tech, Blacksburg, VA	

PROFESSIONAL REGISTRATIONS

Registered Professional Engineer: Washington, Oregon, Arizona, Hawaii, Idaho	Current
California Qualified Industrial Stormwater Practitioner (QISP)	Current
High Purity Water Treatment Specialist – David H. Paul, Inc.	1997/1999
Certified, Hazardous Waste Operations and Emergency Response	1996

INVENTIONS

Stormwater Filtration System, Patent #8002974, Scarpine, D.A., et al. “Passive Stormwater Management System and Apparatus.” Granted 2011.

SELECT PUBLICATIONS AND PRESENTATIONS

Scarpine, D.A. “BMP Escalator – From Inserts to Active Treatment in 10 years”, Proceedings of the NEBC, Managing Stormwater in Oregon, June 2021.

Scarpine, D.A. “Shipyard Treatment 2.0 – An Industrial Stormwater Case Study”, Proceedings of the NEBC, Managing Stormwater in Oregon, June 2018.

Scarpine, D.A. “Level 3 Times 2 – Cost Effective Soluble Zinc Removal”, Proceedings of the NEBC, Managing Stormwater in Washington, March 2018.

Scarpine, D.A. “No Permit? Know Onsite Stormwater Management”, Proceedings of the NEBC, Managing Stormwater in Oregon, May 2015.

Scarpine, D.A. “Managing Multiple Contaminants & Organics; Organics Overview”, Proceedings of the NEBC, Managing Stormwater in Washington, March 2014.

Scarpine, D.A. “What do I need to do in advance of advanced treatment?”, Proceedings of the NEBC, Business and the Environment, December 2013.

Scarpine, D.A. “Advanced Techniques – Industrial Stormwater Treatment – How do you pick a Winning Solution?”, Proceedings of the NEBC, Business and the Environment, December 2012.

Scarpine, Daniel A.

Scarpine, D.A., Green, S. "How to Fit 10 Pounds of Filtration in a 5 Pound Sack. A Case Study of a Microfootprint, High Performance Disc Filtration System", proceedings of North American Surface Water Quality Conference & Exposition (STORMCON), August 2012.

Scarpine, D. A. "Dollars and data –The art of data driven decision making for water discharge" NEBC, proceedings of Business and the Environment Conference. November 2011.

Scarpine, D.A., Krause, D. "Trick or Treat: Why BMP Performance is Irrelevant for Industrial Stormwater", proceedings of North American Surface Water Quality Conference & Exposition (STORMCON), August 2010.

Scarpine, D. A. "A really inconvenient truth...Advanced Treatment isn't in the manual, Now What?" NEBC, proceedings of Managing Stormwater in Washington Conference. March 2010.

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Greg Summers, MS, PWS

Principal Scientist

Greg Summers is a Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists. He has undergone formal training in wetland delineation, mitigation, plant identification, and soils. Mr. Summers manages all varieties of wetland and biological projects and performs wetland delineations, impact assessments, functions and values assessments, permitting, and mitigation. His mitigation design experience includes freshwater wetlands (emergent, scrub-shrub, and forested), estuarine, dam removal, and stream restoration.

Mr. Summers manages all varieties of wetland projects and performs wetland delineations, impact assessments, functions and values assessments, permitting, and mitigation. He manages projects in support of land-use planning, Clean Water Act (CWA) Section 404 permit applications, and state and local wetland enforcement activities, including the Land Conservation and Development Commission. Mr. Summers has provided expert testimony for clients, for jury trials, and at public land-use hearings for wetland law. He has worked throughout the United States in Oregon, Washington, Montana, Alaska, Idaho, Wyoming, Utah, California, Wisconsin, Nevada, Illinois, Virginia, Kentucky, Tennessee, Georgia, Mississippi, and the Canadian Provinces of British Columbia, Alberta, Northwest Territories, and Ontario.

Mr. Summers has served as a project director or project manager for various types of projects throughout the western United States, from large, controversial NEPA EISs to small wetland delineations. His duties include project scoping assistance and oversight, project approach and strategy, overall project management, field oversight, document oversight, QA/QC, budget tracking, client interactions, and personnel oversight.

Mr. Summers' regulatory experience includes NEPA (EIS and EA); ESA, including wildlife, plants, and fish; and CWA Sections 404 and 401. Mr. Summers is experienced in the interpretation and implementation of the NEPA guidelines of a variety of federal agencies, including the U.S. Army Corps of Engineers (USACE), U.S. Bureau of Land Management (BLM), U.S. Bureau of Reclamation, U.S. Department of Energy, Federal Highway Administration (FHWA), U.S. Fish and Wildlife Service (USFWS), Federal Aviation Administration (FAA), and U.S. Forest Service. He has worked with multiple federal agencies on federal and state environmental regulatory processes, including the Office of Surface Mining, U.S. Environmental Protection Agency

Education

MS, Range Science, North Dakota State University, Fargo, 1993

BS, Reclamation (Biological Emphasis), University of Wisconsin, Platteville, 1990

Licenses/Certifications

Professional Wetland Scientist (PWS), No. 0001152

Work History

Anchor QEA, LLC, Principal Scientist and Senior Associate, 2013 to present

Beak/Jones & Stokes/ICF, Senior Wetland Scientist, 1997 to 2013

Jacobs-Bechtel, NEPA Specialist, 1995 to 1997

Beak Consultants Incorporated, Wetland Scientist, 1993 to 1995

(USEPA), USFWS, National Marine Fisheries Service (NMFS), and National Park Service. He has assisted both public and private clients.

Project Experience

Expert Witness/Testimony

Marshland Drainage District

*Confidential Client
Everett, Washington*

Mr. Summers was retained as an expert witness in this project. The plaintiff brought suit under Section 505 of the CWA alleging violations of Sections 301(a) and 404 of the CWA. Specifically, the plaintiff alleged that the defendant illegally rerouted, deepened, and filled irrigation drainage ditches and streams, violated Section 401 of the CWA, and caused damage to their property by completing the unpermitted work. Mr. Summers provided expert opinion, rebuttal of plaintiff's experts opinions, deposition, and expert advice in the settlement agreement developed for the case.

Skykomish River

*Confidential Client
Monroe, Washington*

Mr. Summers was originally hired to provide expert advice to the state-appointed public defender for a defendant under investigation for violations of the CWA by USEPA. The site had experienced multiple unpermitted activities that occurred between 2007 and 2009 on the subject property. Mr. Summers was approved by the State of Washington to support the public defender providing technical wetland and CWA advice. Upon the passing of the defendant, Mr. Summers was then hired to provide the same advice and technical expertise in designing a restoration plan to be approved by USEPA and USEPA's wetland expert. Mr. Summers developed the restoration plan, which was approved by USEPA and their wetland expert.

Marshland Drainage District

*Confidential Client
Everett, Washington*

Mr. Summers was retained as an expert witness in this project. The plaintiff brought suit under Section 505 of the CWA alleging violations of Sections 301(a) and 404 of the CWA. Specifically, the plaintiff alleged the client rerouted a stream, lengthened an irrigation ditch, and removed one and placed two crossings on another irrigation ditch. Mr. Summers is providing expert opinion, rebuttal of plaintiff's opinions, and expert advice in developing a settlement agreement for the case.

Tickle Creek

*Confidential Client
Sandy, Oregon*

Mr. Summers was retained as an expert witness in this project. The defendant was charged with violating the development code of the City of Sandy, and Mr. Summers was retained to provide expert witness and testimony in the jury trial. The development occurred within the buffers to wetlands and streams, and Mr. Summers provided information on wetland delineation methods; regulations

Project Experience

regarding wetland protection, permitting, and mitigation; and general wetland ecology.

Expert Witness

*Confidential Client
Clackamas County, Oregon*

Mr. Summers was retained as an expert witness to provide testimony regarding wetland delineation methodology and his opinion on the wetland boundaries determined by another party. The case was tried by jury and focused on determination of wetland boundaries and whether the wetlands were jurisdictional under federal and state laws. Mr. Summers was deposed and provided testimony in two jury trials regarding the matter.

Regulatory Compliance/Permitting

Regulatory Support

*Confidential Client
Port of Grays Harbor, Washington*

Mr. Summers is the principal in charge for this project, which involves assisting a confidential client with understanding the regulatory complexities applicable to their proposed project. He is assisting the project manager with providing strategic assistance to the client in navigating the environmental review processes needed and all permits that would be required to build the project. This involves ensuring the project is compliant with NEPA and SEPA and has adequate documentation, including supporting surveys and studies, to obtain all necessary permits for construction.

Centralia Mine West Field Expansion Project

*TransAlta Centralia Mining, LLC
Lewis County, Washington*

TCM has identified lands immediately west of the Centralia Mine permit area as a potential source of additional coal to supplement the permitted reserves at the mine. In support of future permitting to expand the existing permit area boundary, TCM investigated the environmental resources present in the West Field expansion area that could be affected by any mining operations there. As project director, Mr. Summers managed the documentation of the baseline environmental conditions for wildlife resources, fishery resources, and wetlands that occur on and around the West Field expansion area, and he prepared the baseline wildlife and wetlands report. For the baseline wildlife effort, existing wildlife habitats on the expansion area were mapped; wildlife expected to occur in the expansion area were identified; and an assessment was made of the likelihood that the expansion area supports candidate, proposed, threatened, or endangered wildlife species identified by federal or Washington state agencies. For the wetland report, a delineation, functions and values assessment, and preliminary impact assessment and mitigation plan were completed.

Project Experience

Marshland Drainage District Channel Relocation

*Golden Eagle Farms
Everett, Washington*

Mr. Summers is the principal in charge for this project, providing environmental support for the relocation of a drainage ditch within the Marshland Drainage District in Everett, Washington. The project requires a SEPA checklist, critical areas report and checklist, Shoreline Substantial Development permit, JARPA documentation, mitigation and restoration plan, Bonneville Power Administration and Puget Sound Energy utility easement and coordination, and ESA compliance (no effects letter) and supporting studies. Mr. Summers oversaw the completion of all the studies, supporting documentation, and applications.

Skykomish River Restoration

*Karl Fredrick Klock Pacific Bison,
LLC, and Bobby Wolford Trucking
and Demolition, Inc.
Monroe, Washington*

Anchor QEA was hired to assist in restoring hydrologic connectivity to a property adjacent to the Skykomish River near Monroe, Washington. The site had experienced multiple unpermitted activities that occurred between 2007 and 2009 on the subject property. In addition to restoration of the unpermitted work, additional hydrologic and biologic improvements were proposed for the property that will improve fish access to the floodplain during a wide range of hydrologic conditions. Overall, proposed site modifications include restoration components such as the following: reconnection and restoration of a large oxbow, restoration and reconnection of a small tributary to the oxbow, installation of culvert and at-grade crossings, and removal of invasive species. A basis of design report was prepared and presented to USEPA in addition to a JARPA for the work.

Mitigation Bank Site Evaluation

*Confidential Client
Westport, Oregon*

Mr. Summers evaluated a 1,000-acre site in the Lower Columbia River as a potential mitigation bank. The evaluation included assessing the feasibility of the site for use as a multiple credit mitigation bank for wetlands and ESA-listed fish (e.g., salmonids) and wildlife (e.g., Columbia white-tailed deer). The analysis included evaluating the site for levee breaching, wetland restoration, salmonid habitat restoration, wildlife habitat restoration, potential credits for wetlands and fish and wildlife, and the market potential for a bank in the service area. Conceptual plans included levee breaching, wetland restoration, and grading and planting plans.

Project Experience

U.S. Golden Eagle Farms
Permitting, Irrigation Planning,
and Restoration Projects for
Multiple Blueberry Farms
*Aquilini Group, LLC
Snohomish and Lewis Counties,
Washington*

Mr. Summers is managing these projects providing environmental support for multiple locations for U.S. Golden Eagle Farms. Projects include planning for water withdrawal from rivers for irrigation purposes, irrigation ditch maintenance and relocation, and restoration for project impacts. Irrigation projects have included planning for pump design, water distribution, irrigation pond design, and all associated permitting. Permitting for irrigation ditches for non-exempt activities included wetland delineation and reporting, SEPA checklist preparation, critical areas determination and reporting, a Shoreline Substantial Development permit, JARPA documentation, ESA compliance (no effects letter), floodplain no-rise analysis, coastal zone management compliance, hydraulic project approval documentation and obtainment, and mitigation and restoration planning. Restoration has included fish restoration for land clearing activities, ditch restoration for ditch relocation activities, and wetland restoration for permit compliance. Anchor QEA prepared all of the studies in support of the permit applications and regulatory compliance, including agency coordination and response to comments.

Rural Industrial Land Bank
Assessment
*Clark County
Clark County, Washington*

Mr. Summers oversaw a review of Clark County Critical Areas Ordinance mapping, historical aerial photos, and U.S. Geological Survey soil surveys for five sites located throughout Clark County. All five sites were more than 100 acres in size and being considered for inclusion in Clark County's Rural Industrial Land Bank. Mr. Summers oversaw the completing an existing conditions site report, which discussed how the designated or potential critical areas present at the site, combined with the applicable county critical areas and water quality regulations or standards might create opportunities or challenges to the potential development scenarios. The reports were used to support the development of the programmatic environmental review required as part of the evaluation of suitable lands for inclusion in Clark County's urban growth area.

Project Experience

Residential Development Projects

*West Hills Land Development
Washington, Multnomah, and
Clackamas Counties, Oregon*

For more than 20 years, Mr. Summers oversaw the natural resource permitting needs for West Hills Land Development. He either performed or oversaw the wetland delineations of wetlands and non-wetland waters for more than 30 prospective residential development projects in Washington, Multnomah, and Clackamas counties. Responsibilities included conducting Clean Water Services' natural resource assessments, federal and state wetland functions and values assessments, and county significant natural resource inventories and critical areas assessments; evaluating potential project-related impacts to sensitive areas and ESA-listed species in order to develop reports and permit applications for submittal to regulatory agencies; and preparing project impact alternative analyses, purpose-and-need statements, and mitigation and restoration plans.

Recreational Land Use Evaluation

*Confidential Client
Washington and California*

As project director, Mr. Summers supervised the development and preparation of a recreational land use evaluation for a client with large land holdings in Washington and California. The client requested the study to determine if revenue could be generated from their lands for recreational use while they sit idle waiting for timber prices to recover. An exhaustive study of potential uses (e.g., destination resort, hunting, fishing, road rallies, zipline park) was undertaken and then refined based upon up-front cost, liability, and low revenue returns, among others.

Wapato Lake National Wildlife Refuge Pump House Bridge and Gaston Feed Store Bridge Replacement Projects

*U.S. Fish and Wildlife Service
Portland, Oregon*

USFWS is restoring 1,000-plus acres of wetland at Wapato Lake National Wildlife Refuge. Lakebed restoration actions would be accomplished by reseeding or planting native vegetation and managing site hydrology (water levels) within the 800-acre lakebed portion of the Project with pumping infrastructure. Anchor QEA prepared the BA, wetland delineation, and CWA Section 404 permits for replacing two bridges to provide safe, structurally sound access points for USFWS to perform restoration and long-term management actions associated with the restoration, including access to pumping infrastructure to manage lakebed water levels.

Watters Quarry Clean Water Act Permitting and Compensatory Mitigation Design

*Knife River Corporation
Portland, Oregon*

Mr. Summers was the project director overseeing the wetland mitigation planning and design, biological support, removal/fill permitting compliance, cultural resources investigation and compliance, and hydrologic evaluation and monitoring for this project. The mitigation involves designing a design for more than 30 acres of wetland, including ephemeral meadow wetlands. A surface water budget and groundwater study is being conducted to inform the design of the mitigation plan.

Project Experience

Troutdale Reynolds Industrial Park

*Port of Portland
Portland, Oregon*

Mr. Summers served as a project manager on a multidisciplinary team to develop potential industrial site development footprints for a 700-acre former aluminum production facility. He oversaw the assessment of wetland functions and values using the Oregon Rapid Wetland Assessment Protocol (ORWAP) and the use of scores to evaluate potential development scenarios. Mr. Summers oversaw development of a draft alternatives analysis document and provided conceptual mitigation designs, assisted in the development of a large-scale conceptual mitigation plan to address compensatory wetland mitigation needs and flood storage capacity, and oversaw the calculations for wetland functions and values losses and gains to demonstrate that the proposed compensatory wetland mitigation plan provided adequate functional lift.

Klamath River Hydroelectric Federal Energy Regulatory Commission Relicensing

*PacifiCorp
Klamath Falls, Oregon*

As part of the Federal Energy Regulatory Commission relicensing effort, Mr. Summers' firm was retained to determine the anadromous fish production potential of stream habitat in the Upper Klamath River basin under various fish passage alternatives developed by participants in the relicensing process. To answer this question, a state-of-the-art ecosystem diagnosis and treatment model (EDT) was used to determine the quality and quantity of over 200 miles of stream habitat. Data on 46 environmental attributes important to fish were rated and loaded into the EDT model on a reach-by-reach basis. The model was then run under a range of fish passage alternatives, including dam removal, to estimate fall Chinook salmon abundance productivity resulting from the implementation of each alternative. The model was also used to identify those environmental attributes and assumptions that were having the greatest effect on study results. Mr. Summers was the project director.

Mt. Scott Creek Dam Removal

*Clackamas County
Clackamas County, Oregon*

Mr. Summers was a project manager for the removal of a dam on Mt. Scott Creek. The project included the preparation of a biological assessment to determine potential impacts on ESA-listed fish and general biological insight into the design of the stream channel once the dam is removed, including substrate, channel shape, and planting recommendations. Mr. Summers also managed the preparation of all permits and supporting material for project construction.

Mitchell Creek Sedimentation Pond Biological Assessment

*TransAlta Centralia Mining, LLC
Lewis County, Washington*

As project director, Mr. Summers directed the preparation of a BA evaluating effects on sensitive fish species of a mine-related sediment pond proposed in a headwater tributary of Mitchell Creek. Species addressed in the BA were bull trout and coastal

Project Experience

cutthroat trout. Conservation measures were designed to mitigate impacts of the proposed action.

Time Oil Road Turtle Underpass Design
*Port of Portland
Multnomah County, Oregon*

As project director, Mr. Summers reviewed available information on the design and construction of small-animal underpasses and designed a generic underpass system to allow safe passage of western painted turtles and other small animals under Time Oil Road. The underpass system included orientation/exclusion fencing and a single underpass linking wildlife habitat areas.

Thor Lake Independent Review
*Mackenzie Valley Land and Water Board
Northwest Territories, Canada*

Mr. Summers conducted an independent review of wetlands, surface water, and water quality sections of a mine permit application prepared for a proposed rare earth metals mine near Great Slave Lake, Northwest Territories, Canada. The mine proposes to mine, mill, and produce rare earth carbonate and oxides, zirconium, niobium and tantalum oxides, and possibly gallium from the Nechalacho deposit. The proposed mine has two components: an underground mine and flotation plant and a hydrometallurgical plant. The metals would be shipped by barge across Great Slave Lake to the hydrometallurgical plant. Impacts were assessed from the mining, processing, and transportation processes to wetlands, surface water, water quality, and potential receptors. The results of the study were presented to the Mackenzie Valley Land and Water Board for consideration in granting a permit to Avalon Rare Metals, the project proponent.

Sutherlin Knolls Industrial Park
*Oregon Economic and Community Development Department
Sutherlin, Oregon*

As project manager, Mr. Summers prepared the purpose and need/alternatives analysis and conceptual mitigation plan for the 200-acre Sutherlin Knolls Industrial Park (SKIP) in Sutherlin, Douglas County, Oregon, via the "Project Ready Industrial Sites Initiative." The SKIP received industrial certification from the Oregon Economic and Community Development Department (OECDD) in February 2006.

Oak Creek Industrial Park
*Douglas County Department of Public Works
Roseburg, Oregon*

As project director, Mr. Summers oversaw the performance of multiple wetland planning services including a wetland delineation, wetland functional assessment, conceptual site plan, purpose and need/alternatives analysis, and conceptual mitigation plan for the proposed 23-acre Oak Creek Industrial Park (OCIP) near Roseburg, Douglas County, Oregon, via the "Project Ready Industrial Sites Initiative." The OCIP received industrial certification from OECDD on July 15, 2005.

Elgin and La Grande-to-Cove Gas Line Extension Projects

This project required CWA Section 404 and ESA compliance, including wetland delineations and potential, threatened, endangered, and sensitive species surveys for a 14-mile natural gas

Project Experience

*Avista Corporation
La Grande, Oregon*

line extension project in eastern Oregon. As project director, Mr. Summers supervised collection of field data on soils, vegetation, and hydrology; project budget; final report; and preparation of site maps.

**Union-to-Cove Fiber-Optic
Installation Project**
*GTE
Union/Cove, Oregon*

This project required CWA Section 404 and ESA compliance, including wetland delineations and surveys for potential, threatened, endangered, and sensitive species for a 12-mile fiber-optic cable installation project. As project director, Mr. Summers supervised the fieldwork to collect data on soils, vegetation, and hydrology; project budget; final report; and preparation of project maps using AutoCAD and GIS. Mr. Summers coordinated with USACE, the Oregon Department of State Lands (ODSL), and the Oregon Department of Transportation (ODOT) to determine jurisdictional status of the waters in the project corridor and related permitting requirements.

Level III Fiber-Optic Project
*Kiewit Construction
Oregon and Washington*

Mr. Summers was a project manager for the natural resource baseline surveys, noxious weed surveys, construction oversight, and noxious weed control and mitigation plan for more than 500 miles of right-of-way for the installation of fiber-optic lines in five counties in southeastern Washington and northeastern Oregon. Baseline data were collected on waters of the United States and state, noxious weeds, and general habitat. All resources were mapped on project maps to assist in minimizing impacts to the maximum extent practical, mitigation plans were prepared, and construction oversight was completed.

**Jenkins-Kim Significant Natural
Resource Inventory**
*LDC Design Group, Inc.
Washington County, Oregon*

As project manager, Mr. Summers oversaw the preparation of a Washington County Section 422 Significant Natural Resource Inventory (SNRI) as part of the permitting effort for a 20-acre residential development site recently annexed into the urban growth boundary. The SNRI described and mapped wetland, riparian, and wildlife habitat types; assessed their resource value to wildlife; and determined project impacts on significant natural resources.

Project Experience

**Skookumchuck Gravel Pit
Wildlife Resources Report**
*TransAlta Centralia Mining, LLC
Lewis and Thurston Counties,
Washington*

As project director, Mr. Summers assessed the potential impacts of a proposed 41-acre gravel pit expansion on Washington priority species (bald eagle, western gray squirrel, and Mardon skipper) and habitats (Oregon white oak woodland). He also developed a management plan to protect and mitigate important wildlife habitats and species.

**Annual National Pollutant
Discharge Elimination System
Report**
*Port of Portland, Oregon
Portland, Oregon*

Mr. Summers was a project manager for the completion of the 2000–2001 Annual Report for the Port’s joint National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Discharge Permit. This project included contacting the managers of each operating area (i.e., marine, aviation, and properties) to obtain information on stormwater-related activities (e.g., training, monitoring) that occurred during the 2000–2001 monitoring year and compiling a report summarizing the results.

**Portland International Airport
Airfield Safety Improvements
Project Biological Assessment**
*Port of Portland
Portland, Oregon*

Mr. Summers was a project manager for the preparation of a BA determining the potential effects of implementing runway safety improvements on ESA-listed species. Potential effects to bald eagles and plants were assessed.

**Natural Resources Inventory
and Assessment Mapping
Project**
*Port of Portland
Portland, Oregon*

Mr. Summers was the overall project director of the Port of Portland’s habitat inventory of their properties. He supervised and coordinated the field effort to collect data on vegetation and habitat elements for undeveloped areas on more than 16 Port of Portland-owned properties. He tested and refined data collection procedures and trained others in the use of this protocol. Aerial photographs were used to map individual habitats. Mr. Summers provided updated maps and data forms to the Port of Portland for entry into an Access database and coordinated in-house map digitization and data entry efforts to aid the Port of Portland in meeting their project deadlines.

**Annual National Pollutant
Discharge Elimination System
Report**
*Port of Portland
Portland, Oregon*

As project director, Mr. Summers prepared the 1999–2000 and 2000–2001 annual reports for the Port of Portland’s joint NPDES municipal separate storm sewer system discharge permit. He contacted managers and other personnel of each operating area (i.e., marine, aviation, and properties) to obtain information on the implementation of the best management practices addressed in the Port of Portland’s municipal storm water management plan, including related training and monitoring. Mr. Summers supervised

Project Experience

Little Deschutes River

Biological Evaluation

*Oregon Department of
Transportation
Klamath County, Oregon*

the preparation of a detailed report summarizing results that was submitted to the Oregon Department of Environmental Quality.

As a botanist, Mr. Summers prepared a BA for a proposed bridge reconstruction project. He prepared a U.S. Forest Service BE addressing impacts of bridge construction on any proposed, endangered, threatened, and sensitive (PETS) species.

Badger Creek Wetland Delineation and Biological Evaluation

*Oregon Department of
Transportation
Wasco County, Oregon*

As a wetland scientist, Mr. Summers performed a wetland delineation, impact assessment, and conceptual mitigation report for a proposed bridge reconstruction project. He prepared a wetland delineation report and supporting documentation for CWA Section 404 permitting.

Chanute Air Force Base

*U.S. Air Force
Chanute, Illinois*

As an ecological risk assessor, Mr. Summers conducted an ecological risk assessment as part of this proposal. He used hypothetical bioassay values to conduct a risk assessment following USEPA Risk Assessment Guidance for Superfund, Vol. II: Environmental Evaluation Manual, for wildlife, threatened and endangered species, and vegetation.

Waste Area Groups 22, 23, 1 and 7, and 17

*Paducah Gaseous Diffusion Plant
Paducah, Kentucky*

As an ecological risk assessor, Mr. Summers reviewed and commented on ecological risk assessments conducted as part of a cleanup effort for these waste area groups at Paducah Gaseous Diffusion Plant. Contaminants of concern included most organics, inorganics, and radionuclides. Mr. Summers ensured that USEPA guidelines were followed and that results were correct for all endpoint species.

Centralia Mine Sensitive Species Assessments

*TransAlta Centralia Mining, LLC
Lewis and Thurston Counties,
Washington*

TCM is preparing a permit renewal application for submittal to the U.S. Office of Surface Mines (OSM) to renew coal-mining leases at the Centralia Mine in western Washington. OSM requires the 14,450-acre mine, in operation since 1969, to renew its operating permit at a maximum of 5-year intervals through the life-of-mine permit (2025). As project director, Mr. Summers supervised the preparation of a BA (federal) and a biological report (state) to determine whether renewal of mining operations is likely to affect any federal or state proposed, threatened, endangered, or sensitive species, as well as federally proposed or designated critical habitat. The BA addressed coastal cutthroat trout, bull trout, coho salmon, Olympic mudminnow, bald eagle, Oregon spotted frog, Mardon skipper, white-topped aster, and small-flowered trillium.

Project Experience

Short Mountain Landfill Crocker Property Mitigation Plan

*Lane County Department of Public
Works
Lane County, Oregon*

Lane County retained Mr. Summers' firm for more than 5 years to aid the Waste Management Division with its environmental permitting needs for several projects. They permitted and oversaw the implementation of a multiphase project involving more than 110 acres of wetland fill and 262 acres of wetland and upland mitigation. Part of the permitting included development of the mitigation site as a wetland mitigation bank. As the project director/manager/wetland delineator, Mr. Summers' responsibilities included mitigation design, delineation of wetland and wildlife habitat, and hydrogeomorphic (HGM) assessment. The project also involved several federally listed species and involved take of Bradshaw's lomatium (*Lomatium bradshawii*), an endangered plant. Other deliverables included a comprehensive biological resource inventory, a consolidated wetland report (compilation of five separate delineations), and an analysis of on- and off-site alternatives.

Rivergate Industrial District Mitigation Sites Monitoring

*Port of Portland
Portland, Oregon*

As project director, Mr. Summers supervised Year 1 through Year 5 monitoring of two of the Port of Portland's mitigation sites in the Rivergate Industrial District as required by the terms and conditions of their Rivergate Consent Decree with USACE, their DSL permit, and their permit with the City of Portland Bureau of Development Services. He assisted in the development of the vegetation sampling protocols and monitoring procedures utilized for the Ramsey Lake Enhancement Area/Visual Buffer and the 40-Mile Loop Trail Mitigation Site/Levee Repair Area sites. He also managed the field crew in Year 1 and supervised the following years. He assisted in the data analysis and provided QA/QC for the monitoring reports.

40-Mile Loop Trail Permit Application

*Port of Portland
Portland, Oregon*

As project manager, Mr. Summers worked closely with Port of Portland personnel to prepare a Joint CWA Section 404/Removal-Fill Permit application for the proposed 40-Mile Loop Trail Project along the Columbia Slough in the Rivergate Industrial District. He coordinated with the Port's engineering department, other consultants, and the City of Portland Bureau of Environmental Services to obtain information on the proposed trail impacts and restoration efforts. He assisted in preparation of the proposed mitigation plan and permit application figures. He also prepared a permit application for submission to ODSL and responded to agency comments.

Rivergate Consent Decree Permit Application

Port of Portland

As project manager, Mr. Summers prepared a Joint CWA Section 404/Removal-Fill Permit application for submission to ODSL for the

Project Experience

Portland, Oregon

restoration and fill removal actions required under the Rivergate consent decree.

North Simmons Road Wetland Delineation and Permit Application

*Port of Portland
Portland, Oregon*

As project manager, Mr. Summers performed a wetland delineation and prepared the associated report for the North Simmons Road property in the Rivergate industrial district. He met with Port of Portland property personnel, the prospective tenant, and agencies to discuss project details and proposed impacts, and prepared a Joint CWA Section 404/Removal-Fill Permit application for submission to ODSL and USACE.

Natural Resources Analyses of a Proposed Aggregate Site Adjacent to the Willamette River

*Eugene Sand and Gravel
Eugene, Oregon*

As an environmental scientist, Mr. Summers worked on this comprehensive natural resources assessment and permitting for a proposed 450-acre aggregate mining site. He provided documents and testimony for County Land-Use (State Goal 5) process; developed a wetland permit package, including alternatives analysis and mitigation design; and prepared NEPA documentation, including a BA for bald eagle and fish species. He coordinated with eight regulatory agencies and local public interests.

Highway 26 Realignment

*Oregon Department of
Transportation
Grant County, Oregon*

As a botanist, Mr. Summers performed a PETS species study for the proposed realignment of Highway 26. He prepared a report concerning consequences of all alterations on PETS species.

Coastal Timber Harvest Project

*Stimson Forestry
Linn County, Oregon*

As a botanist, Mr. Summers performed a PETS species study for the proposed clearing of logging roads. He prepared a report detailing findings and consequences of the proposed clearing of logging roads on PETS species.

Wetlands

Big Creek In-Line Valve Replacement

*Northwest Natural
Knappa, Oregon*

As principal in charge, Mr. Summers oversaw the completion of the wetland delineation and permitting support for the Big Creek Mueller In-Line Valve Replacement Project. The project involved excavating a portion of their right-of-way to access and retrofit an existing in-line valve. A wetland delineation, report, and permitting support was provided to the client to construct the project.

Fertile Valley Creek

*Northwest Natural
Knappa, Oregon*

As principal in charge, Mr. Summers oversaw the completion of the wetland delineation and permitting support for the Fertile Valley Creek pipeline replacement project. The project involved the replacement of an exposed section of a 10-inch high-pressure natural gas line in the channel of Fertile Valley Creek by using horizontal directional drilling to install a new line approximately

Project Experience

30-plus feet below the elevation of the existing streambed. A wetland delineation and report was prepared to avoid the need for obtaining permits by avoiding any wetland impacts.

Highway 26 – Austin Junction
*Oregon Department of
Transportation
Austin Junction, Oregon*

As an environmental scientist, Mr. Summers assessed impacts to wetlands and PETS plant species for the proposed realignment of Highway 26. He also prepared associated sections of an EA detailing wetland and PETS species impacts and possible mitigation measures.

**JARPA Permitting and
Mitigation Planning**
*TransAlta Centralia Mining, LLC
Lewis and Thurston Counties,
Washington*

As project manager, Mr. Summers oversaw the preparation of mitigation plans for various mining-related projects requiring a JARPA. Work included assessing direct and indirect wetland impacts and meeting with agencies to develop the appropriate wetland and stream mitigation plans. Mitigation plans included a biological and engineering report to describe the mitigation approach. Mr. Summers managed staff to prepare support JARPA documents such as BAs and NHPA Section 106 reports for submittal to permit agencies. He conducted meetings with agencies to discuss mitigation options and obtain JARPA-related permits.

**Big Hanaford Creek
Construction Plans,
Observation, and Monitoring**
*TransAlta Centralia Mining, LLC
Lewis County, Washington*

As project director, Mr. Summers supervised the development and preparation of construction bid documents for a 150-acre wetland and stream restoration project and assisted the project owner in the bid selection process. He prepared a construction observation and monitoring plan to provide on-site review of the excavation of a new stream channel; construction of large woody debris stream structures; and installation of more than 300,000 native trees, shrubs, and emergent plants. He prepared daily field observation forms with observations made and recommendations to the project owner.

**McClelland Lake Wetland
Complex Functional
Assessment Approach**
*Petro-Canada Oil Sands, Inc.
(Suncor Energy Ltd.)
Fort McMurray, Alberta, Canada*

As project manager, Mr. Summers managed the development of a wetland functional assessment methodology for the McClelland Lake Wetland Complex, an 18-square-kilometer, highly diverse wetland system proposed for oil-sands mining. He met regularly with a multi-stakeholder committee composed of representatives from the industry, provincial regulatory agencies, and Aboriginal communities to develop a consensus on the definition of key project terms and identify the wetland functions occurring in the system and the indicators that could be used to assess them. He reviewed existing scientific studies on wetland functional assessment, boreal peatland ecology, and the effects of oil-sands mining on wetlands. Mr. Summers compiled information provided

Project Experience

by multiple technical experts that contributed to a comprehensive functional assessment report.

Wetland Policy White Paper

*Shell Canada, Inc.
Alberta, Canada*

Mr. Summers was the project director for developing a white paper on the status of the science and policy regarding wetland regulations in Canada. The paper focused on the comparison of Alberta and Canada wetland regulations with Washington State and the U.S. regulations.

Buckskin Mine Hay Creek II Amendment Area Wetland Delineation

*Buckskin Mining Company-Kiewit Mining Properties, Inc.
Gillette, Wyoming*

As project director, Mr. Summers oversaw the methodology for delineating potential wetlands and other waters of the United States within the 1,009-acre Hay Creek II Amendment Area at the Buckskin Mine, the northernmost surface coal mine in Wyoming's Powder River Basin. He supervised the collection of field data on the existing wetlands and other waters of the amendment area and the mapping of their boundaries. He reviewed and quality checked a detailed wetland delineation report submitted to the USACE Wyoming Regulatory Office for review and concurrence.

Baseline Assessment Surveys for Pacific Connector Gas Pipeline

*Williams-Northwest Pipeline Corp. and Edge Environmental
Coos Bay/Malin, Oregon*

As project director, Mr. Summers oversaw baseline data collection for this proposed 223-mile-long pipeline project between Coos Bay and Malin. He oversaw the survey of a 400-foot-wide study area to delineate wetlands and streams; collection of data on wetland vegetation, soils, and hydrology; and recording of stream characteristics and data for wetland functional analysis. He prepared survey maps, data spreadsheet compilation, HGM functional analysis reports, and the wetland/waters delineation report.

Buckskin Mine Permit Area Delineation and Nationwide Permit 21 Renewal Application

*Buckskin Mining Company-Kiewit Mining Properties, Inc.
Gillette, Wyoming*

As project director, Mr. Summers supervised the delineation of potential wetlands and other waters of the United States within the existing 8,011-acre Wyoming Department of Environmental Quality Land Quality Division permit area of the Buckskin surface coal mine as part of the mine's renewal application to USACE for coverage under Nationwide Permit 21. The project involved reviewing previous delineations, CWA Section 404 Permits, mitigation plans, and monitoring reports to compile a comprehensive history of the wetland permitting and mitigation performed on the site to date. Mr. Summers supervised the collection of field data on the existing wetlands and other waters of the permit area and mapped their boundaries and the preparation of a detailed wetland delineation report submitted to the USACE Wyoming Regulatory Office for review and concurrence. He oversaw the preparation of the USACE pre-construction notification to renew the mine's coverage under

Project Experience

USACE's Nationwide Permit 21 for proposed future coal extraction operations in the permit area.

Pond 3B Natural Resources Assessment

*TransAlta Centralia Mining, LLC
Lewis County, Washington*

As project manager, Mr. Summers oversaw the evaluation of the natural resource value of wetlands associated with Pond 3B, a 115-acre coal fines refuse pond on the Centralia Coal Mine property where a functional wetland community has developed across much of the shallow water portions. He prepared the documentation of wetland, aquatic, and wildlife resources and evaluated overall functional value of developing wetland. He noted opportunities where active management could be employed to enhance similarly created wetlands and improve habitat conditions for fish and wildlife.

Pit 20 Wetland Mitigation Plan and Planting Plan

*TransAlta Centralia Mining, LLC
Lewis County, Washington*

As project manager, Mr. Summers evaluated the feasibility of creating viable wetland habitat at the Pit 20 site, an old coal mine pit undergoing reclamation. Historic wetland conditions were reviewed, on-site conditions were assessed, bathymetry of the pit was examined, and water quality was reviewed for potential contaminants. A detailed wetland mitigation plan was prepared that outlined landscape conditions, grading, hydrology, target wetland/riparian habitats, seeding and planting plans, special habitat features to benefit fish and wildlife, and wetland functions to be achieved. The plan was used by TCM to seek a land use change from the Office of Surface Mining.

Edgewater Properties Consolidated Wetland Delineation

*Matrix Development Corporation
Tualatin, Oregon*

As project manager, Mr. Summers prepared a wetland delineation report that combined the results of four previously performed wetland delineations into a single report for a proposed multiparcel residential development. He prepared a natural resource assessment report for this site for submission to Clean Water Services and a Joint CWA Section 404/Removal-Fill Permit application package for the proposed project.

Arbor Lakes Residential Development

*West Hills Development
Washington County, Oregon*

As project manager, Mr. Summers oversaw the wetland delineation, natural resource assessment, and permitting services for a 111-acre multiphase, multiyear residential development project. He supervised the delineation of potential wetlands and other waters of the United States, assessed their functions and values, planned compensatory wetland mitigation, and prepared Joint Section CWA 404/Removal-Fill Permit applications for proposed project impacts. He also oversaw the preparation of a Clean Water Services natural resource assessment to establish and mitigate the loss of protective buffers around wetlands and other water quality-sensitive areas.

Project Experience

Arbor Heights East Residential Development

*West Hills Development
Washington County, Oregon*

Mr. Summers served as project manager for the development of a 77-lot detached single-family home subdivision on a 21.51-acre parcel in Washington County. He oversaw the preparation of a Clean Water Services natural resource assessment for the project, including a complex upland vegetated corridor compensatory mitigation plan, and coordinated with ODFW on fish passage issues. He supervised preparation of a Joint CWA Section 404/Removal-Fill Permit application, including a purpose and need statement and alternatives analysis, for the placement of fill material into wetlands and an excavated pond to facilitate road and lot construction. He also oversaw amphibian salvage activities in the drained pond to capture and relocate red-legged frogs to an off-site location per ODFW requirements.

Arbor Oaks Residential Development

*West Hills Development
Washington County, Oregon*

Mr. Summers served as project manager overseeing multiple wetland delineations, natural resource assessments, and permitting services for a 111-acre multiphase, multiyear residential development project. He supervised the delineation of potential wetlands and other waters of the state and United States, assessment of their functions and values, planning for compensatory wetland mitigation, and preparation of the Joint Section 404/Removal-Fill Permit applications for proposed project impacts. He also oversaw the preparation of a Clean Water Services natural resource assessment to establish and mitigate the loss of protective buffers around wetlands and other water quality sensitive area and to obtain service provider letters for the project.

Arbor Oaks Phase 1 Wetland Mitigation Monitoring

*West Hills Development
Washington County, Oregon*

Mr. Summers served as project manager overseeing the annual monitoring for an on-site compensatory wetland mitigation site at the Arbor Lakes Phase 1 residential development. He established the methodology for sampling on-site vegetation to determine survivorship of woody species and areal cover of herbaceous and invasive species; evaluating site hydrology and taking key photographs of mitigation features; assessing whether the site was meeting or on track to meet the performance standards required by the federal and state permits; and development of a site-specific invasive species control plan for reed canarygrass (*Phalaris arundinacea*).

Arbor Pass Creekside Residential Development

*West Hills Development
Hillsboro, Oregon*

Mr. Summers served as project manager for an application to obtain a revised Clean Water Services service provider letter for a condominium development in Hillsboro, Washington County, Oregon. He oversaw the preparation and submittal of a revised significant natural resource overlay impact and mitigation plan to meet City of Hillsboro zoning requirements.

Project Experience

Bethany Church Investors Property

*West Hills Development
Washington County, Oregon*

Mr. Summers served as project manager for the preparation of a wetland delineation for a 14.5-acre agricultural parcel proposed for future residential development. He reviewed the wetland delineation fieldwork and report and oversaw the preparation of a final submittal package to ODSL.

Waterleaf Residential Development Natural Resource Report

*Riverside Homes, Inc.
Portland, Oregon*

Mr. Summers served as project manager for the preparation of a natural resources report for a proposed residential development on a 26.54-acre site within a City of Portland environmental conservation zone. He oversaw the development of a natural resource inventory, wetland delineation, and wildlife habitat assessment, as well as the evaluation of the site for rare, threatened, and endangered plant and animal species habitat. In addition, he developed a wildlife habitat impact analysis, cumulative effects analysis, and mitigation plan describing how the permanent and temporary impacts of the development on natural resources would be compensated. Mr. Summers also oversaw the development of a Joint CWA Section 404/Removal-Fill Permit application for the placement of fill material into potential waters of the state and United States.

Arbor Pass Wetland Mitigation Monitoring

*West Hills Development
Hillsboro, Oregon*

Mr. Summers served as project manager for a pooled compensatory wetland mitigation site constructed for two off-site residential development projects. He oversaw the sampling of on-site vegetation to determine survivorship of woody species and areal cover of herbaceous and invasive species, evaluation of site hydrology and taking of key photographs of mitigation features, assessment of whether the site was meeting or on track to meet the performance standards required by the federal and state permits, and preparation of annual monitoring report for submission to USACE and ODSL.

Hillsboro Landfill

*Waste Management, Inc.
Hillsboro, Oregon*

For more than 14 years, Mr. Summers' former firm managed a variety of environmental issues associated with a 380-acre landfill site, of which approximately 200 acres is natural area within the Tualatin River floodplain. Mr. Summers was the project director, project manager, and wetland scientist. Prior to design, Mr. Summers oversaw and qualitatively assessed current functions and estimated those that likely existed during and prior to the 1852 Land Survey. This assessment guided design development for the 126-acre wetland mitigation site. The mitigation plan was based on a "self-design" concept, whereby the river has been harnessed to provide the majority of the site's hydrology and revegetation. By carefully designing the site topography to control and capture hydrology during vernal high flows, the firm created

Project Experience

various zones of preferred vegetation and minimized weed problems (mainly reed canarygrass). This approach was very successful and has greatly reduced planting efforts and associated cost (it was also found that vegetation is generally much more robust than similar sites in the vicinity utilizing traditional planting approaches). The design also included outlets to provide egress for federally listed salmonid species back to the channel following seasonal flooding. Additional site elements include a peat fen restoration modeled after fens known to have occurred in the Willamette Valley, which are now extremely rare, and construction of a vegetated perimeter corridor that provides flood-escape cover and habitat for wildlife.

Coffin Butte Wetland Mitigation

*Valley Landfills, Inc.
Adair, Oregon*

As project director, Mr. Summers designed and implemented two wetland restoration sites totaling approximately 15 acres. Both sites involved restoring former wetland and enhancing highly degraded wetlands to a wet prairie/ash forest sere, which is now rare in the Willamette Valley. Both sites contain Nelson's checkermallow (*Sidalcea nelsoniana*), a federally listed endangered plant species, and both sites have been designed to facilitate recovery of this species; they successfully increased the site's population size from about 20 plants to approximately 300 over the past 5 years.

Georgia Pacific Wauna Paper Mill Stormwater Ditch Remediation Project

*Bridgewater Group, Inc.
Clatsop County, Oregon*

As project manager, Mr. Summers oversaw the preparation of a wetland determination/delineation and preparation of a Joint CWA Section 404/Removal Fill Permit application to pipe and fill an existing stormwater ditch at Georgia Pacific's Wauna paper mill in Wauna, Clatsop County, Oregon. The project was part of an ongoing environmental remediation project at the former Koppers Wood-Treating Site pursuant to a voluntary remediation agreement with the Oregon Department of Environmental Quality.

Dry Creek Landfill

*Rogue Waste Services, Inc.
White City, Oregon*

As project manager and director, Mr. Summers developed a wetland permit package for a 654-acre landfill site. Permitting involved brokering a 30-acre parcel of unique vernal pool habitat (containing a federally endangered fairy shrimp species) in the Agate Desert to mitigate wetland impacts. This involved close coordination with USFWS, ODFW, ODSL, and USACE.

Eastbank Pedestrian Walkway

*Portland Development Commission
Portland, Oregon*

As a wetland scientist, Mr. Summers assisted in the completion of biological documentation of effects of this walkway project on threatened Lower Columbia River steelhead trout in the Portland Harbor area of Willamette River. He reviewed design plans and coordinated with engineering consultants and agencies to gain

Project Experience

Randall Wetland Mitigation Site Monitoring

*Port of Portland
Hillsboro, Oregon*

approval for project without need to conduct formal consultation under the ESA.

As project director, Mr. Summers oversaw the Year 2 through Year 7 monitoring of the Port's Randall Mitigation Site as required by the terms and conditions of their USACE and ODSL permits. He supervised the development of the vegetative sampling protocols and management of the field crew.

Arbor Heights/Arbor Crossing Residential Developments

*West Hills Development
Washington County, Oregon*

As project director, Mr. Summers supervised the wetland delineations for two properties proposed for residential development in Washington County, Oregon. He oversaw the preparation of separate wetland delineation reports, wetland functional assessments, and Joint CWA Section 404/Removal-Fill Permit applications for each project and the development of a combined compensatory wetland mitigation plan.

Sutherlin Industrial Park

*Douglas County Department of
Public Works
Sutherlin, Oregon*

As project manager, Mr. Summers performed a wetland delineation and Oregon HGM functional assessment for a 51-acre property proposed for commercial/light industrial development. He delineated herbaceous and vernal pool wetlands and prepared the associated report for submission to DSL. He conducted a functional assessment for both the wetland proposed for impact and the proposed mitigation site. He prepared conceptual plans for future site development and a conceptual compensatory wetland mitigation plan and the CWA Section 404(b)(1) alternatives analysis for potential impacts to wetlands and other waters of the state. Work was associated with the OECD's "Project Ready Industrial Sites Initiative."

Portland International Airport Southwest Quad Safety Fill Project

*Port of Portland
Multnomah County, Oregon*

The purpose of this project was to remove from the Southwest Quad habitat elements (i.e., wetlands, open water, and trees) that were serving as attractants to wildlife species determined to pose a wildlife strike hazard to aircraft operations, in compliance with FAA regulatory mandates. Specifically, the project involved converting a stormwater conveyance canal to an underground piped structure, filling adjacent wetlands and remnant drainage ditches, removing associated riparian forest patches, and modifying some existing grassland areas. As part of the project, Mr. Summers, a project manager, prepared a natural resource assessment for riparian habitat, described and mapped wildlife habitats, numerically assessed wildlife value using the Wildlife Habitat Assessment rating system, directed a City of Portland environmental review, and prepared a BA addressing impacts to proposed, threatened, or endangered species associated with filling 3.94 acres of wetlands and other waters. Mr. Summers also prepared a Joint CWA Section

Project Experience

	<p>404/Removal-Fill Permit application package to fill the approximately 3.94 acres of wetland and other waters, and he developed a mitigation plan for impacts to wetland and other waters.</p>
<p>Local Wetland Inventory <i>City of Port Orford</i> <i>Port Orford, Oregon</i></p>	<p>As project manager, Mr. Summers conducted a local wetland inventory of all wetlands (0.5 acre or larger) in the 2,570-acre City of Port Orford's urban growth boundary. Tasks included wetland mapping, collecting field data, coordination with agency and city staff, and assistance with community involvement.</p>
<p>Clackamas County Shooting Range Expansion <i>Clackamas County</i> <i>Clackamas County, Oregon</i></p>	<p>Mr. Summers oversaw the wetland delineation and buffer evaluation for the expansion of the Clackamas County Shooting Range. A wetland delineation and an assessment of the adjacent buffers was completed. The expansion encroached into buffers regulated by Water Environment Services, so a buffer mitigation plan was developed to compensate for the impacts.</p>
<p>Sunnybrook Wetland Delineation and Permitting and Mitigation Planning <i>Oregon Department of Transportation</i> <i>Clackamas County, Oregon</i></p>	<p>Mr. Summers conducted the wetland delineation, CWA Section 404 permitting, and conceptual mitigation design for the proposed Sunnybrook interchange improvement and Interstate 205 widening. Mr. Summers delineated the wetlands and compiled the results as an appendix to the permit application submitted to ODSL and USACE. As part of the permit application, a conceptual wetland mitigation plan was designed that including enhancing and creating approximately 6 acres of wetlands. Additionally, Mr. Summers prepared the plans for the removal of a 150-foot-long culvert on a tributary of Mt. Scott Creek and the channel restoration design.</p>
<p>Tri-Property Wetland Delineation <i>LDC Design Group, Inc.</i> <i>Aloha, Oregon</i></p>	<p>As project manager, Mr. Summers performed the wetland delineation fieldwork and prepared a project report for a 33-acre property proposed for residential development. He used both routine and atypical situation methodologies to delineate wetlands within the property boundary. He worked with client and agencies to resolve a disputed boundary.</p>
<p>Boeckman Road Wetland Delineation <i>LCD Design Group, Inc., and West Hills Development</i> <i>Wilsonville, Oregon</i></p>	<p>As project manager, Mr. Summers performed wetland delineation and prepared delineation report for a 24.2-acre property proposed for residential development. He worked with ODSL to determine the jurisdictional status of several artificially created wetlands/waters.</p>
<p>Highway 58 – Willamette Highway Biological</p>	<p>As an environmental scientist, Mr. Summers prepared two BEs, three BAs, and two wetland reports. The BEs addressed 25 species of threatened, endangered, and sensitive fish, amphibians, reptiles,</p>

Project Experience

Assessments, Biological Evaluations, and Wetland Analyses

*Oregon Department of Transportation
Oak Ridge, Oregon*

mammals, birds, invertebrates, and plants. The BAs were prepared to evaluate potential impacts to northern spotted owl and American peregrine falcon.

Flexible Services Contract

*Oregon Department of Transportation
Oregon*

As project manager, Mr. Summers managed the flexible services contract that has provided ODOT with wetland services since 1989. Support of the contract included wetland delineations, functions and values assessments, impact assessments, mitigation planning, permitting, and mitigation design.

Cascadian Nursery

*Claremont Properties
Washington County, Oregon*

Mr. Summers was project manager for a proposed residential development. The project included preparation of a Joint CWA Section 404/Removal-Fill Permit, Clean Water Services natural resource assessment, and Washington County significant natural resources inventory report. Delineation of wetlands and natural resources on site was used to determine potential impacts and obtain all permits for the project.

Saltzman Heights

*Venture Homes
Washington County, Oregon*

Mr. Summers was project manager for a proposed residential development. The project included preparation of a Joint CWA Section 404/Removal-Fill Permit, Clean Water Services natural resource assessment, and Washington County significant natural resources inventory report. Delineation of wetlands and natural resources on site was used to determine potential impacts and obtain all permits for the project.

Mitchell Creek Project

*Centurion Homes
Portland, Oregon*

As project manager, Mr. Summers assessed streams, wildlife habitat, and wetlands on a 70-acre parcel to negotiate placement of environmental protection (EP) zones in relation to those resources according to City of Portland's City Code Chapter 33.340. Streams, wildlife habitat features, and wetlands were tied in to a cadastral survey to determine exact location and placement of respective EP zones. Information was used to create a development plan for the property that incorporates innovative mitigation measures proposed for protection of streams and watershed resources.

Claremont Hills

*Marshall-Grimberg Group
Beaverton, Oregon*

As project manager, Mr. Summers delineated wetlands on a 90-acre parcel of agricultural land within the urban growth boundary of Beaverton, Oregon. Delineation was complicated by extensive hydrologic manipulation of land for agriculture. Mr. Summers

Project Experience

Headquarters Solid Waste Disposal Facility

*Weyerhaeuser Company
Cowlitz County, Washington*

completed the permit application package for development on area.

As a wetland scientist, Mr. Summers performed wetland, fisheries, wildlife, botanical, and surface water technical studies for planning, design, and construction of a 400-acre wood waste landfill site. The project included filling 12 acres of wetlands in headwaters of Cowlitz River drainage. Wetland delineation, mitigation plan preparation, and CWA Section 404 permit preparation were required. An extensive alternatives analysis was required to clearly demonstrate that an upland alternative was not practicable. The final mitigation package was more than 150 acres, which is one of region's largest aquatic and terrestrial habitat mitigation, creation, and monitoring programs.

North Albany Project

*Oregon Department of Transportation
Albany, Oregon*

As project manager, Mr. Summers performed wetland delineation, functions and values assessment, and impact assessment for a proposed upgrade of Interstate 5 north of Albany, Oregon. He worked with ODOT project managers to select the mitigation site and designed the mitigation plan using all available area. Mitigation beyond what is required for the project will be developed into a mitigation bank for future ODOT projects.

Warner Highway Project

*Federal Highway Administration
Lakeview, Oregon*

As project manager, Mr. Summers performed wetland delineation, functions and values assessment, and impact assessment for a proposed highway realignment. He compared two possible routes to determine impacts to ecological resources and to identify a preferred alternative route. He prepared report detailing findings and possible mitigation measures.

Cowlitz Falls Hydroelectric Project

*Washington Public Utility District
Morton, Washington*

As a wetland scientist, Mr. Summers assisted in the implementation of habitat enhancement measures as mitigation for the construction of 70-megawatt hydroelectric project on the Cowlitz River. Shoreline restoration was completed before the reservoir was filled, which determined post-construction pool depth. He supervised the planting of more than 9,000 plants as part of the shoreline restoration for the proposed reservoir. He prepared and managed the implementation of fish and wildlife mitigation. He prescribed mitigation measures focused on big game, bald eagles, ruffed grouse, forest management, wetlands, shoreline/riparian management, and fishery enhancement. Mr. Summers conducted or managed on-ground work including forest management to benefit wildlife, meadow creation, development of diked reservoir subimpoundments, island creation and planting, reclamation and management of reservoir and riverine riparian habitat, forest

Project Experience

	reclamation, tributary stream habitat improvements, bald eagle management, and enhancement of transmission line corridor.
Chenoweth Wetland Mitigation Project <i>Oregon Department of Transportation The Dalles, Oregon</i>	As project manager, Mr. Summers designed wetlands as mitigation for impacts associated with the construction of a proposed interchange. He prepared a technical report detailing the wetland design, planting plan, and contingency measures.
Olalla Creek Wetland Mitigation Project <i>Oregon Department of Transportation Winston, Oregon</i>	As project manager, Mr. Summers delineated wetlands for a proposed highway realignment project and prepared a report detailing wetland impacts, possible mitigation measures, and the proposed planting plan for project. He also designed wetlands to mitigate for impacts and prepared a report detailing the wetland design and planting plans.
Wren Hill Wetland Mitigation <i>Oregon Department of Transportation Wren, Oregon</i>	As project manager, Mr. Summers designed wetlands as mitigation for impacts to wetlands from a proposed construction of a highway. He prepared a report detailing the wetland design, planting plan, and construction phases and concerns.
Hillsboro Landfill Expansion Project <i>Emcon Northwest, Inc. Hillsboro, Oregon</i>	As a wetland scientist, Mr. Summers completed wetland delineation; threatened, endangered and, sensitive (TES) plant survey; and habitat evaluation for a proposed landfill expansion. He prepared a report addressing the effects of the proposed expansion on wetlands, TES plants, and habitat of project area. He assisted in the design of a 60-acre wetland system to mitigate for wetland impacts, devised a planting plan for constructed wetland, and prepared a report detailing these plans.
Technical Center Campus <i>Fuisz Technologies, Ltd. Sterling, Virginia</i>	As project manager, Mr. Summers performed wetland delineation for the proposed construction of a manufacturing plant in Loudon County, Virginia.
Functions and Values Analysis for Wetlands South of Solid Waste Management Units 2 and 3 of Waste Area Group 22, Department of Energy <i>Paducah Gaseous Diffusion Plant Paducah, Kentucky</i>	As project manager, Mr. Summers performed a functions and values analysis of wetland to assist in choosing remedial actions for Solid Waste Management Units 2 and 3 of Waste Area Group 22. Functions and values of wetland were evaluated using USACE's WET 2.0 program.
Roseburg Project <i>Hancock Forestry</i>	As a botanist, Mr. Summers performed a plant survey for possible Siuslaw National Forest PETS species for the proposed timber harvest. He also prepared portions of a report detailing findings and

Project Experience

Seal Rock, Oregon

consequences of the proposed clearing for logging roads on PETS plant species.

Medford Landfill Expansion

Emcon Northwest, Inc.

Medford, Oregon

As a botanist, Mr. Summers performed a PETS species study and habitat evaluation for a proposed landfill expansion. He prepared a report concerning the effects of a proposed expansion on PETS species and habitat of the project area.

Arboretum Development

Mid-Willamette Valley Council of

Governments

Salem, Oregon

As a botanist, Mr. Summers performed a habitat evaluation, wetland assessment, and PETS species study for proposed arboretum. He prepared a report concerning the effects of the proposed expansion on wetlands, PETS species, and habitat of project area.

Remedial Investigation

Owens Corning

Jackson, Tennessee

As an ecological risk assessor, Mr. Summers conducted an ecological risk assessment, habitat assessment, threatened and endangered species survey, and wetland vegetation survey. He conducted ecological risk assessment following USEPA Risk Assessment Guidance for Superfund, Vol. II: Environmental Evaluation Manual, for piscivorous wildlife and threatened and endangered species. He determined broad-scale impacts to vegetation from possible off-site migration of contaminants by statistical comparisons of site areas to control areas. He assessed possible impacts to threatened and endangered species. Methods and results were detailed in portions of a remedial investigation report.

NEPA/SEPA Projects

Chehalis River Strategy: Reducing Flood Damage and Enhancing Aquatic Species SEPA Programmatic Environmental Impact Statement and Analysis

Washington State Office of

Financial Management

*Lewis, Thurston, and Grays Harbor
Counties, Washington*

Mr. Summers is managing several aspects of the comprehensive strategy to reduce flood damages while enhancing aquatic species habitat in the 2,400-square-mile Chehalis River Basin. The work includes developing a State Environmental Policy Act (SEPA) programmatic EIS, evaluating restoration priorities for aquatic species, assessing potential impacts to aquatic species and their habitats including adjacent wetland and riparian habitats, habitat mapping, extensive fisheries studies, hydrologic and hydraulic studies of existing flooding and potential flooding if a flood retention structure is used, fish passage and dam design, an extensive water quality monitoring program, and geomorphology and sediment transport analyses. He also leads coordination with a number of technical committees comprising state agency staff and tribal members and representatives, along with various other stakeholders that are reviewing the analyses.

Project Experience

Chehalis Basin Flood Damage Reduction Project NEPA Environmental Impact Statement

*U.S. Army Corps of Engineers
Chehalis Basin, Washington*

Mr. Summers is the NEPA advisor and technical contributor for wetlands, wildlife, water quality, vegetation, and groundwater for the EIS prepared for this effort. The lead agency is USACE, overseeing the development of an EIS evaluating the Chehalis River Basin Flood Control Zone District's proposal to build a flood retention control facility on the Chehalis River and levees near the Chehalis-Centralia Airport. Mr. Summers assisted with development of USACE's purpose and need relative to the applicant's objectives and the identification and screening of alternatives for this controversial project. Key issues include water resources, geology and geomorphology, cultural and tribal resources, flood damage reduction, and wetland and vegetation and terrestrial and aquatic species issues.

NEPA Strategy and Support for Tualatin Basin Joint Water Supply and Dam Safety Project

*Clean Water Services and U.S. Bureau of Reclamation
Washington County, Oregon*

Mr. Summers provided strategic support in the development of a NEPA compliance approach for this project, which is evaluating the increase in height of an existing dam or construction of a new dam to increase available water capacity primarily for instream flow users. Efforts included assisting in the development of comprehensive NEPA strategy to comply with Secretarial Order 3355 and Executive Order 13807 related to streamlining NEPA documents. Efforts also included assisting in developing a Memorandum of Agreement between Clean Water Services, as a NEPA cooperating agency, and the U.S. Bureau of Reclamation, as the federal lead agency; the scope and approach to baseline studies; and the overall NEPA project schedule.

Skookumchuck Wind Energy Project Habitat Conservation Plan Environmental Impact Statement

*U.S. Fish and Wildlife Service
Lewis County, Washington*

Mr. Summers was the principal in charge, NEPA strategist, and technical specialist for fish and wildlife, vegetation, wetlands, and general oversight on this project. As a third-party NEPA contractor, Mr. Summers prepared the EIS for the Habitat Conservation Plan (HCP) under the direction of the U.S. Fish and Wildlife Service. This EIS was prepared under the current NEPA streamlining guidance (Secretarial Order 3355 and Executive Order 13807). This EIS was based on studies provided in the HCP and relied heavily upon the HCP analysis for preparing the EIS. Due to changes in the project, additional analysis had to be completed, including impacts to non-covered birds and bats and the evaluation of additional alternatives.

Elliott State Forest Habitat Conservation Plan Environmental Impact Statement

Oregon Department of Forestry

Mr. Summers was the project director assisting the project manager and overseeing the preparation of the EIS on the revised HCP for the Elliott State Forest in Coos Bay, Oregon. The EIS focused on potential impacts associated with the implementation of a revised forest management plan and HCP covering a 50-year

Project Experience

Coos Bay, Oregon

period. Primary issues of concern in the EIS included impacts to avian and fish species (approximately 20 species are covered in the HCP/EIS) and potential socioeconomic impacts associated with changes in forest management strategies. The team had to work closely and coordinate with the Oregon Department of Forestry, USFWS, NMFS, and the Oregon Department of Fish and Wildlife (ODFW) to ensure timely completion of the EIS and to manage project schedule and budget.

Western Snowy Plover Habitat Conservation Plan and Environmental Impact Statement

*Oregon Parks and Recreation Department
Oregon*

Mr. Summers assisted the project manager with the NEPA strategy for this project that involved providing protections for federally listed western snowy plover in balance with the Oregon Parks and Recreation Department's (OPRD's) management activities and the public's recreational use along the length of the Oregon Coast. The project required close coordination with OPRD to revise and refine the HCP with participation from USFWS, other key regulatory agencies and landowners, and the general public.

Icicle Creek Strategy SEPA Environmental Impact Statement

*Chelan County and Washington State Department of Ecology
Leavenworth, Washington*

Mr. Summers is assisting the Anchor QEA team in the preparation of an EIS evaluating watershed management alternatives, including a dam raise and dam improvements, with the goal of optimizing the programmatic analysis to minimize the need for subsequent environmental review. Key issues include balancing diverse stakeholder interests in water availability and uses, including irrigation, minimum instream flow requirements, and municipal use.

Switzler Reservoir Technical Studies and Environmental Impact Statement

Office of Columbia River Klickitat and Benton Counties, Washington

Mr. Summers is providing strategic input regarding natural resources fieldwork and documentation to evaluate existing conditions for terrestrial and aquatic species and their habitat, including special-status species, wetlands, and cultural resources, for this 800-acre study area. Mr. Summers is also assisting in determining the applicable permits required for project implementation and providing strategy related to CWA Section 404 compliance.

Columbia Gateway NEPA/SEPA Environmental Impact Statement and Permitting Services

*Port of Vancouver
Vancouver, Washington*

As the third-party contractor project director, Mr. Summers oversaw a team of environmental scientists, economic development specialists, and marine and rail engineers in preparing a NEPA/SEPA EIS, ESA compliance, National Historic Preservation Act (NHPA) Section 106 compliance, CWA Sections 404 and 401 compliance, Washington State Joint Aquatic Resources Permit Application (JARPA) preparation, and preparation of all local permits. The lead federal agency was USACE, and USFWS and NMFS were cooperating agencies. The Columbia Gateway Project is located in the Vancouver Lowlands area on the

Project Experience

opposite side of a closed aluminum plant from existing Port of Vancouver facilities. The project consisted of mixed-use industrial development, bulk facility, two marine terminals, and road and rail infrastructure support. The NEPA process was completed to the EIS administrative draft stage. Scoping was completed and all environmental work in support of permitting (e.g., wetlands, fisheries, ESA, cultural resources) was completed when the abandoned aluminum plant property became available. As the aluminum plant property is immediately adjacent to existing Port of Vancouver facilities and a brownfields development and was considered a better option for development by the public and agencies, the Port of Vancouver purchased this property to develop prior to Gateway. Mr. Summers oversaw the completion of the administrative draft EIS; re-scoped the project, including permits; and then provided NEPA/SEPA, permitting, and environmental support for the new project (see West Vancouver Freight Access Project).

**Strategic Environmental
Regulatory Support, Including
NEPA/SEPA Environmental
Impact Statement Services**
*TransAlta Centralia Mining, LLC
Centralia, Washington*

Mr. Summers oversaw the master services agreement his firm held with TransAlta Centralia Mining, LLC (TCM), from 1997 to 2013. TCM had an active coal mine that has transformed from mining coal on site and converting it to electricity using its on-site generating facility to closing its mining operations and improving on-site rail facilities to bring in 100% of its coal from the Powder River Basin to generate electricity. Mr. Summers led the environmental regulatory support for that transformation, including permitting the last mining effort, initiating mine expansion efforts, and assisting with converting to 100% off-site coal burning.

As project manager for the Westfield EIS, Mr. Summers was responsible for NEPA/SEPA compliance, alternatives analysis (both NEPA and CWA Section 404), cumulative impact assessment, CWA Section 404 permitting, and coal issues (e.g., dust and air). He was the liaison for USACE, the Washington State Department of Ecology (Ecology), and Lewis County, and he helped develop the strategy for scoping and level of analysis necessary for preparing a complete and legally defensible EIS. He also oversaw the wetland delineation and assisted with the CWA Section 404 mitigation design and implementation, NHPA Section 106 compliance, ESA compliance, and overall permitting strategy.

During the EIS scoping process, the level of opposition to the mine expansion and burning of coal in Washington state, along with the large amount of mitigation that would be required, led TCM to make the decision to close the mine and haul in coal from the Powder River. As such, the project was changed from an EIS

Project Experience

covering a mine expansion to an EA covering a rail upgrade (new rail lines for train storage and a rail loop) and coal offloading facility (rail dumper, receiving station, conveyors).

Mr. Summers led the strategy for shifting from an EIS to an EA and then managed the regulatory compliance effort for the rail and coal offloading facility upgrade needed for the project. He worked with the agencies to determine the scope of analysis, number of alternatives, and mitigation strategy for the project.

Mr. Summers also oversaw the development of a 125-acre wetland and stream mitigation project to compensate for over 20 acres of wetland impact and the preparation of a cumulative impact analysis that USACE considered the best completed in the state to date. Mr. Summers drafted a NEPA EA for USACE's internal processing. Analysis included the impact of increased coal delivery to the plant from the Powder River Basin and the potential effect of coal storage on nearby wetlands. He also continued to work with USACE and Ecology in assessing wetland impacts and developing a mitigation plan to compensate for wetland impacts. Documents prepared for USACE and Ecology were adopted by the local county for SEPA compliance.

Portland International Center Commercial Development/ Cascade Station Project NEPA Environmental Assessment and Permitting Assistance

*Port of Portland
Portland, Oregon*

Mr. Summers was project manager, leading the preparation of the NEPA EA and Discipline Reports (including air, noise, wetland, cultural, transportation, and biological) for the Portland International Center (PIC) Commercial Development/Cascade Station project. The PIC is a 458-acre, master-planned, mixed-use Plan District located on the west side of Portland International Airport (PDX). The PIC has been planned for office, retail, hotel, and a variety of light industrial and employment uses (including aviation-related uses) subject to an agreement between the FAA and the Port of Portland. Two primary environmental-related processes were completed before the proposed PIC development could occur: compliance with NEPA and completion of the City of Portland's rezoning to enable proposed revision to the plan. The analysis for the EA focused on changes in transportation due to the change in use of the PIC. In addition to transportation, all aspects required by NEPA were evaluated, and the resulting Finding of No Significant Impact was issued by the FAA.

Environmental Impact Statement for Tongue River Railroad

Surface Transportation Board

Mr. Summers served as a wetland scientist and assisted as the Surface Transportation Board's (STB's) preferred third-party contractor and prepared an EIS for the proposed construction of a rail line to haul coal from a proposed coal mine in the Otter Creek Area to existing Burlington Northern Santa Fe (BNSF) rail lines. He was responsible for developing the methodology of the wetland

Project Experience

*Bighorn, Rosebud, and Custer
Counties, Montana*

field studies and alternative alignment selection in the initial stages of the project. He evaluated the proposed alignments with regard to wetland and stream impacts and assisted in the selection of the preferred alternative to carry forward, based on potential impacts to wetlands, waters of the United States, and other natural resources.

West Vancouver Freight Access Project

*Port of Vancouver
Vancouver, Washington*

As project director, Mr. Summers oversaw the strategic shift in direction from the Columbia Gateway Terminal NEPA/SEPA EIS to the NEPA categorically excluded SEPA-compliant West Vancouver Freight Access Project for the Port of Vancouver. This change was made when the property adjacent to existing Port of Vancouver facilities, the decommissioned Alcoa Aluminum Plant, became available for purchase and subsequent brownfield development. He oversaw the change in federal lead agency from USACE to FHWA, including ensuring all agencies had what they needed for the NEPA regulatory process and ensuring the project manager and team were prepared to keep the project moving forward with the switch in direction. He then oversaw the NEPA/SEPA strategy and assisted with the NHPA Section 106 and U.S. Department of Transportation Act Section 4(f) consultations.

Coyote Springs NEPA Environmental Impact Statement

*Bonneville Power Administration
and Pacific Gas and Electric
Company
Morrow County, Oregon*

As a botanist and wetland scientist, Mr. Summers performed baseline surveys in support of the NEPA EIS being prepared for the proposed 500-kilovolt transmission line and cogeneration facility construction. Reports were prepared to document findings of the studies and evaluate potential impacts of the proposed construction.

Crown Jewel Gold Mine

*U.S. Forest Service
Tonasket, Washington*

As an environmental scientist, Mr. Summers was responsible for mapping forest stands and collecting biological data for a proposed gold mine in northern Washington. The maps were uploaded into a GIS layer to determine potential impacts and the data were input to the USFWS habitat evaluation procedures (HEP) model. Results from the HEP model were used to evaluate impacts of proposed mine construction and were incorporated into an EIS being prepared for the U.S. Forest Service. Mr. Summers wrote several technical portions of the EIS and reviewed other sections of the EIS.

Environmental Impact Statement for the Alaska Railroad Corporation Port

As a strategic advisor, Mr. Summers assisted the project manager with NEPA strategy and CWA Section 404 permitting strategy at his former firm, which was STB's independent third-party contractor for an EIS for the construction and operation of the Alaska Railroad

Project Experience

Mackenzie Rail Extension Project

*Federal Rail Administration
Port Mackenzie to Houston, Alaska*

Corporation's (ARRC's) Port Mackenzie Rail Project, which would connect the Matanuska-Susitna Borough's Port Mackenzie to ARRC's main line. Major elements of the project would include between 30 and 45 miles of new railroad track; a 200-foot-wide right-of-way; crossings of local roads, streams, trails, and utility corridors; sidings; and ancillary facilities. His former firm and its team assisted the STB's Section of Environmental Analysis on all aspects of the EIS process, including identifying a range of reasonable alternatives; supporting public involvement efforts for the contentious project; consulting with state, local, and federal agencies and Native Alaska groups; and preparing EIS sections for technical resource areas such as land use, cultural resources, subsistence, biology, hydrology, proposed action and alternatives, recreation, noise, and air quality.

Environmental Impact Statement for Hay Creek II Coal Lease by Application

*Buckskin Mine
Campbell County, Wyoming*

Mr. Summers was the project director for BLM's preferred third-party contractor for an EIS addressing a proposal for a competitive lease sale of a maintenance coal tract for a surface mine in Campbell County, Wyoming. The overall analysis area encompassed nearly 2,500 acres of private surface overlaying approximately 77.2 million tons of federal coal. The analysis area included various habitats of local and regional concern, such as sagebrush, riparian, and agricultural vegetation communities. In addition to overseeing the overall project, he also oversaw resource specialists providing evaluations and impact analyses for several key resources, including vertebrate threatened and endangered and sensitive species, such as sage-grouse; paleontological resources; wetlands; noise; and visual impacts. All recent concerns related to leasing coal and its subsequent development were addressed, with special emphasis on loss of livestock grazing areas, conflicts with oil and gas development, cumulative impacts related to ongoing surface coal mining and other proposed development in the Wyoming Powder River Basin, greenhouse gas emissions, ozone, and global climate change.

Environmental Impact Statement for the Alaska Railroad Corporation Northern Rail Extension

*Federal Rail Administration
North Pole, Alaska*

As a strategic advisor, Mr. Summers assisted the project manager with NEPA strategy and CWA Section 404 permitting strategy at his former firm, which was STB's independent third-party contractor for an EIS for the construction and operation of ARRC's Northern Rail Extension that would connect to ARRC's existing Eielson Branch near North Pole, Alaska, and extend the rail system to Delta Junction, Alaska. Major elements of the project would include approximately 80 miles of new railroad track; a 200-foot-wide right-of-way; crossings of local roads, rivers, trails, and utility corridors; sidings; and ancillary facilities. The project included assisting STB's Section of Environmental Analysis on all aspects of

Project Experience

the EIS process, including identifying a range of reasonable alternatives; supporting public involvement efforts; coordinating with eight cooperating agencies; consulting with state, local, and federal agencies and Native Alaska groups; preparing the Draft and Final EIS; supporting the NHPA Section 106 process and preparation/execution of a Programmatic Agreement; and supporting the U.S. Department of Transportation Act Section 4(f) assessment, for which the Federal Railroad Administration is the lead agency.

Power Line Upgrade Environmental Assessment

*Consumers Power, Inc., and
Siuslaw National Forest
Benton, Lane, and Lincoln
Counties, Oregon*

Mr. Summers was the project director for the upgrade of four power line segments that cross federal, state, municipal, and private lands in the central Oregon Coast Range. He oversaw and managed the project scoping, developed issues and alternatives, prepared a supporting BA and BE, conducted surveys for special-status plants and animals, and prepared the EA and decision notice. The EA assessed impacts on biological resources, special-status plants and animals, cultural resources, visual resources, recreation, and public services.

Independent Internal Adequacy Review of an Environmental Impact Report for a Proposed Copper Mine

*Nicolet Minerals Company, LLC
Forest County, Wisconsin*

Mr. Summers was a subject matter expert/project manager for this project that entailed an adequacy review of an environmental impact report (EIR) prepared by several firms for Nicolet Minerals Company, LLC (NMC). Mr. Summers was part of a team of reviewers that reviewed the entire EIR. He was responsible for reviewing the biological sections (wetlands, wildlife, plants, endangered species, soils, land use, fisheries) and general project management. Results from the review were provided to NMC in oral and written format.

Categorical Exclusion, Portland International Airport Runway Improvements

*Port of Portland
Portland, Oregon*

As project manager, Mr. Summers provided project oversight for the completion of a NEPA categorical exclusion checklist for runway improvements at PDX.

Supplemental Environmental Impact Statement, Milltown Hill Project

*U.S. Bureau of Land Management
Douglas County, Oregon*

As project manager, Mr. Summers provided overall project management for the completion of a supplemental EIS for proposed construction of a dam on a tributary of Umpqua River in Douglas County, Oregon. A previous EIS was issued; however, Umpqua River cutthroat trout has since been listed as endangered species. A wetland delineation for a proposed 681-acre reservoir area and an 18.5-mile proposed pipeline distribution system was completed. Delineation within the proposed reservoir area was completed using 1987 USACE and National Food Securities Act (NFSA) wetland delineation manuals concurrently. Pipeline route

Project Experience

delineation followed 1987 USACE wetland delineation manual guidelines solely, because it is a linear project and not subject to NFSA. Mitigation guidelines were established in accordance with federal and state regulations. Mitigation site has been selected in upper reservoir area for creation of approximately 80 acres of mitigation wetlands.

Portland International Airport Wildlife Hazard Management Plan, Biological Assessment, and NEPA Environmental Assessment

*Port of Portland
Multnomah County, Oregon*

As project director, Mr. Summers oversaw his firm in assisting the Port of Portland in revising their Wildlife Hazard Management Plan (WHMP) for PDX, in compliance with FAA requirements and 14 Code of Federal Regulations 139.337. The WHMP presents an integrated and adaptive program to effectively manage risk at PDX by reducing the probability of occurrence of wildlife/aircraft collisions. The risk management techniques and protocols adopted in the WHMP include the following: 1) wildlife control procedures to discourage, disperse, and remove wildlife species of concern from the airfield vicinity; 2) habitat modification practices to reduce the attractiveness of lands on and around the airport to wildlife species of concern; 3) research and development projects to gather data and field-test new equipment and techniques; and 4) information and education programs to articulate the hazards wildlife can pose to the safe operation of aircraft. Implementation of the WHMP is based upon management strategies developed to address the wildlife hazards unique to specific management areas identified at PDX. In support of the WHMP, Mr. Summers also oversaw the preparation of a BA evaluating plan impacts to proposed, threatened, and endangered species, as well as the preparation of the wildlife sections of a NEPA EA that addresses the environmental impacts associated with implementing the management strategies developed in the plan.

Bradwood Landing

*Northernstar Natural Gas LLC
Bradwood, Oregon*

As project director, project manager, and wetland scientist, Mr. Summers oversaw and managed a variety of tasks in support of the proposed Bradwood Landing liquefied natural gas (LNG) facility. His tasks included overseeing the conversion of Svenson Island from agriculture to use as mitigation for salmonids and wetland impacts. Mr. Summers oversaw the mitigation design for the breaching of dikes, recontouring of elevations, planting plan, and success standards. He was also involved in the salmonid modeling for both impacts from the proposed LNG facility and benefits from the proposed mitigation.

Medford Airport NEPA Review

*Rogue Valley International-
Medford Airport*

Mr. Summers completed a third-party NEPA review of Rogue Valley International-Medford Airport's WHMP. The WHMP is required by the FAA for all airports that have commercial flights to address the potential for wildlife strikes by aircraft. Mr. Summers

Project Experience

Medford, Oregon

was responsible for reviewing the EA completed for the project and ensuring it complied with FAA NEPA requirements.

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