EMERGING TRENDS REGARDING WETLAND ISSUES AND REAL ESTATE DEVELOPMENT

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for the
WETLANDS SYMPOSIUM
SPONSORED BY
WETLANDS SOLUTIONS, LLC

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ENVIRONMENTAL ISSUES AND LAND DEVELOPMENT

A. Selling or Purchasing Real Estate – Wetlands and Other Issues.

1. **In General:** The process of land development and land use is a growing area of complexity. The issues to be considered prior to acquisition and development include many layers of regulations, restrictions and permitting requirements. You should consider having each parcel of property investigated and delineated for wetlands and other sensitive characteristics (in addition to other matters covered by an environmental assessment) to first determine existence, then to determine jurisdiction.

The budget process should include cost items related to the wetland investigation, wetland delineation and jurisdictional determination, wetland permitting, and wetland mitigation and monitoring.

2. **Issues to Consider:** If selling, purchasing or developing residential or commercial property, what other matters should you consider?

(a) Real Property

Should every parcel be investigated or delineated?

Unfortunately, the process of evaluating real property has become increasingly more complicated, and as ridiculous as it sounds, each and every parcel should be examined and delineated to determine if wetlands and associated issues exist. To ignore this aspect of the process, creates substantial investment and regulatory risk.

The delineation should be conducted by a qualified and experienced professional. The 1987 Wetland Delineation Manual, forms and 2010 Regional Supplement will be used as well as other reference guides, plant lists and amendments.

Although wetlands may be found, the next step is to determine if the wetlands are **jurisdictional** and subject to the Clean Water Act and regulations requiring permits to develop. The initial jurisdictional determination can be and should be made by the consultant to then be verified by the Corps of Engineers. This process has also become more complex and time consuming. Jurisdiction is the most litigated issue regarding wetlands. Developers tend to limit the jurisdictional reach while the agencies are constantly attempting to expand the jurisdictional reach.

After the 2006 *Rapanos/Carbell* decisions by the United States Supreme Court, the EPA and Corps of Engineers scrambled to produce their rules and interpretation for the field agents to follow resulting in the 2007 Guidance which was finalized in December, 2008 Guidance, and the new Jurisdictional Determination Form Guidebook.

Once the preliminary or final "approved" jurisdictional determination is made, the property, project and the extent of impacts to the regulated

area can be evaluated to determine what type of permit may be necessary and what process will be followed.

The costs and budget for the project must take these twists and turns into account during the planning stages.

(1) If you determine that wetlands will be impacted and there is a need to fill wetlands, you will need to apply for a CWA § 404 Corps of Engineers Permit. Depending on size and other factors, you may need an individual permit, a general permit or a Nationwide permit such as a Nationwide permit 18. All permits ("projects") must also have a CWA §401 water quality consistency certification from the Alabama Department of Environmental Management (ADEM), and if in the Coastal zone, a coastal program consistency certification from ADEM.

(2) Coastal and other waterfront properties need a CWA § 404 to address wetlands, or a Rivers and Harbors Act (RHA) § 10 permit to address obstructions to navigation from the Corps as well as approval of other agencies, such as:

- USFWS – 16 USC § 1531 (Endangered Species)
- ADEM – 401/coastal program consistency
- Cultural – SHPO
- ADCNR – fisheries/streams
  state waters/piers/excavation
  submerged lands lease (riparian easement).

(b) Mitigation. Is mitigation available? Is there a Mitigation Bank in the watershed or proximity such as the Wetlands Solutions Mitigation Bank in Lillian, Alabama? What type of mitigation credits are available and what is the cost?

(c) Contract Provisions. What provisions should your contract contain?

(1) Purchase/Sales Contract.

(2) Development Contract.

(3) Consultant/Wetland determination/permitting Contract.

(4) Mitigation Bank Agreements and Certificates.

(d) Prior History / Existing Permits.

(1) Prior permit history/violations/rejections.

(2) Existing permits should be transferred.

(3) Prior jurisdictional determinations, functional changes.

(e) In the event, permit applications are to be denied or are denied:

(1) Corps appeal procedures.

(2) State administrative appeal procedures.

a) permits/administration.

b) Coastal Zone/NOAA/Dept. of Commerce.

(3) State variance procedures.

B. Due Diligence/Baseline Information Regarding Wetlands and Natural Resources Issues and Regulations.

The economy, world politics and the growing environmental disasters create additional challenges to real estate, wetlands and waterfront development. Due diligence these days must include much more than the history and present condition of the property and surrounding properties. It now should include the permitting, cleanup procedures, mitigation requirements and other matters that are required to put the property in a saleable condition while recognizing and minimizing adverse impacts of natural resources.

Developers, landowners, industry and governmental officials must be aware of the local, state and federal environmental issues, including the increasing demands for water and protection of natural resources that continue to evolve and directly involve the natural, practicable, economical and operational aspects of subdivision and commercial development. All aspects of development and the development site are now affected by some permit issue or regulation that focuses on land use, environmental, health or safety concerns. There are also cost, liability and compliance considerations associated with or which must be examined for each subdivision and commercial development.

All subdivision and commercial development and land use involve or affect environmental resources including water quantity and quality, as well as air quality, in some way, either by use, right, or impact. Historically, we have addressed the rights to land use by common law principals, by statutory restrictions and by infrastructure limitations. Permitting and transactional due diligence must include a comprehensive analysis and review of the surface and subsurface conditions for each project. The

carbon footprint and impacts on climate change will also be growing areas of concern. Attention must be given to identify and evaluate the complex legal and regulatory matters of land use law that will or may affect each project. As part of the development due diligence, establishment of the baseline conditions of the target property as well as the surrounding property is necessary.

You should pay attention to the physical, natural, historical and regulatory characteristics of each proposed development site, as well as surrounding sites. The conditions are determined by reviewing the site, the local and regulatory records of the site, the records of the landowner and the community. All information gathered will help establish the existing conditions, capacities and requirements of the property. The baseline is one of the most important parts of the initial investigation for considering the costs which will be associated with the acquisition, the use and the development of the property.

Some of the matters to examine include:

1. **Geography/Geology.** The physical and natural conditions of the surface and subsurface of the site and surrounding sites should be reviewed to determine the following conditions:

(a) topography, drainage;

(b) flood conditions/history and flood zone requirements;

(c) soil conditions, erosivity, slope, vegetation;

(d) location of water

(i) waterways, streams and stream types;

(ii) wetlands (quality/character of those wetlands);

(iii) groundwater;

(iv) utilities;

(v) disposal/treatment;

(vi) flow rates;

(e) conditions of soil and water (surface and subsurface);

(f) existence of hazardous, toxic or regulated conditions such as waste disposal deposits, or spills, existence of USTs, existence of wetlands, endangered species, historical properties, sink holes, wells, USTs, floodplain, sewage treatment/disposal;

(g) condition and availability of access (to the site, any water surface, any water source);

(h) past and present condition/use of the surface and subsurface of the site and surrounding properties (existing operations, condition of buildings, location in rural areas, industrial, vacant, unimproved); and

(i) geology, hydrogeology, groundwater flow and recharge sources.

2. **Existing Land Use and Water Regulations.**

(a) state/federal statutes/regulations;

(b) local building codes, zoning restrictions and planning and other local ordinances;

(c) health and safety regulations;

(d) special or conservation districts/locations, watershed districts, historical/archeological sites; and

(e) flood ordinances.

3. **Surrounding Conditions.**

(a) past and existing land uses;

(b) demand for and availability of water;

(c) economic, practical and social character of neighborhood;

(d) surface and subsurface drainage;

(e) location of waterways, water wells, disposal activities; and

(f) existing air and water quality.

4. **Utilities and Resources.**

(a) what are available utilities;

(b) transportation routes/requirements, pipeline, rail, highway, waterways, air;

(c) water use, sources, treatment facilities;

(d) discharge/treatment facilities; and

(e) disposal facilities.

5. **Community Relations.**

(a) neighbors, environmental justice;

(b) existing organizations;

(c) regulatory agencies;

(d) local government; and

(e) existing businesses.

6. **Environmentally Sensitive Areas.**

Environmentally Sensitive Areas (ESAs) have been described to include almost any type of regulated or recognized natural resource, and is often a convenient phrase used to emphasize target areas for protection, including aquatic resources.

ESAs have been described to include:

(a) essential habitat for threatened and endangered species;

(b) wetlands, streams and other aquatic resources of national importance;

(c) scientifically recognized rare ecological communities;

(d) steep slopes;

(e) flood prone areas;

(f) riparian habitats and corridors;

(g) fisheries and wildlife habitat;

(h) hardwood bottomland habitats;

(i) coastal areas, dunes and barrier islands; and

(j) historic and cultural properties (although not necessarily "environmental").

This list is by no means exhaustive and such ESAs may also be included in another description pertaining to a particular program, ordinance, regulation or statute.

For example:

(a) Linear projects or pipelines regulated by the Office of Pipeline Safety and the U.S. Department of Transportation, Research and Special Programs Administration are now required by final rule codified in 49 CFR Part 195 to consider the

effects of a hazardous liquid pipeline release on drinking water and ecological areas which the regulations refer to as "Unusually Sensitive Areas" ("USA").

USAs include:

(i) drinking water resources;

(ii) sole source aquifer recharge area;

(iii) ecological resources such as a multi-species assemblage area;

(iv) migrating bird concentration area; and

(v) an area containing imperiled species.

(b) Clean Water Act.

Requirements of the Clean Water Act ("CWA") § 404 refer to "waters of the United States" (33 CFR § 328) which includes wetlands, mudflats, etc. The CWA § 404(b)(1) guidelines refer to wetlands as "Special Aquatic Sites" (40 CFR § 230.3). The U. S. Army Corps of Engineers during the CWA § 404 permit application process must consider other sensitive areas and consult with other agencies that exercise jurisdiction over sensitive areas such as endangered and threatened species and their habitat (USFWS), historic and cultural sites (SHPO), coastal resources (ADEM and NOAA), and fish and wildlife species and their habitats (USFWS, NMFS, and ADCNR).

By a 1992 Memorandum of Agreement between EPA and the Corps, EPA may request elevation of permit considerations for significant impacts to "aquatic resources of national importance" or "ARNI."

C. Wetland Permitting/Approvals.

1. General.

Though not an exhaustive list, some of the permits and approvals you may be required to obtain for any land disturbance and development include:

(a) Wetlands.

(i) Clean Water Act § 404, dredge and fill permit (individual permit), or any one of several Nationwide or general permits.

(ii) Clean Water Act § 401 and ADEM Admin. Regulation § 335-6-1, water quality consistency certification.

(iii) Coastal Zone Management Act and ADEM Admin. Regulations, § 335-8-1, coastal zone program consistency certification.

(iv) Archaeological/historic properties study.

(v) Wildlife/endangered and threatened species study.

(vi) Wetland delineation, WRAP analysis, mitigation plan.

(vii) Stream impact study, analysis and mitigation proposal.

(viii) If road requirements, wetland approvals from planning or building departments.

(ix) If financing, may have to address other matters.

(b) Landclearing/Construction Site.

(i) Clean Water Act § 402 (NPDES) and § 319; ADEM Admin. Regulation Rule § 335-6-12 "Construction Site Stormwater/Erosion Control,"

and New ADEM general permit for Construction Sites, ALR 100000, effective April 1, 2011.

(ii) Local landclearing approvals.

(iii) Compliance with flood prevention ordinances.

(c) Archaeological/Cultural/Historic Properties.

(i) Study – Phase I/Phase II.

(ii) Excavation/preservation (SHPO).

(d) Threatened and Endangered Species.

(i) Onsite inspection and study.

(ii) Endangered Species Act 16 USC 1531.

(1) ESA § 10 – Incidental Take permit.

(2) ESA § 7 – Consultation with USFWS/biological assessment (applicant) and biological opinion (USFWS).

(iii) ADEM Coastal Regulations-species protection.

(iv) ADCNR – State protected species.

(e) Flood.

(i) Flood Insurance Rate Maps, amendments – changes.

(ii) Flood classifications, location of flooding, flood zones.

(iii) Building limitations/elevation certificate and height requirements.

(iv) Obstructions – no rise certification.

(v) Stormwater retention/detention requirements.

(vi) Insurance/financing.

2. **Wetland Permitting.**

(a) Wetland Delineation/Jurisdictional Determination.

The CWA § 404 (33 USC § 1344) prohibits the discharge of dredged material and the discharge of fill material to *waters of the United States* without a permit. Prior to submitting a permit application or proceeding with any type of land disturbing activity pursuant to a general or nationwide permit, you should determine the existence and extent of wetlands by obtaining (1) a wetland delineation (preferably by a qualified consultant), (2) survey of the delineated areas, (3) submit the delineation for verification by the Corps of Engineers, and (4) obtain a written wetland jurisdictional determination by the Corps of Engineers or a nonjurisdictional determination that no jurisdictional wetlands exist. The procedures and criteria for this part of the process now is subject to new rules and procedures guidance such as:

__ Jurisdictional Determination forms and Instructional Guidebook.
__ November, 2010 Regional Supplement to the 1987 Wetland Delineation Manual.
__ The appropriate "Guidance" regarding wetland jurisdiction.

(b) Analysis of Impacts/Alternatives:

The project site's impacts to aquatic resources must then be reviewed by the Corps and other agencies including EPA, USFWS, NOAA, ADEM, Alabama State Port Authority. As required by the Clean Water Act § 404(b)(1) guidelines at 33 CFR 230, as number of resource considerations must be examined including whether there are any alternatives to the proposed activity. If "waters of the

United States" (as the phrase is defined in 33 CFR 328.3) must be filled as a process of the development, (1) reasonable, *practicable alternatives* must be examined and analyzed, (2) to the maximum extent practicable, wetlands must be avoided and impacts minimized, and (3) if any impacts or fill are still necessary, the impacted or filled areas must be mitigated. The Corps of Engineers and in some cases, the EPA, will review and investigate the proposed activity pursuant to the requirements of the National Environmental Policy Act ("NEPA"), the CWA § 404(b)(1) guidelines (33 CFR § 230), and the CEQ regulations found at 40 CFR § 1500, and make an environmental assessment to determine the level of impacts and make a determination and "Finding of No Significant Impacts" ("FONSI"), or require further study, and an "Environmental Impact Study"("EIS").

This Alternative Analysis, though only one aspect of the review and permitting process, is certainly one of the most important and challenging to the proposed activity.

(c) CWA § 401 Water Quality/Coastal Resources.

The development project will also have an impact on water quality (CWA § 401) requiring ADEM's water quality consistency certification, and if located in the coastal zone, it will also have an impact on the coastal resources requiring a review and costal program and consistency certification from ADEM.

(d) Permit Application.

Once the application is submitted with all required information, the Corps of Engineers issues a public notice that is provided to the interested public and

other individuals and entities, as well as other federal and state agencies with whom consultation obligations exist by regulation such as:

U. S. Fish & Wildlife Service
State Historic Preservation Officer
Alabama Department of Conservation and Natural Resources
Alabama State Port Authority
U. S. Coast Guard
National Marine Fisheries Service
Alabama Department of Environmental Management
Environmental Protection Agency and others.

During the public notice period, normally 30 days, comments will be elicited and submitted. The District Engineer will then determine if cause exists to hold a public hearing, and an environmental assessment ("EA") will be made to determine the environmental impacts. During the EA review, numerous criteria are considered as outlined by NEPA and the CWA § 404(b)(1) guidelines. The review period can be quite resource intensive and time consuming. An environmental impact study may be necessary, and if not, a finding of no significant impact will be made.

3. **Jurisdictional Implications From *SWANCC* and *Rapanos* Decisions.**

(i) Jurisdiction in Practice.

Not all wetlands are jurisdictional and subject to the prohibitations and permitting requirements of the Clean Water Act § 404. Most of the controversy has centered on the issue of jurisdiction.

Before proceeding with any development, it is suggested that the target property be investigated to determine if any wetlands or other sensitive areas exist, and if so, further investigation is needed to determine if the wetlands are subject to the Corps of Engineers and EPA's regulatory jurisdiction.

If a consultant finds that the wetlands are not jurisdictional, it is further suggested that you obtain a "nonjurisdictional" determination or concurrence from the Corps of Engineers and EPA (if appropriate).

If your consultant finds that the wetlands are jurisdictional, you can proceed to request a jurisdictional determination by the Corps of Engineers and EPA (see 2008) Jurisdictional Determination Form Instructional Guidebook, Regulatory Guidance Letter (RGL) 07-01 and Regulatory Guidance Letter (RGL) 08-02.

The Guidebook is not a regulation but in practice it must be used (as amended from time to time), and the procedures set out must be used on the Jurisdictional Determination Form.

(ii) SWANCC (2001) – Isolated Intrastate Wetlands.

The Solid Waste Authority of Northern Cook County vs. U. S. Army Corps of Engineers, 531 U.S. 159 (2001) ("*SWANCC* "), decision has caused some practitioners to argue for a very narrow interpretation of the CWA § 404 jurisdiction.

Prior to *SWANCC*, the jurisdictional boundaries of the Clean Water Act progressively expanded towards including essentially *all* of the waters of the United States (or if we want to be more informal – "every ditch and puddle in the country" in place of "essentially *all* of the waters...") (33 C.F.R. 328; 40 C.F.R. § 122) including navigable waters, tributaries, adjacent wetlands, United States v. Riverside Bayview Homes, 474 U.S. 121, 16 E.L.R. 20086 (1985), and isolated intrastate wetlands and waters. The Corps relied on Congress's power under the Commerce Clause of the United States Constitution (U.S. CONST. art. I cl. VIII) to justify its expansive definition of

"waters of the United States." Under the so-called **"Migratory Bird Rule,"** waters that are, should, or would be used as habitat for migratory birds which cross state lines are "waters of the United States" (or were pre-*SWANCC*) subject to the Clean Water Act Section 404 jurisdiction. This was not usually a rule and was not advertized or noticed under any rule-making procedure or authority.

The Migratory Bird Rule found its way into the preamble of the regulations in 1986 with the following language:

> "Waters of the United States . . . also include the following waters:
>
> a. waters which are or would be used as habitat for birds protected by Migratory Bird Treaties; or
>
> b. which are or would be used as habitat by other migratory birds which cross state lines; or
>
> c. which or would be used as habitat for endangered species; or
>
> d. used to irrigate crops sold in interstate commerce."

51 Fed. Reg. 41208, 41217 (Nov. 13, 1986).

The Rule was rejected in the Fourth Circuit in Tabb Lakes, Ltd. v. United States, 715 F. Supp. 726 (E.D. Va. 1988), *aff'd* 885 F.2d 866 (4th Cir. 1989), and the Seventh Circuit in Hoffman Homes, Inc. v. EPA, 975 F.2d 1554 (7th Cir. 1992), and Hoffman Homes, Inc. v. EPA, 999 F.2d 256 (7th Cir. 1993). However, the Seventh Circuit, in 1999, upheld the Rule (Solid Waste Agency of No. Cooke County v. Corps of Engineers, 191 F.3d 845 (7th Cir. 1999), as did the Ninth Circuit in 1990 and 1995. See Leslie Salt

Co. v. United States, 55 F.3d 1388 (9th Cir. 1995); and Leslie Salt Co. v. United States, 896 F.2d 354 (9th Cir. 1990).

Finally, the United States Supreme Court, during the appeal from the Seventh Circuit Court opinion in Solid Waste Agency of No. Cooke County v. Corps of Engineers, 531 U.S. 159 (2001), the *SWANCC* decision, held that the Corps of Engineers overextended Section 404 jurisdiction beyond the Congressional authority. The Migratory Bird Rule was, therefore, invalidated.

The Plaintiff in *SWANCC* was a consortium of twenty-three suburban Chicago cities that formed a corporation to handle their solid waste disposal. The group purchased 533 acres of an old gravel pit to develop a landfill. The pit held water seasonably and was visited from time to time by migratory birds. The site was also in close proximity to another wetland area which was in close proximity to an established traditional navigable water. The Corps of Engineers denied, after several years, the Section 404 permit application. The cities claimed that the Clean Water Act extended only to traditional navigable waters and that the Migratory Bird Rule was not authorized under this traditional definition. In addition, the cities argued that the expanded jurisdiction exceeded Congress' broadest constitutional authority to regulate activities which have a substantial effect on interstate commerce.

The Corps took the opposite position and argued that the Migratory Bird Rule was a justified exercise of Congress's Commerce Clause authority which it said included more than just those waters directly related to navigation. Siding with the consortium of cities, the Supreme Court found that the Clean Water Act grants jurisdiction only over

navigable waters in its traditional sense – waters that were or had been navigable in fact or could reasonably be navigable in fact.

The Court ruled that isolated wetlands may, but do not necessarily, affect interstate commerce. The Clean Water Act jurisdiction, arguably, only extends to those waters, navigable waters, that clearly have been indicated by Congress. While it has been argued that SWANNC was a very narrow opinion invalidating the Migrating Bird Rule, in fact, the Court addressed adjacency supporting the Riverside Bayview opinion and introducing "Significant Nexus" as a standard.

It now appears that each court is wrestling with its application to hydrology, whether waters are adjacent to wetlands, and whether there is a significant nexus to navigable waters. The Fourth Circuit Court of Appeals has held wetlands with hydrologic connections to non-navigable or intermittent tributaries of navigable waters to be jurisdictional. United States v. Interstate General Co., 152 F. Supp. 2d 843 (D. Md. 2001), *aff'd,* 39 F. Appx. 870 (4th Cir. 2002); Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (9th Cir. 2001). See also United States v. Eidson, 108 F. 3d 1336 (11th Cir. 1997 – pre-*SWANCC*). Others have interpreted *SWANCC* to extend the Corps' Section 404 jurisdiction only to wetlands that are "adjacent" to navigable waters. Rice v. Harken Exploration Co., 250 F.3d 246 (5th Cir. 2001); and United States v. Newdunn Assoc., 195 F. Supp. 2d 751 (E.D. Va. 2002).

In Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001), the Court held that the Clean Water Act jurisdiction extends only to a body of water that is actually navigable and adjacent to an open body of water.

An excellent article you should review is "Can *SWANCC* be Right For a New Look at the Legislative History of the Clean Water Act," by Virginia S. Albrecht and Stephen M. Nickelsburg, 32 E.L.R. 11042, Sept. 2002.

Other appellate courts since *SWANCC* have ruled that *SWANCC* should be read narrowly: interpreting the CWA as striking down the migratory bird rule only, and not as an attempt to construe navigable waters. See U. S. v. Deaton, 332 F.3d 698 (4th Cir. 2003). However, the Deaton court did state the Corps had jurisdiction to look at the whole tributary system including manmade ditches and culverts which extend for miles before entering the Chesapeake Bay.

In Treacy v. Newdunn Associates, LLP, 344 F.2d 407 (4th Cir. 2003), the court held that the Corps had jurisdiction over wetlands that are "adjacent" to traditional navigable waters pursuant to 33 CFR § 328.3(a) and that had a surface hydrologic connection through a series of natural and manmade waterways and ditches, even those that crossed under an interstate highway to traditional navigable waters 2.4 miles from the wetlands.

In U. S. v. Jones, 267 F.Supp.2d (M.D. Ga. 2003), the court found defendant liable for unpermitted discharges to navigable waters from the migration of oil spilled into a storm drain that connected to a tributary of a navigable stream. The court held the defendant liable under the Clean Water Act. As support, the court cited United States v. Eidson, 108 F.3d 1336 (11th Cir. 1997) (pre-*SWANCC*), that found that a storm drainage ditch system was a tributary because the ditch emptied into a canal and eventually into Tampa Bay, a navigable water.

(iii) *Rapanos/Carabell* (2006).

In 2006, the Supreme Court in *Rapanos v. United States*, 126 S. Ct. 2208 (2006) and in *Carabell v. United* States, 126 S. Ct. 2208 (2006) addressed jurisdiction of the CWA §404 to wetlands that were adjacent to or had a surface hydrological connection to a traditional navigable water. The Rapanos decision overturned the Sixth Circuit Court of Appeals which ruled that non-jurisdiction wetlands connected to navigable waters only by streams and ditches that did not have a continuous flow were "adjacent to" navigable waters and therefore jurisdictional.

The Supreme Court issued a split decision (4-4-1) with 4 Justices led by Chief Justice Scalia, the plurality, deciding that (1) Clean Water Act jurisdiction only extended to "relatively permanent, standing or flowing bodies of water" and not to intermittent or ephemeral streams, and that (2) there must be a continuous surface connection between the wetland and navigable waters. For the decision to overturn the Sixth Circuit, a fifth Justice, Justice Kennedy, voted separately with the plurality, adding that there must be a "significant nexus" between a wetland connected to a navigable water by a non-navigable waterway, and when adjacent to a navigable in fact waterway, jurisdiction can be shown by a "reasonable inference if ecological connection." For the two years after the *Rapanos* decision, various courts followed the plurality in some cases and Justice Kennedy's significant nexus in others.

The Corps, meanwhile, refused to process jurisdictional requests until "guidance" issued in 2007 was finalized in December, 2008. As such, consultants made decisions during the gap period 2006-2008 regarding wetland jurisdiction, and applicants either

delayed projects waiting on the government or proceeded without formal Corps approval on jurisdictional determinations "at their risk."

An extensive guidance document, Jurisdictional Determination Form Instruction Guidebook, can be found at http://www.USACE.Army.mil/cw/cecwo/Reg/cwa_guide/cwa_guide.htm. The Guide Book provides a jurisdictional checklist of hydrological factors, ecological features and other items to evaluate the site for significant nexus, and a list of geographical features which do not meet jurisdictional criteria. The jurisdictional form also provides a template to use.

It is interesting to note that the Supreme Court in SWANCC and again in Rapanos suggested that Congress intended the Clean Water Act to be limited to application. Rather than amending the regulations to address jurisdiction as suggested by Chief Justice Roberts in *Rapanos*, the Corps of Engineers and EPA have issued a series of nonregulatory interpretations and "guidance".

- January 15, 2003 Joint Memorandum providing clarifying guidance on SWANCC, 68 Fed. Reg. 1991, 1995.
- Draft Guidance 2007 – Finalized December 2, 2008, "Clean Water Act Jurisdiction following the U.S. Supreme Court's Decision (73 Fed. Reg. 19594, April 10, 2008 and 33 CFR part 332)
- RGL 07-01 "Practices for Documenting Jurisdiction under Section 9 & 10 of the RHA of 1899 and Section 404 of the CWA"
- RGL 08-02 "Jurisdictional Determinations"

- 2011 Draft Guidance on Identifying Waters Protected by the Clean Water Act

The intent and purpose of these guidelines appear to be attempts to again expand the reach of the agencies' jurisdiction.

The 2011 Proposed Guidance issued in draft in April, 2011, when finalized will supercede the January 15, 2003 Joint Memorandum (68 Fed. Reg. 1991, 1995) which provided "clarifying guidance" on SWANCC, the 2007 draft Guidance on *Rapanos* and the 2008 Joint Guidance memo on *Rapanos*.

The agencies have again opted to forgo rulemaking in favor of more subtle jurisdictional expansion using revised guidance.

> "This draft guidance document is intended to describe for agency field staff the agencies' current understandings; it is not a rule, and hence it is not binding and lacks force of law."
>
> "The proposed [2011] guidance is consistent with the principles established by the Supreme Court cases and is supported by the agencies scientific understanding of how waterbodies and watershed's function." 76 Fed. Reg. 24479 (May 2, 2011).

There are distinct differences between the 2008 "Guidance" and the 2011 Guidance. The 2008 Guidance focused on the criteria that would satisfy the *Rapanos* plurality and Justice Kennedy's "significant nexus."

The Guidance provides

> "A significant nexus analysis will assess the flow characteristics and functions of the tributory itself and the functions performed by any wetlands adjacent to the tributary to determine of they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters." The guidance also provides details as to what hydrologic and ecologic factors will be considered in the significant nexus determination. The hydrologic factors listed are: volume, duration,

> and frequency of flow; proximity to the traditional navigable water; size of the watershed, average annual rainfall; and average annual winter snow pack. The ecological factors listed are: potential of tributaries to carry pollutants and flood waters to traditional navigable waters, provision of aquatic habitat that supports a traditional navigable water, potential of wetlands to trap and filter pollutants or store flood waters, and maintenance of water quality in traditional navigable water. The guidance describes certain considered geographic features which are generally not jurisdictional waters: swales or erosional features and ditches excavated wholly in and draining only uplands and that do not carry a relativity permanent flow of water.

The proposed 2011 Guidance will significantly expand the jurisdiction over waters of the United States under all CWA programs that use that term including Sections 303 (TMDL) and water quality standards, Section 311 oil spill program, Section 401 states water quality certification process, Section 402 NPDES, and Section 404. The 2008 Guidance addressed Section 404 only. In addition, the 2011 Guidance now addresses the "other waters" described in EPA's regulations 40 CFR 230.3(s)(3) and the Corps of Engineers' regulations 33 CFR 328.3(a)(3).

4. <u>CWA § 404(f) Exemptions</u>.

The Clean Water Act Section 404(f), 33 U.S.C. § 1334(f), exempts certain activities from the permitting process. These include ongoing and normal farming, ranching and silvicultural operations.

For purposes of development, normally a site must be cleared, graded, and have a good road system.

If the property is forested and has had a history of forestry improvements, ditching, forest roads, stream crossings, periodic and "normal" ongoing timber harvests and site preparation activity, the continuation of such forestry or silvicultural activities

should qualify as exempt activities. However, if the activities are associated with land clearing, timbering and road work in preparation for the development, the timber and road work in wetland areas may not qualify for the exemption, may be considered new activity which would then be recaptured by the statute and require a permit prior to conducting the operations.

Developers are advised to request a determination of exempt status prior to proceeding under the assumption and claim of the silvicultural exemption.

If the exemption does apply, the developer must follow federal and state requirements for forestry best management practices.

If located within a municipality, city ordinances relating to land disturbance, trees and buffers should also be consulted.

5. **Water Quality Consistency.**

The CWA § 401 and Corps regulations 33 CFR § 320.4(d) require state agencies (ADEM) to review federal permit applications and determine if the discharges to state waters will comply with state water quality standards established under CWA § 303 and certify consistency with those standards. The CWA § 404 permit application used in the Mobile District Corps of Engineers is a joint Corps/ADEM application but the water quality certification process usually does not begin until all aspects and information are submitted to the Corps and the Corps then formally requests the certification.

The ADEM water quality regulations are found at ADEM Admin. Regulations § 335-6-6. The requirements for obtaining the certification are found at 33 CFR § 320.4(d).

> (d) *Water quality.* Applications for permits for activities which may adversely affect the quality of waters of the United States will be evaluated for compliance with applicable effluent limitations and water quality standards, during the construction and subsequent operation of the proposed activity. The evaluation should include the consideration of both point and non-point sources of pollution. It should be noted, however, that the Clean Water Act assigns responsibility for control of non-point sources of pollution to the states. Certification of compliance with applicable effluent limitations and water quality standards required under provisions of section 401 of the clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration.

6. <u>Coastal Zone Management Program Consistency Certification</u>.

In the event that the subdivision or any part thereof is located in the coastal zone or area defined by ADEM in ADEM Admin. Regulations § 335-8-1, the Corps must notify ADEM and obtain a certification from the applicant that the proposed activities comply with ADEM's coastal zone management program (called the Alabama Coastal Area Management Plan or ACAMP) (1999) and ADEM concurs with the certification. Normally, the water quality certification and coastal concurrence occur at the same time in the same response letter from ADEM.

In addition, ADEM will submit conditions to be included as part of the § 404 permit if and when issued by the Corps.

The requirements for the Corps' consideration of coastal impacts is found at 33 CFR § 320.4(h).

7. <u>Mitigation of Wetland and Stream Impacts</u>.

(i) Wetlands Impacts – As part of the CWA § 404 permit application process, the applicant must reduce impacts to wetlands and other aquatic sites to the greatest extent practicable and must do so in a sequenced order: first by avoiding wetland impacts, second by minimizing the remaining impacts and third by mitigating for any remaining impacts that cannot be avoided or minimized.

The permit will not be finally processed until an acceptable mitigation plan has been submitted. Mitigation may be accomplished by (1) restoration of existing wetlands on or off the project site, (2) enhancement of wetlands on or off the project site, (3) creation of wetlands, (4) preservation, or (5) a combination of these. Applicants may also propose the use of mitigation banks and in-lieu-fee projects. There have been several interagency memoranda and guidance addressing mitigation. The most recent regulations have been issued by the Corp and EPA in early 2008 that consolidates and restates the preferred options available with the intent to promote greater consistency, predictability and ecological success of mitigation projects. See Compensatory Mitigation for Losses to Aquatic Resources, 73 Fed. Reg. 19, 594 (April 10, 2008) which is codified at 33 CFR § 325 and 40 CFR § 230.

The new regulations now put more focus on the use of mitigation banks and in lieu fee programs over permittee responsible plans. The permittee should now look at (1) mitigation banks, (2) in lieu fee programs, (3) permittee responsible mitigation using a watershed approach onsite and in kind, or (4) offsite and out-of-kind mitigation in this hierarchical order.

For the developer, having the right people, including wetland consultants, legal advisors and engineers, will insure a timely and successful project and will avoid costly delays, penalties, lost sales, etc. Mitigation for impacts to wetlands also must include qualification and quantification of functional values. The Mobile District Corps of Engineers has adopted an objective functional process developed by the South Florida Water Management District, the "Wetland Rapid Assessment Procedure" or "WRAP" for evaluating and scoring the functional quality values of wetlands as low, medium or high for mitigation purposes.

(ii) Stream Impacts – CWA § 404 jurisdiction also extends to certain streams. There are several categories of streams distinguished by the prevalence and duration of water.

Perennial – streams that flow water most of the time in most years

Intermittent – streams that flow water part of the time in most years and have a defined stream channel

Ephemeral – streams that flow water in response to heavy rainfalls

Corps jurisdiction and resulting requirements for mitigation have changed by the Supreme Court ruling in *Rapanos v. United States*, 126 S. Ct. 2208 (2006).

The Mobile District Corps of Engineers requires streams and development impacts to streams to be evaluated and mitigated using the *Standard Operating Procedures for Compensatory Stream Mitigation Guidelines*.

Mitigation for impacts to streams depends on the type of stream, as well as the upstream and downstream impacts. Proposed mitigation for stream impacts must address the type, condition, function and area of the aquatic system, as well as meeting

the requisite criteria for enhancement, restoration, preservation and control of the mitigation area.

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Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States

This memorandum[1] provides guidance to EPA regions and U.S. Army Corps of Engineers ["Corps"] districts implementing the Supreme Court's decision in the consolidated cases Rapanos v. United States and Carabell v. United States[2] (herein referred to simply as "Rapanos") which address the jurisdiction over waters of the United States under the Clean Water Act.[3] The chart below summarizes the key points contained in this memorandum. This reference tool is not a substitute for the more complete discussion of issues and guidance furnished throughout the memorandum.

Summary of Key Points

The agencies will assert jurisdiction over the following waters:

- **Traditional navigable waters**
- **Wetlands adjacent to traditional navigable waters**
- **Non-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)**
- **Wetlands that directly abut such tributaries**

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- **Non-navigable tributaries that are not relatively permanent**
- **Wetlands adjacent to non-navigable tributaries that are not relatively permanent**
- **Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary**

The agencies generally will not assert jurisdiction over the following features:

- **Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)**
- **Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water**

The agencies will apply the significant nexus standard as follows:

- **A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters**
- **Significant nexus includes consideration of hydrologic and ecologic factors**

[1] This guidance incorporates revisions to the EPA/Army Memorandum originally issued on June 6, 2007, after careful consideration of public comments received and based on the agencies' experience in implementing the *Rapanos* decision.

[2] 126 S. Ct. 2208 (2006).

[3] 33 U.S.C. §1251 et seq.

Background

Congress enacted the Clean Water Act ("CWA" or "the Act") "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[4] One of the mechanisms adopted by Congress to achieve that purpose is a prohibition on the discharge of any pollutants, including dredged or fill material, into "navigable waters" except in compliance with other specified sections of the Act.[5] In most cases, this means compliance with a permit issued pursuant to CWA §402 or §404. The Act defines the term "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source[,]"[6] and provides that "[t]he term 'navigable waters' means the waters of the United States, including the territorial seas[,]."[7]

In Rapanos, the Supreme Court addressed where the Federal government can apply the Clean Water Act, specifically by determining whether a wetland or tributary is a "water of the United States." The justices issued five separate opinions in Rapanos (one plurality opinion, two concurring opinions, and two dissenting opinions), with no single opinion commanding a majority of the Court.

The Rapanos Decision

Four justices, in a plurality opinion authored by Justice Scalia, rejected the argument that the term "waters of the United States" is limited to only those waters that are navigable in the traditional sense and their abutting wetlands.[8] However, the plurality concluded that the agencies' regulatory authority should extend only to "relatively permanent, standing or continuously flowing bodies of water" connected to traditional navigable waters, and to "wetlands with a continuous surface connection to" such relatively permanent waters.[9]

Justice Kennedy did not join the plurality's opinion but instead authored an opinion concurring in the judgment vacating and remanding the cases to the Sixth Circuit Court of Appeals.[10] Justice Kennedy agreed with the plurality that the statutory term "waters of the United States" extends beyond water bodies that are traditionally considered navigable.[11] Justice Kennedy, however, found the plurality's interpretation of the scope of the CWA to be "inconsistent with the Act's text, structure, and purpose[,]" and he instead presented a different standard for evaluating CWA jurisdiction over wetlands and other water bodies.[12] Justice Kennedy concluded that wetlands are "waters

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[4] 33 U.S.C. § 1251(a).
[5] 33 U.S.C. § 1311(a), §1362(12)(A).
[6] 33 U.S.C. § 1362(12)(A)
[7] 33 U.S.C. § 1362(7). See also 33 C.F.R. § 328.3(a) and 40 C.F.R. § 230.3(s).
[8] Id. at 2220.
[9] Id. at 2225-27.
[10] Id. at 2236-52. While Justice Kennedy concurred in the Court's decision to vacate and remand the cases to the Sixth Circuit, his basis for remand was limited to the question of "whether the specific wetlands at issue possess a significant nexus with navigable waters." 126 S. Ct. at 2252. In contrast, the plurality remanded the cases to determine both "whether the ditches and drains near each wetland are 'waters,'" and "whether the wetlands in question are 'adjacent' to these 'waters' in the sense of possessing a continuous surface connection...." Id. at 2235.
[11] Id. at 2241.
[12] Id. at 2246.

of the United States" "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.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'"[13]

Four justices, in a dissenting opinion authored by Justice Stevens, concluded that EPA's and the Corps' interpretation of "waters of the United States" was a reasonable interpretation of the Clean Water Act.[14]

When there is no majority opinion in a Supreme Court case, controlling legal principles may be derived from those principles espoused by five or more justices.[15] Thus, regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied.[16] Since Rapanos, the United States has filed pleadings in a number of cases interpreting the decision in this manner.

The agencies are issuing this memorandum in recognition of the fact that EPA regions and Corps districts need guidance to ensure that jurisdictional determinations, permitting actions, and other relevant actions are consistent with the decision and supported by the administrative record. Therefore, the agencies have evaluated the Rapanos opinions to identify those waters that are subject to CWA jurisdiction under the reasoning of a majority of the justices. This approach is appropriate for a guidance document. The agencies will continue to monitor implementation of the Rapanos decision in the field and recognize that further consideration of jurisdictional issues, including clarification and definition of key terminology, may be appropriate in the future, either through issuance of additional guidance or through rulemaking.

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[13] Id. at 2248. Chief Justice Roberts wrote a separate concurring opinion explaining his agreement with the plurality. See 126 S. Ct. at 2235-36.

[14] Id. at 2252-65. Justice Breyer wrote a separate dissenting opinion explaining his agreement with Justice Stevens' dissent. See 126 S. Ct. at 2266.

[15] See Marks v. United States, 430 U.S. 188, 193-94 (1977); Waters v. Churchill, 511 U.S. 661, 685 (1994) (Souter, J., concurring) (analyzing the points of agreement between plurality, concurring, and dissenting opinions to identify the legal "test ... that lower courts should apply," under Marks, as the holding of the Court); cf. League of United Latin American Citizens v. Perry, 126 S. Ct. 2594, 2607 (2006) (analyzing concurring and dissenting opinions in a prior case to identify a legal conclusion of a majority of the Court); Alexander v. Sandoval, 532 U.S. 275, 281-282 (2001) (same).

[16] 126 S. Ct. at 2265 (Stevens, J., dissenting) ("Given that all four justices who have joined this opinion would uphold the Corps' jurisdiction in both of these cases – and in all other cases in which either the plurality's or Justice Kennedy's test is satisfied – on remand each of the judgments should be reinstated *if either* of those tests is met.") (emphasis in original). The agencies recognize that the Eleventh Circuit, in United States v. McWane, Inc., et al., 505 F.3d 1208 (11th Cir. 2007), has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. The Supreme Court denied the government's petition for a writ of *certiorari* on December 1, 2008.

Agency Guidance[17]

To ensure that jurisdictional determinations, administrative enforcement actions, and other relevant agency actions are consistent with the Rapanos decision, the agencies in this guidance address which waters are subject to CWA § 404 jurisdiction.[18] Specifically, this guidance identifies those waters over which the agencies will assert jurisdiction categorically and on a case-by-case basis, based on the reasoning of the Rapanos opinions.[19] EPA and the Corps will continually assess and review the application of this guidance to ensure nationwide consistency, reliability, and predictability in our administration of the statute.

1. Traditional Navigable Waters (i.e., "(a)(1) Waters") and Their Adjacent Wetlands

Key Points

- **The agencies will assert jurisdiction over traditional navigable waters, which includes all the waters described in 33 C.F.R. § 328.3(a)(1), and 40 C.F.R. § 230.3 (s)(1).**
- **The agencies will assert jurisdiction over wetlands adjacent to traditional navigable waters, including over adjacent wetlands that do not have a continuous surface connection to traditional navigable waters.**

EPA and the Corps will continue to assert jurisdiction over "[a]ll waters which are currently used, or were used in the past, or may be susceptible to use in interstate or

[17] The CWA provisions and regulations described in this document contain legally binding requirements. This guidance does not substitute for those provisions or regulations, nor is it a regulation itself. It 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. Any decisions regarding a particular water will be based on the applicable statutes, regulations, and case law. Therefore, interested persons are free to raise questions about the appropriateness of the application of this guidance to a particular situation, and EPA and/or the Corps will consider whether or not the recommendations or interpretations of this guidance are appropriate in that situation based on the statutes, regulations, and case law.

[18] This guidance focuses only on those provisions of the agencies' regulations at issue in Rapanos – 33 C.F.R. §§ 328.3(a)(1), (a)(5), and (a)(7); 40 C.F.R. §§ 230.3(s)(1), (s)(5), and (s)(7). This guidance does not address or affect other subparts of the agencies' regulations, or response authorities, relevant to the scope of jurisdiction under the CWA. In addition, because this guidance is issued by both the Corps and EPA, which jointly administer CWA § 404, it does not discuss other provisions of the CWA, including §§ 311 and 402, that differ in certain respects from § 404 but share the definition of "waters of the United States." Indeed, the plurality opinion in Rapanos noted that "... there is no reason to suppose that our construction today significantly affects the enforcement of §1342 ... The Act does not forbid the 'addition of any pollutant *directly* to navigable waters from any point source,' but rather the 'addition of any pollutant *to* navigable waters.'" (emphasis in original) 126 S. Ct. 2208, 2227. EPA is considering whether to provide additional guidance on these and other provisions of the CWA that may be affected by the Rapanos decision.

[19] In 2001, the Supreme Court held that use of "isolated" non-navigable intrastate waters by migratory birds was not by itself a sufficient basis for the exercise of federal regulatory jurisdiction under the CWA. See Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001). This guidance does not address SWANCC, nor does it affect the Joint Memorandum regarding that decision issued by the General Counsels of EPA and the Department of the Army on January 10, 2003. See 68 Fed. Reg. 1991, 1995 (Jan. 15, 2003).

foreign commerce, including all waters which are subject to the ebb and flow of the tide."[20] These waters are referred to in this guidance as traditional navigable waters.

The agencies will also continue to assert jurisdiction over wetlands "adjacent" to traditional navigable waters as defined in the agencies' regulations. Under EPA and Corps regulations and as used in this guidance, "adjacent" means "bordering, contiguous, or neighboring." Finding a continuous surface connection is not required to establish adjacency under this definition. The Rapanos decision does not affect the scope of jurisdiction over wetlands that are adjacent to traditional navigable waters because at least five justices agreed that such wetlands are "waters of the United States."[21]

The regulations define "adjacent" as follows: "The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'"[22] Under this definition, the agencies consider wetlands adjacent if one of following three criteria is satisfied. First, there is an unbroken surface or shallow sub-surface connection to jurisdictional waters. This hydrologic connection may be intermittent. Second, they are physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like. Or third, their proximity to a jurisdictional water is reasonably close, supporting the science-based

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[20] 33 C.F.R. § 328.3(a)(1); 40 C.F.R. § 230.3(s)(1). The "(a)(1)" waters include all of the "navigable waters of the United States," defined in 33 C.F.R. Part 329 and by numerous decisions of the federal courts, plus all other waters that are navigable-in-fact (e.g., the Great Salt Lake, UT and Lake Minnetonka MN). For purposes of CWA jurisdiction and this guidance, waters will be considered traditional navigable waters if:

- They are subject to Section 9 or 10 of the Rivers and Harbors Act, or
- A federal court has determined that the water body is navigable-in-fact under federal law, or
- They are waters currently being used for commercial navigation, including commercial water-borne recreation (e.g., boat rentals, guided fishing trips, water ski tournaments, etc.), or
- They have historically been used for commercial navigation, including commercial water-borne recreation; or
- They are susceptible to being used in the future for commercial navigation, including commercial water-borne recreation. Susceptibility for future use may be determined by examining a number of factors, including the physical characteristics and capacity of the water (e.g., size, depth, and flow velocity, etc.) to be used in commercial navigation, including commercial recreational navigation, and the likelihood of future commercial navigation or commercial water-borne recreation. Evidence of future commercial navigation use, including commercial water-borne recreation (e.g., development plans, plans for water dependent events, etc.), must be clearly documented. Susceptibility to future commercial navigation, including commercial water-borne recreation, will not be supported when the evidence is insubstantial or speculative. Use of average flow statistics may not accurately represent streams with "flashy" flow characteristics. In such circumstances, daily gage data is more representative of flow characteristics.

[21] Id. at 2248 (Justice Kennedy, concurring) ("As applied to wetlands adjacent to navigable-in-fact waters, the Corps' conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone.").

[22] 33 C.F.R. § 328.3(c).

inference that such wetlands have an ecological interconnection with jurisdictional waters.[23] Because of the scientific basis for this inference, determining whether a wetland is reasonably close to a jurisdictional water does not generally require a case-specific demonstration of an ecologic interconnection. In the case of a jurisdictional water and a reasonably close wetland, such implied ecological interconnectivity is neither speculative nor insubstantial. For example, species, such as amphibians or anadramous and catadramous fish, move between such waters for spawning and their life stage requirements. Migratory species, however, shall not be used to support an ecologic interconnection. In assessing whether a wetland is reasonably close to a jurisdictional water, the proximity of the wetland (including all parts of a single wetland that has been divided by road crossings, ditches, berms, etc.) in question will be evaluated and shall not be evaluated together with other wetlands in the area.

2. Relatively Permanent Non-navigable Tributaries of Traditional Navigable Waters and Wetlands with a Continuous Surface Connection with Such Tributaries

Key Points

- **The agencies will assert jurisdiction over non-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).**
- **The agencies will assert jurisdiction over those adjacent wetlands that have a continuous surface connection to such tributaries (e.g., they are not separated by uplands, a berm, dike, or similar feature.)**

A non-navigable tributary[24] of a traditional navigable water is a non-navigable water body whose waters flow into a traditional navigable water either directly or indirectly by means of other tributaries. Both the plurality opinion and the dissent would uphold CWA jurisdiction over non-navigable tributaries that are "relatively permanent" – waters that typically (e.g., except due to drought) flow year-round or waters that have a

[23] See e.g., United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 134 (1985) ("...the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act.").

[24] A tributary includes natural, man-altered, or man-made water bodies that carry flow directly or indirectly into a traditional navigable water. Furthermore, a tributary, for the purposes of this guidance, is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream). The flow characteristics of a particular tributary generally will be evaluated at the farthest downstream limit of such tributary (i.e., the point the tributary enters a higher order stream). However, for purposes of determining whether the tributary is relatively permanent, where data indicates the flow regime at the downstream limit is not representative of the entire tributary (as described above) (e.g., where data indicates the tributary is relatively permanent at its downstream limit but not for the majority of its length, or vice versa), the flow regime that best characterizes the entire tributary should be used. A primary factor in making this determination is the relative lengths of segments with differing flow regimes. It is reasonable for the agencies to treat the entire tributary in light of the Supreme Court's observation that the phrase "navigable waters" generally refers to "rivers, streams, and other hydrographic features." 126 S. Ct. at 2222 (Justice Scalia, quoting Riverside Bayview, 474 U.S. at 131). The entire reach of a stream is a reasonably identifiable hydrographic feature. The agencies will also use this characterization of tributary when applying the significant nexus standard under Section 3 of this guidance.

continuous flow at least seasonally (e.g., typically three months).[25] Justice Scalia emphasizes that relatively permanent waters do not include tributaries "whose flow is 'coming and going at intervals ... broken, fitful.'"[26] Therefore, "relatively permanent" waters do not include ephemeral tributaries which flow only in response to precipitation and intermittent streams which do not typically flow year-round or have continuous flow at least seasonally. However, CWA jurisdiction over these waters will be evaluated under the significant nexus standard described below. The agencies will assert jurisdiction over relatively permanent non-navigable tributaries of traditional navigable waters without a legal obligation to make a significant nexus finding.

In addition, the agencies will assert jurisdiction over those adjacent wetlands that have a continuous surface connection with a relatively permanent, non-navigable tributary, without the legal obligation to make a significant nexus finding. As explained above, the plurality opinion and the dissent agree that such wetlands are jurisdictional.[27] The plurality opinion indicates that "continuous surface connection" is a "physical connection requirement."[28] Therefore, a continuous surface connection exists between a wetland and a relatively permanent tributary where the wetland directly abuts the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature).[29]

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[25] See 126 S. Ct. at 2221 n. 5 (Justice Scalia, plurality opinion) (explaining that "relatively permanent" does not necessarily exclude waters "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").

[26] Id. (internal citations omitted)

[27] Id. at 2226-27 (Justice Scalia, plurality opinion).

[28] Id. at 2232 n.13 (referring to "our physical-connection requirement" and later stating that Riverside Bayview does not reject "the physical-connection requirement") and 2234 ("Wetlands are 'waters of the United States' if they bear the 'significant nexus' of physical connection, which makes them as a practical matter *indistinguishable* from waters of the United States.") (emphasis in original). See also 126 S. Ct. at 2230 ("adjacent" means "physically abutting") and 2229 (citing to Riverside Bayview as "confirm[ing] that the scope of ambiguity of 'the waters of the United States' is determined by a wetland's *physical connection* to covered waters...") (emphasis in original). A continuous surface connection does not require surface water to be continuously present between the wetland and the tributary. 33 C.F.R. § 328.3(b) and 40 C.F.R. § 232.2 (defining wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions").

[29] While all wetlands that meet the agencies' definitions are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

3. *Certain Adjacent Wetlands and Non-navigable Tributaries That Are Not Relatively Permanent*

Key Points

- **The agencies will assert jurisdiction over non-navigable, not relatively permanent tributaries and their adjacent wetlands where such tributaries and wetlands have a significant nexus to a traditional navigable water.**
- **A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.**
- **"Similarly situated" wetlands include all wetlands adjacent to the same tributary.**
- **Significant nexus includes consideration of hydrologic factors including the following:**
  - **volume, duration, and frequency of flow, including consideration of certain physical characteristics of the tributary**
  - **proximity to the traditional navigable water**
  - **size of the watershed**
  - **average annual rainfall**
  - **average annual winter snow pack**
- **Significant nexus also includes consideration of ecologic factors including the following:**
  - **potential of tributaries to carry pollutants and flood waters to traditional navigable waters**
  - **provision of aquatic habitat that supports a traditional navigable water**
  - **potential of wetlands to trap and filter pollutants or store flood waters**
  - **maintenance of water quality in traditional navigable waters**
- **The following geographic features generally are not jurisdictional waters:**
  - **swales or erosional features (e.g. gullies, small washes characterized by low volume, infrequent, or short duration flow)**
  - **ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water**

The agencies will assert jurisdiction over the following types of waters when they have a significant nexus with a traditional navigable water: (1) non-navigable tributaries that are not relatively permanent,[30] (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent, and (3) wetlands adjacent to, but not directly abutting, a relatively permanent tributary (e.g., separated from it by uplands, a berm, dike or similar feature).[31] As described below, the agencies will assess the flow characteristics and functions of the tributary itself, together with the functions performed by any wetlands adjacent to that tributary, to determine whether collectively they have a significant nexus with traditional navigable waters.

[30] For simplicity, the term "tributary" when used alone in this section refers to non-navigable tributaries that are not relatively permanent.

[31] As described in Section 2 of this guidance, the agencies will assert jurisdiction, without the need for a significant nexus finding, over all wetlands that are both adjacent and have a continuous surface connection to relatively permanent tributaries. See pp. 6-7, supra.

The agencies' assertion of jurisdiction over non-navigable tributaries and adjacent wetlands that have a significant nexus to traditional navigable waters is supported by five justices. Justice Kennedy applied the significant nexus standard to the wetlands at issue in Rapanos and Carabell: "[W]etlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' 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.'"[32] While Justice Kennedy's opinion discusses the significant nexus standard primarily in the context of wetlands adjacent to non-navigable tributaries,[33] his opinion also addresses Clean Water Act jurisdiction over tributaries themselves. Justice Kennedy states that, based on the Supreme Court's decisions in Riverside Bayview and SWANCC, "the connection between a non-navigable water or wetland may be so close, or potentially so close, that the Corps may deem the water or wetland a 'navigable water' under the Act. ... Absent a significant nexus, jurisdiction under the Act is lacking."[34] Thus, Justice Kennedy would limit jurisdiction to those waters that have a significant nexus with traditional navigable waters, although his opinion focuses on the specific factors and functions the agencies should consider in evaluating significant nexus for adjacent wetlands, rather than for tributaries.

In considering how to apply the significant nexus standard, the agencies have focused on the integral relationship between the ecological characteristics of tributaries and those of their adjacent wetlands, which determines in part their contribution to restoring and maintaining the chemical, physical and biological integrity of the Nation's traditional navigable waters. The ecological relationship between tributaries and their adjacent wetlands is well documented in the scientific literature and reflects their physical proximity as well as shared hydrological and biological characteristics. The flow parameters and ecological functions that Justice Kennedy describes as most relevant to an evaluation of significant nexus result from the ecological inter-relationship between tributaries and their adjacent wetlands. For example, the duration, frequency, and volume of flow in a tributary, and subsequently the flow in downstream navigable waters, is directly affected by the presence of adjacent wetlands that hold floodwaters, intercept sheet flow from uplands, and then release waters to tributaries in a more even and constant manner. Wetlands may also help to maintain more consistent water temperature in tributaries, which is important for some aquatic species. Adjacent wetlands trap and hold pollutants that may otherwise reach tributaries (and downstream navigable waters) including sediments, chemicals, and other pollutants. Tributaries and their adjacent wetlands provide habitat (e.g., feeding, nesting, spawning, or rearing young) for many aquatic species that also live in traditional navigable waters.

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[32] Id. at 2248. When applying the significant nexus standard to tributaries and wetlands, it is important to apply it within the limits of jurisdiction articulated in SWANCC. Justice Kennedy cites SWANCC with approval and asserts that the significant nexus standard, rather than being articulated for the first time in Rapanos, was established in SWANCC. 126 S. Ct. at 2246 (describing SWANCC as "interpreting the Act to require a significant nexus with navigable waters"). It is clear, therefore, that Justice Kennedy did not intend for the significant nexus standard to be applied in a manner that would result in assertion of jurisdiction over waters that he and the other justices determined were not jurisdictional in SWANCC. Nothing in this guidance should be interpreted as providing authority to assert jurisdiction over waters deemed non-jurisdictional by SWANCC.

[33] 126 S. Ct. at 2247-50.

[34] Id. at 2241 (emphasis added).

When performing a significant nexus analysis,[35] the first step is to determine if the tributary has any adjacent wetlands. Where a tributary has no adjacent wetlands, the agencies will consider the flow characteristics and functions of only the tributary itself in determining whether such tributary has a significant effect on the chemical, physical and biological integrity of downstream traditional navigable waters. A tributary, as characterized in Section 2 above, is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream). For purposes of demonstrating a connection to traditional navigable waters, it is appropriate and reasonable to assess the flow characteristics of the tributary at the point at which water is in fact being contributed to a higher order tributary or to a traditional navigable water. If the tributary has adjacent wetlands, the significant nexus evaluation needs to recognize the ecological relationship between tributaries and their adjacent wetlands, and their closely linked role in protecting the chemical, physical, and biological integrity of downstream traditional navigable waters.

Therefore, the agencies will consider the flow and functions of the tributary together with the functions performed by all the wetlands adjacent to that tributary in evaluating whether a significant nexus is present. Similarly, where evaluating significant nexus for an adjacent wetland, the agencies will consider the flow characteristics and functions performed by the tributary to which the wetland is adjacent along with the functions performed by the wetland and all other wetlands adjacent to that tributary. This approach reflects the agencies' interpretation of Justice Kennedy's term "similarly situated" to include all wetlands adjacent to the same tributary. Where it is determined that a tributary and its adjacent wetlands collectively have a significant nexus with traditional navigable waters, the tributary and all of its adjacent wetlands are jurisdictional. Application of the significant nexus standard in this way is reasonable because of its strong scientific foundation – that is, the integral ecological relationship between a tributary and its adjacent wetlands. Interpreting the phrase "similarly situated" to include all wetlands adjacent to the same tributary is reasonable because such wetlands are physically located in a like manner (i.e., lying adjacent to the same tributary).

Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a traditional navigable water. In addition to any available hydrologic information (e.g., gauge data, flood predictions, historic records of water flow, statistical data, personal observations/records, etc.), the agencies may reasonably consider certain physical characteristics of the tributary to characterize its flow, and thus help to inform the determination of whether or not a significant nexus is present between the tributary and downstream traditional navigable waters. Physical indicators of flow may include the presence and characteristics of a reliable ordinary high water mark (OHWM) with a channel defined by bed and banks.[36] Other physical indicators of flow may include

[35] In discussing the significant nexus standard, Justice Kennedy stated: "The required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the [CWA] to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters' ..." 126 S. Ct. at 2248. Consistent with Justice Kennedy's instruction, EPA and the Corps will apply the significant nexus standard in a manner that restores and maintains any of these three attributes of traditional navigable waters.

[36] See 33 C.F.R. § 328.3(e). The OHWM also serves to define the lateral limit of jurisdiction in a non-navigable tributary where there are no adjacent wetlands. See 33 C.F.R. § 328.4(c). While EPA regions

shelving, wracking, water staining, sediment sorting, and scour.[37] Consideration will also be given to certain relevant contextual factors that directly influence the hydrology of tributaries including the size of the tributary's watershed, average annual rainfall, average annual winter snow pack, slope, and channel dimensions.

In addition, the agencies will consider other relevant factors, including the functions performed by the tributary together with the functions performed by any adjacent wetlands. One such factor is the extent to which the tributary and adjacent wetlands have the capacity to carry pollutants (e.g., petroleum wastes, toxic wastes, sediment) or flood waters to traditional navigable waters, or to reduce the amount of pollutants or flood waters that would otherwise enter traditional navigable waters.[38] The agencies will also evaluate ecological functions performed by the tributary and any adjacent wetlands which affect downstream traditional navigable waters, such as the capacity to transfer nutrients and organic carbon vital to support downstream foodwebs (e.g., macroinvertebrates present in headwater streams convert carbon in leaf litter making it available to species downstream), habitat services such as providing spawning areas for recreationally or commercially important species in downstream waters, and the extent to which the tributary and adjacent wetlands perform functions related to maintenance of downstream water quality such as sediment trapping.

After assessing the flow characteristics and functions of the tributary and its adjacent wetlands, the agencies will evaluate whether the tributary and its adjacent wetlands are likely to have an effect that is more than speculative or insubstantial on the chemical, physical, and biological integrity of a traditional navigable water. As the distance from the tributary to the navigable water increases, it will become increasingly important to document whether the tributary and its adjacent wetlands have a significant nexus rather than a speculative or insubstantial nexus with a traditional navigable water.

Accordingly, Corps districts and EPA regions shall document in the administrative record the available information regarding whether a tributary and its adjacent wetlands have a significant nexus with a traditional navigable water, including the physical indicators of flow in a particular case and available information regarding the functions of the tributary and any adjacent wetlands. The agencies will explain their basis for concluding whether or not the tributary and its adjacent wetlands, when considered together, have a more than speculative or insubstantial effect on the chemical, physical, and biological integrity of a traditional navigable water.

Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) are generally not waters of the United States

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and Corps districts must exercise judgment to identify the OHWM on a case-by-case basis, the Corps' regulations identify the factors to be applied. These regulations have recently been further explained in Regulatory Guidance Letter (RGL) 05-05 (Dec. 7, 2005). The agencies will apply the regulations and the RGL and take other steps as needed to ensure that the OHWM identification factors are applied consistently nationwide.

[37] See Justice Kennedy's discussion of "physical characteristics," 126 S. Ct. at 2248-2249.

[38] See, generally, 126 S. Ct. at 2248-53; see also 126 S. Ct. at 2249 ("Just as control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions, so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries....") (citing to Oklahoma ex rel. Phillips v. Guy F. Atkinson Co., 313 U.S. 508, 524-25(1941)).

because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters. In addition, ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not waters of the United States because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters.[39] Even when not jurisdictional waters subject to CWA §404, these geographic features (e.g., swales, ditches) may still contribute to a surface hydrologic connection between an adjacent wetland and a traditional navigable water. In addition, these geographic features may function as point sources (i.e., "discernible, confined, and discrete conveyances"), such that discharges of pollutants to other waters through these features could be subject to other CWA regulations (e.g., CWA §§ 311 and 402).[40]

Certain ephemeral waters in the arid west are distinguishable from the geographic features described above where such ephemeral waters are tributaries and they have a significant nexus to downstream traditional navigable waters. For example, in some cases these ephemeral tributaries may serve as a transitional area between the upland environment and the traditional navigable waters. During and following precipitation events, ephemeral tributaries collect and transport water and sometimes sediment from the upper reaches of the landscape downstream to the traditional navigable waters. These ephemeral tributaries may provide habitat for wildlife and aquatic organisms in downstream traditional navigable waters. These biological and physical processes may further support nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, functions that may significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters.

Documentation

As described above, the agencies will assert CWA jurisdiction over the following waters without the legal obligation to make a significant nexus determination: traditional navigable waters and wetlands adjacent thereto, non-navigable tributaries that are relatively permanent waters, and wetlands with a continuous surface connection with such tributaries. The agencies will also decide CWA jurisdiction over other non-navigable tributaries and over other wetlands adjacent to non-navigable tributaries based on a fact-specific analysis to determine whether they have a significant nexus with traditional navigable waters. For purposes of CWA §404 determinations by the Corps, the Corps and EPA are developing a revised form to be used by field regulators for documenting the assertion or declination of CWA jurisdiction.

Corps districts and EPA regions will ensure that the information in the record adequately supports any jurisdictional determination. The record shall, to the maximum extent practicable, explain the rationale for the determination, disclose the data and information relied upon, and, if applicable, explain what data or information received greater or lesser weight, and what professional judgment or assumptions were used in reaching the determination. The Corps districts and EPA regions will also demonstrate and document in the record that a particular water either fits within a class identified above as not requiring a significant nexus determination, or that the water has a

[39] See 51 Fed. Reg. 41206, 41217 (Nov. 13, 1986).
[40] 33 U.S.C. § 1362(14).

significant nexus with a traditional navigable water. As a matter of policy, Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

All pertinent documentation and analyses for a given jurisdictional determination (including the revised form) shall be adequately reflected in the record and clearly demonstrate the basis for asserting or declining CWA jurisdiction.[41] Maps, aerial photography, soil surveys, watershed studies, local development plans, literature citations, and references from studies pertinent to the parameters being reviewed are examples of information that will assist staff in completing accurate jurisdictional determinations. The level of documentation may vary among projects. For example, jurisdictional determinations for complex projects may require additional documentation by the project manager.

Benjamin H. Grumbles
Assistant Administrator for Water
U.S. Environmental Protection Agency

John Paul Woodley, Jr.
Assistant Secretary of the Army
(Civil Works)
Department of the Army

[41] For jurisdictional determinations and permitting decisions, such information shall be posted on the appropriate Corps website for public and interagency information.

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM-RD

July 11, 2008

PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS

JURISDICTIONAL DETERMINATIONS

TO WHOM IT MAY CONCERN: The Mobile District Regulatory Division, U.S. Army Corps of Engineers (Corps) is circulating this notice to ensure that the public is aware of recent guidance pertaining to jurisdictions.

On June 26, 2008, the U.S. Army Corps of Engineers implemented Regulatory Guidance Letter (RGL) No. 08-02. This RGL provides to the public, new options available to them, as it relates to jurisdiction under Section 404 of the Clean Water Act (CWA) and Sections 9 and 10 of the Rivers and Harbors Act of 1899 (RHA).

The following pages include RGL 08-02 and the new preliminary jurisdictional determination form. This RGL and form are also available on our website at www.sam.usace.army.mil/RD/reg, under the "jurisdiction" section.

If you have any questions concerning this publication, you may contact Mr. Jason W. Steele via e-mail at Jason.W.Steele@usace.army.mil or telephone number (251) 690-3188.

Encls

MOBILE DISTRICT
U.S. Army Corps of Engineer

US Army Corps of Engineers

REGULATORY GUIDANCE LETTER

No. 08-02 Date: 26 June 2008

SUBJECT: Jurisdictional Determinations

1. Purpose. Approved jurisdictional determinations (JDs) and preliminary JDs are tools used by the U.S. Army Corps of Engineers (Corps) to help implement Section 404 of the Clean Water Act (CWA) and Sections 9 and 10 of the Rivers and Harbors Act of 1899 (RHA). This Regulatory Guidance Letter (RGL) explains the differences between these two types of JDs and provides guidance on when an approved JD is required and when a landowner, permit applicant, or other "affected party"[1] can decline to request and obtain an approved JD and elect to use a preliminary JD instead.

a. This guidance does not address which waterbodies are subject to CWA or RHA jurisdiction. For guidance on CWA and RHA jurisdiction, see Corps regulations, "Memorandum re: Clean Water Act (CWA) Jurisdiction Following U.S. Supreme Court Discussion in Rapanos v. United States," dated 19 June 2007, and the documents referenced therein.

b. This guidance takes effect immediately, and supersedes any inconsistent guidance regarding JDs contained in RGL 07-01.

2. Approved JDs. An approved JD is an official Corps determination that jurisdictional "waters of the United States," or "navigable waters of the United States," or both, are either present or absent on a particular site. An approved JD precisely identifies the limits of those waters on the project site determined to be jurisdictional under the CWA/RHA. (See 33 C.F.R. 331.2.)

a. The Corps will provide (subject to the limitation contained in paragraph 5.b. below) an approved JD to any landowner, permit applicant, or other "affected party" when:

(1) a landowner, permit applicant, or other "affected party" requests an approved JD by name or otherwise requests an official jurisdictional determination, whether or not it is referred to as an "approved JD";

[1] As defined at 33 CFR 331.2 "affected party" means a permit applicant, landowner, a lease, easement or option holder (i.e., an individual who has an identifiable and substantial legal interest in the property) who has received an approved JD, permit denial or has declined a proffered individual permit.

(2) a landowner, permit applicant, or other "affected party" contests jurisdiction over a particular water body or wetland, and where the Corps is allowed access to the property and is otherwise able to produce an approved JD; or

(3) the Corps determines that jurisdiction does not exist over a particular water body or wetland.

b. An approved JD:

(1) constitutes the Corps' official, written representation that the JD's findings are correct;

(2) can be relied upon by a landowner, permit applicant, or other "affected party" (as defined at 33 C.F.R. 331.2) who receives an approved JD for five years (subject to certain limited exceptions explained in RGL 05-02);

(3) can be used and relied on by the recipient of the approved JD (absent extraordinary circumstances, such as an approved JD based on incorrect data provided by a landowner or consultant) if a CWA citizen's lawsuit is brought in the Federal Courts against the landowner or other "affected party," challenging the legitimacy of that JD or its determinations; and

(4) can be immediately appealed through the Corps' administrative appeal process set out at 33 CFR Part 331.

c. The District Engineer retains the discretion to use an approved JD in any other circumstance where he or she determines that is appropriate given the facts of the particular case.

d. If wetlands or other water bodies are present on a site, an approved JD for that site will identify and delineate those water bodies and wetlands that are subject to CWA/RHA jurisdiction, and serve as an initial step in the permitting process.

e. Approved JDs shall be documented in accordance with the guidance provided in RGL 07-01. Documentation requires the use of the JD Form published on June 5, 2007, or as modified by ORM2 or subsequent revisions to the June 5, 2007 JD form approved by Corps Headquarters. Districts will continue to post approved JDs on their websites.

3. A permit applicant's option to decline to request and obtain an approved JD. While a landowner, permit applicant, or other "affected party" can elect to request and obtain an approved JD, he or she can also decline to request an approved JD, and instead obtain a Corps individual or general permit authorization based on either a preliminary JD, or, in appropriate circumstances (such as authorizations by non-reporting nationwide general permits), no JD whatsoever. The Corps will determine what form of JD is appropriate

for any particular circumstance based on all the relevant factors, to include, but not limited to, the applicant's preference, what kind of permit authorization is being used (individual permit versus general permit), and the nature of the proposed activity needing authorization.

4. Preliminary JDs. Preliminary JDs are non-binding ". . . written indications that there may be waters of the United States, including wetlands, on a parcel or indications of the approximate location(s) of waters of the United States or wetlands on a parcel. Preliminary JDs are advisory in nature and may not be appealed." (See 33 C.F.R. 331.2.)

a. A landowner, permit applicant, or other "affected party" may elect to use a preliminary JD to voluntarily waive or set aside questions regarding CWA/RHA jurisdiction over a particular site, usually in the interest of allowing the landowner or other "affected party" to move ahead expeditiously to obtain a Corps permit authorization where the party determines that is in his or her best interest to do so.

b. It is the Corps' goal to process both preliminary JDs and approved JDs within 60 days as detailed in paragraph 5 below, so the applicant or other affected party's choice of whether to use a preliminary JD or approved JD should not affect this goal.

c. A landowner, permit applicant, or other "affected party" may elect to use a preliminary JD even where initial indications are that the water bodies or wetlands on a site may not be jurisdictional, if the affected party makes an informed, voluntary decision that is in his or her best interest not to request and obtain an approved JD.

d. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S.

e. Preliminary JDs are also commonly used in enforcement situations because access to a site may be impracticable or unauthorized, or for other reasons an approved JD cannot be completed in a timely manner. In such circumstances, a preliminary JD may serve as the basis for Corps compliance orders (e.g., cease and desist letters, initial corrective measures). The Corps should support an enforcement action with an approved JD unless it is impracticable to do so under the circumstances, such as where access to the site is prohibited.

f. When the Corps provides a preliminary JD, or authorizes an activity based on a preliminary JD, the Corps is making no legally binding determination of any type regarding whether CWA/RHA jurisdiction exists over the particular water body or wetland in question.

g. A preliminary JD is "preliminary" in the sense that a recipient of a preliminary JD can later request and obtain an approved JD if that later becomes necessary or appropriate during the permit process or during the administrative appeal process. If a

permit applicant elects to seek a Corps individual permit based on a preliminary JD, that permit applicant can later raise jurisdictional issues as part of an administrative appeal of a proffered permit or a permit denial, as explained in paragraph 6 below.

h. In all circumstances where an approved JD is not required by the guidance in paragraph 2 of this RGL, District Engineers retain authority to use preliminary JDs. The Corps may authorize an activity with one or more general permits, a letter of permission, or a standard individual permit, with no "official" JD of any type, or based on a preliminary JD, where the District Engineer determines that to be appropriate, and where the permit applicant has been made aware of his or her option to receive an approved JD and has declined to exercise that option. Generally, approved JDs should be used to support individual permit applications, but the applicant should be made aware of his or her option to elect to use a preliminary JD wherever the applicant feels doing so is in his or her best interest.

5. Processing approved and preliminary JDs. Every approved JD and preliminary JD should be completed and provided to the person, organization, or agency requesting it as promptly as is practicable in light of the district's workload, and site and weather conditions if a site visit is determined necessary.

a. Corps districts should not give preliminary JDs priority over approved JDs. Moreover, every Corps district should ensure that a permit applicant's request for an approved JD rather than a preliminary JD will not prejudice the timely processing of that permit application. It is the Corps' goal that every JD requested by an affected party should be completed within 60 calendar days of receiving the request. Regulatory Project Managers will notify their supervisors and develop a schedule for completion of the JD if it is not practicable to meet this 60 day goal.

b. The Corps should not provide either an approved JD or a preliminary JD to any person if the Corps has reason to believe that person is seeking a JD for any purpose relating to a CWA program not administered by the Corps (e.g., CWA Section 402, 303, or 311). In such circumstances the Corps should decline to perform the JD and instead refer the person who requested it to the Federal or state agency responsible for administering that program.

6. JDs and appeals. In any circumstance where a permit applicant obtains a Corps proffered individual permit or a permit denial, based on a preliminary JD, and where the permit applicant elects to pursue an administrative appeal of the proffered permit or the permit denial, the appeal "may include jurisdiction issues," as stated at 33 C.F.R. 331.5(a)(2). However, if an affected party during the appeal of a proffered permit or a permit denial challenges or questions jurisdiction, those jurisdictional issues must be addressed with an approved JD. Therefore, if, during or as a result of the administrative appeal of the permit denial or the terms and conditions of the proffered permit, it becomes necessary to make an official determination whether CWA/RHA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps should provide an approved JD as soon as is practicable, consistent with the

goal expressed in paragraph 5 above. Such an approved JD would be subject to the same procedures as other approved JDs, such as requirements for coordinating approved JDs with EPA.

7. Key distinction between approved JDs and preliminary JDs. By definition, a preliminary JD can only be used to determine that wetlands or other water bodies that exist on a particular site "may be" jurisdictional waters of the United States. A preliminary JD by definition cannot be used to determine either that there are no wetlands or other water bodies on a site at all (i.e., that there are no aquatic resources on the site and the entire site is comprised of uplands), or that there are no jurisdictional wetlands or other water bodies on a site, or that only a portion of the wetlands or waterbodies on a site are jurisdictional. A definitive, official determination that there are, or that there are not, jurisdictional "waters of the United States" on a site can only made by an approved JD. The Corps retains the ability to use a "no-permit-required" letter to indicate that a specific proposed activity is not subject to CWA/RHA jurisdiction when that is determined appropriate, but a "no-permit-required" letter cannot make any sort of determination regarding whether there are jurisdictional wetlands or other waterbodies on a site.

8. Mandatory use of the preliminary JD form. In each and every circumstance where a preliminary JD is used, the Corps district must complete the "Preliminary Jurisdictional Determination Form" provided at Attachment 1, which sets forth in writing the minimum requirements for a preliminary JD and important information concerning the requesting party's option to request and obtain an approved JD, and subsequent appeal rights. The signature of the affected party who requested the preliminary JD will be obtained on the preliminary JD form wherever practicable (e.g., except for enforcement situations, etc.). Where a preliminary JD form covers multiple water bodies or multiple sites, the information for each can be included in the table provided with the preliminary JD form. Information in addition to the minimum of data required on the preliminary JD form can be included on that form, but only if such information pertains to the amount and location of wetlands or other water bodies at the site. Corps regulatory personnel are expected to continue to exercise appropriate judgment and use appropriate information when making technical and scientific determinations as to what areas on the site qualify as water bodies or wetlands. Any such additional information included on the preliminary JD form should not purport, or be construed, to address any legal determination involving CWA/RHA jurisdiction on the site.

9. Data collection. Information about the quality and quantity of the aquatic resources that would be affected by the proposed activity, the types of impacts that are expected to occur, and compensatory mitigation, are obtained by the Corps during the processing of an individual permit application and are included in pre-construction notification for reporting NWPs. For example, NWP pre-construction notifications must contain a "description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; . . . a delineation of special aquatic sites and other waters of the United States on the project site." (Reissuance of Nationwide Permits Notice, 72 Fed. Reg. 11092, at 11194-95 (March 12, 2007).) Applicants should

provide a delineation of special aquatic sites in support of an individual permit or "letter of permission" application.

a. The information on a preliminary JD form should be limited to the amount and location of wetlands and other water bodies on the site and should be sufficiently accurate and reliable that the effective presumption of CWA/RHA jurisdiction over all of the wetlands and other water bodies at the site will support a reliable and enforceable permit decision. When a preliminary JD is used to support a request for a permit authorization, the information on the preliminary JD form is also relevant to the processing of that permit application (e.g., to calculate compensatory mitigation requirements). During the permit process, information in addition to the data on the preliminary JD form is developed and relied upon to support the Corps permit decision; that additional information should be carefully documented as part of the permit process (e.g., through an environmental assessment, 404(b)(1) analysis, combined decision document, or decision memorandum). This additional information for the permit decision should *not* be captured on a preliminary JD form.

b. The type of information collected to support the decision on the permit application will be the same for permit applications supported by approved JDs and for those supported by preliminary JDs. Therefore, decisions and judgments regarding environmental impacts, public interest determinations, and mitigation requirements should be adequately supported regardless of the type of JD used. For this reason, the data necessary to quantify and defend the Corps Regulatory Program's performance will be available for a permit application regardless of whether it was supported by an approved JD or a preliminary JD.

c. The information used to support an approved JD should be reliable and verifiable. Traditionally, this information has been obtained or verified though a site visit, but now, with information from new, highly sensitive technology and imaging, site visits may not always be required for approved JDs.

d. When documenting preliminary JDs, any available technical, scientific, and observational information about the wetlands or other water bodies can be entered into ORM2 regardless of whether it is the type of information that could inform a formal jurisdictional determination (e.g., discussion of the ecological relationship between water bodies), so long as legal conclusions about jurisdictional status are not included. Any additional, available information that is entered into ORM2 must be accompanied by the warning that the information has not been verified, that it is not an official determination by the government, and that it cannot later be relied upon to determine whether an area is or is not jurisdictional.

10. Coordination with U.S. Environmental Protection Agency (EPA) and posting. Districts will continue to post approved JDs on their web sites. Consistent with historical practice, preliminary JDs will not be coordinated with EPA or posted on District websites. Corps Headquarters is modifying the ORM2 data base to collect information regarding use of preliminary JDs, and regarding permit authorizations based on

preliminary JDs, or based on no official form of JD. Until ORM2 is modified to collect and access information related to preliminary JDs, every District should collect basic information, to the maximum extent practicable, on those subjects for purposes of documenting District workload.

11. This guidance remains in effect until revised or rescinded.

Attachment

for DON T. RILEY
Major General, US Army
Deputy Commanding General for Civil and
Emergency Operations

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: County/parish/borough: City:

Center coordinates of site (lat/long in degree decimal format): Lat. °

Pick List, Long. ° Pick List.

Universal Transverse Mercator:

Name of nearest waterbody:

Identify (estimate) amount of waters in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.

Cowardin Class:

Stream Flow:

Wetlands: acres.

Cowardin Class:

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☐ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name:

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date):

or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter:

☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory Project Manager (REQUIRED)	Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

SAMPLE

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
1				0.1 acre	section 10 – tidal
2				100 linear feet	section 10 – non-tidal
3				15 square feet	non-section 10 – wetland
4				0.01 acre	non-section 10 – non-wetland

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM-RD

July 11, 2008

PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS

REQUIREMENTS FOR AN APPLICATION TO BE CONSIDERED COMPLETE

TO WHOM IT MAY CONCERN: The Mobile District Regulatory Division, U.S. Army Corps of Engineers (Corps) is circulating this notice to ensure that the public is aware of a recent change to our regulations. This change is described below and is effective as of July 14, 2008.

The Corps, in the Federal Register dated April 10, 2008, issued final regulations governing compensatory mitigation for activities authorized by permits issued by the Department of the Army (DA). While the main focus of the regulations is to establish performance standards and criteria for the use of permittee-responsible compensatory mitigation, mitigation banks, and in-lieu programs to improve the quality and success of compensatory mitigation projects for activities authorized by DA permits, the regulations also redefined what information is required for a complete application for an individual permit.

The requirements for a complete application for an individual permit are discussed in the Corps regulations at 33 CFR 325.1(d). This regulation has been amended by redesignating paragraphs (d)(7), (d)(8), and (d)(9) as paragraphs (d)(8), (d)(9), and (d)(10), respectively, and adding new paragraphs (d)(7) as follows:

325.1 Applications for permits

(d)
(7) For activities involving discharges of dredged or fill material into waters of the United States, the application must include a statement describing how impacts to waters of the United States are to be avoided and minimized. The application must also include either a statement describing how impacts to waters of the United States are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.

This requirement has been adopted in the final rule because it will provide useful information for the permit evaluation process.

Pursuant to 332.4(b)(1) of the new regulations, for any activity that requires a standard DA permit pursuant to section 404 of the Clean Water Act, the public notice for the proposed activity must contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for. The mitigation statement in the public notice is to be based on the information submitted by the applicant, in accordance with the new requirement at 33 CFR 325.1 (d)(7). This explanation shall address, to the extent that such information is provided in the mitigation statement required by 325.1 (d)(7), the proposed avoidance and minimization and the amount, type, and location of any proposed compensatory mitigation, including any out-of-kind compensation, or indicate an intention to use an approved mitigation bank or in-lieu fee program.

The mitigation statement provided should be brief, because the permit evaluation process is an iterative process, and district engineers often require additional avoidance and minimization measures as they evaluate permit applications. The level of detail provided in the public notice must be commensurate with the scope and scale of the impacts.

The full text of the April 10, 2008 Federal Register may be viewed at the following web address:

http://www.usace.army.mil/cw/cecwo/reg/news/final_mitig_rule.pdf

If you have any questions regarding the information contained in this public notice, you may contact Jason W. Steele at 251-690-3188 or by e-mail at Jason.W.Steele@usace.army.mil.

MOBILE DISTRICT
U.S. Army Corps of Engineer

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

CESAM-RD

May 9, 2011

PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT

DRAFT CLEAN WATER ACT GUIDANCE REQUEST FOR COMMENTS

On May 2, 2011, the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE) jointly published in the Federal Register their proposal to issue clarifying guidance for determining which waters and wetlands are protected under the Clean Water Act (CWA) programs. The agencies are soliciting comments on the proposed draft guidance from interested parties, and the comment period will be 60 days.

The proposed draft guidance is intended to improve the consistency, predictability, and transparency of jurisdictional determinations and be fully consistent with the CWA, applicable regulations, and Supreme Court decisions.

You may submit comments, identified by docket number EPA–HQ–OW–2011–0409, by any of the following methods:

- Federal eRulemaking Portal: http://www.regulations.gov at docket ID no. EPA–HQ–OW–2011–0409. Please see the Federal Register notice for instructions on submitting comments.
- E-mail: owdocket@epa.gov. Include EPA–HQ–OW–2011–0409 in the subject line of the message.
- Mail: Send the original and three copies of your comments to: Water Docket, Environmental Protection Agency, Mail Code 2822T, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, Attention: Docket ID No. EPA–HQ–OW–2011–0409.
- Hand Delivery/Courier: Deliver your comments to EPA Docket Center, EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20460, Attention: Docket ID No. EPA–HQ–OW–2011–0409. Such deliveries are accepted only during the Docket's normal hours of operation, which are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. Special arrangements should be made for deliveries of boxed information. The telephone number for the Water Docket is (202)566-2426.

After the comment period has ended, the agencies will thoroughly consider all comments received as they develop final guidance. *The 2008 Clean Water Act Guidance will remain in effect until final guidance is published in the Federal Register.*

A copy of the proposed draft guidance is available through the USACE webpage at http://www.usace.army.mil/CECW/Pages/nnpi.aspx, the EPA webpage at http://www.epa.gov, at www.regulations.gov (docket number EPA–HQ–OW–2011–0409), or the Federal Register at http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR.

Additional information about the Environmental Protection Agency's CWA programs can be found at: http://water.epa.gov/lawsregs/guidance/index.cfm. The U.S. Army Corps of Engineers Regulatory program information can be found at: http://www.usace.army.mil/CECW/Pages/cecwo_reg.aspx

MOBILE DISTRICT
U.S. Army Corps of Engineers

Estimated Total Annual Cost: $1,356,320, includes $20 in annualized capital or O&M costs.

Changes in the Estimates: There is a decrease of 1,667 hours in the total estimated burden currently identified in the OMB Inventory of Approved ICR Burdens. This decrease reflects EPA's updating of burden estimates. The decrease is due to an increase in computer-generated product transfer documents.

Dated: April 25, 2011.

John Moses,

Director, Collection Strategies Division.

[FR Doc. 2011–10425 Filed 4–29–11; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9300–9]

In the Matter of the Taylor Lumber and Treating Superfund Site, Sheridan, Oregon, Amendment to Agreement and Covenant Not To Sue, Pacific Wood Preserving of Oregon

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice; request for public comment.

SUMMARY: This Amendment to Agreement and Covenant Not to Sue ("Amendment") amends the 2002 Agreement and Covenant Not To Sue, Docket CERCLA–10–2002–0034 ("Original Agreement"), entered into by and between the United States on behalf of the U.S. Environmental Protection Agency ("EPA") and Pacific Wood Preserving of Oregon ("PWPO"). In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601 *et seq.* ("CERCLA"), notice is hereby given of the proposed Agreement between the EPA and PWPO, subject to the final review and approval of the EPA and the U.S. Department of Justice.

The 2002 Original Agreement with PWPO provided a covenant not to sue for response costs at the Taylor Lumber and Treating Site, which PWPO was acquiring, in exchange for several obligations related to site operation and a commitment not to use certain hazardous products, including pentachlorophenol, at the Site. This Amendment removes the restriction on pentachlorophenol use and extends PWPO's commitment to collect and treat groundwater and maintain the asphalt cap until January 31, 2022, or for as long as PWPO owns or operates on the Property, whichever is later. This Amendment includes additional commitments including submittal of annual environmental audit reports; implementation of institutional controls; payment of EPA future oversight costs; and, a revised Statement of Work for future work to be performed by PWPO.

DATES: Comments must be received on or before May 16, 2011.

ADDRESSES: The proposed settlement is available for public inspection at the U.S. EPA Region 10 office, located at 1200 Sixth Avenue, Seattle, Washington 98101. A copy of the proposed settlement may be obtained from Sharon Eng, Paralegal, U.S. EPA Region 10, Mail Stop ORC–158, 1200 Sixth Avenue, Suite 900, Seattle, Washington 98101; 206–553–0705. Comments should reference the Taylor Lumber and Treating Superfund Site in Sheridan, Oregon, EPA Docket No. CERCLA–10–2002–0034 and should be addressed to Jennifer Byrne, Assistant Regional Counsel, U.S. EPA Region 10, Mail Stop ORC–158, 1200 Sixth Avenue, Suite 900, Seattle, Washington 98101.

FOR FURTHER INFORMATION CONTACT: Jennifer Byrne, Office of Regional Counsel, Mail Stop: ORC–158, Environmental Protection Agency, 1200 Sixth Avenue, Suite 900, Seattle, WA, 98101; *telephone number:* 206–553–0050; *fax number:* 206–553–0163; *e-mail address: byrne.jennifer@epa.gov.*

Dated: April 25, 2011.

Daniel D. Opalski,

Director, Office of Environmental Cleanup.

[FR Doc. 2011–10567 Filed 4–29–11; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF DEFENSE

Deaprtment of the Army, Corps of Engineers

[EPA–HQ–OW–2011–0409; FRL–9300–6]

EPA and Army Corps of Engineers Guidance Regarding Identification of Waters Protected by the Clean Water Act

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

ACTION: Notice of availability and request for comments.

SUMMARY: The Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) are publishing for public comment proposed guidance that describes how the agencies will identify waters protected by the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act or CWA or Act) and implement the Supreme Court's decisions on this topic (*i.e., Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers (SWANCC)* (531 U.S. 159 (2001)) and *Rapanos* v. *United States* (547 U.S. 715 (2006)) *(Rapanos)).* The agencies believe that under this proposed guidance the number of waters identified as protected by the Clean Water Act will increase compared to current practice and this improvement will aid in protecting the Nation's public health and aquatic resources.

The proposed guidance is consistent with the principles established by the Supreme Court cases and is supported by the agencies' scientific understanding of how waterbodies and watersheds function.

In addition, the agencies believe that when the revised guidance is finalized and goes into effect, it will improve CWA program predictability and clarity regarding the scope of "waters of the United States" protected under the Act and that this improvement will have benefits for both the government and regulated parties. When finalized, this guidance would supersede previously issued guidance on this matter. This guidance will apply to all CWA programs, including section 303 water quality standards, section 311 oil spill prevention and response, section 401 water quality certification, section 402 National Pollutant Discharge Elimination System permits, and section 404 permits for discharges of dredged or fill material. The agencies seek public comment on all aspects of the proposed guidance, including interpretations and scientific underpinnings.

In addition to this guidance, the agencies expect to propose revisions of existing regulations to further clarify which waters are subject to CWA jurisdiction, consistent with the Supreme Court's decisions. Public comment on any such revisions will be requested at the time they are proposed.

DATES: Comments must be received on or before July 1, 2011.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OW–2011–0409 by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

- *E-mail: owdocket@epa.gov.* Include EPA–HQ–OW–2011–0409 in the subject line of the message.
- *Mail:* Send the original and three copies of your comments to: Water Docket, Environmental Protection Agency, Mail Code 2822T, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, Attention: Docket ID No. EPA–HQ–OW–2011–0409.
- *Hand Delivery/Courier:* Deliver your comments to EPA Docket Center, EPA West, Room 3334, 1301 Constitution Avenue, NW., Washington, DC 20460, Attention Docket ID No. EPA–HQ–OW–2011–0409. Such deliveries are accepted only during the Docket's normal hours of operation, which are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. Special arrangements should be made for deliveries of boxed information. The telephone number for the Water Docket is 202–566–2426.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OW–2011–0409. EPA's policy is that all comments received will be included in the public docket without change and may be made available on-line at *http://www.regulations.gov,*including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI, or otherwise protected, through *http://www.regulations.gov* or e-mail. The *http://www.regulations.gov* Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail directly to EPA without going through *http://www.regulations.gov,* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA might not be able to consider your comment. Avoid the use of special characters and any form of encryption, and ensure that electronic files are free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Some information, however, is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is publicly available only in hard copy. Publicly available docket materials are available electronically at *http://www.regulations.gov* or in hard copy at the Water Docket, EPA Docket Center, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202–566–1744, and the telephone number for the Water Docket is 202–566–2426.

FOR FURTHER INFORMATION CONTACT: Ms. Donna Downing, Office of Water (4502–T), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington DC 20460; telephone number 202–566–1783; e-mail address: *CWAwaters@epa.gov.* Mr. David Olson, Regulatory Community of Practice (CECW–CO–R), U.S. Army Corps of Engineers, 441 G Street, NW., Washington, DC 20314; telephone number 202–761–4922; email address: *david.b.olson@usace.army.mil.*

SUPPLEMENTARY INFORMATION: EPA and the Corps are seeking public comment on proposed joint agency guidance regarding identification of waters protected by the Clean Water Act. The agencies intention is that the final joint guidance will supersede the "Joint Memorandum" providing clarifying guidance on *SWANCC,* dated Jan. 15, 2003 (68 FR 1991, 1995), and "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos* v. *United States & Carabell* v. *United States,*" dated December 2, 2008, and available at *http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm.* Until that final guidance is issued, both the 2003 and 2008 CWA jurisdiction guidance remain in effect.

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. 1251(a)). One of the mechanisms adopted by Congress to achieve that purpose is a prohibition on the discharge of any pollutants into "navigable waters" except in compliance with other specified sections of the CWA (33 U.S.C. 1311(a) and 1362(12)(A)). In most cases, this means compliance with a permit issued pursuant to CWA section 402 (33 U.S.C. 1342) or section 404 (33 U.S.C. 1344). The CWA provides that "[t]he term 'navigable waters' means the waters of the United States, including the territorial seas" (33 U.S.C. 1362(7)). EPA and the Corps have further defined the term "waters of the United States" in regulations (40 CFR 230.3(s) and 33 CFR 328.3(a); substantively similar regulatory definitions appear at 40 CFR 110.1, 112.2, 116.3, 117.1, 122.2, 232.2, 300.5, part 300 App. E, 302.3 and 401.11).

The U.S. Supreme Court has addressed the scope of waters of the United States protected by the CWA in three cases, two of which are specifically addressed by the draft guidance. In *SWANCC,* the Court addressed the question of CWA jurisdiction over isolated ponds, and concluded that CWA jurisdiction could not be based solely on the presence of migratory birds. In *Rapanos,* the Court addressed CWA protections for wetlands adjacent to tributaries, and issued five opinions with no single opinion commanding a majority of the Court. Neither *SWANCC* nor the opinions in *Rapanos* invalidated any of the regulatory provisions defining "waters of the United States." The Court also addressed the question of CWA jurisdiction in an earlier case, *Riverside Bayview Homes.* While not specifically addressed in the current guidance, this case informed the Court's decisions in the latter two cases.

The agencies believe it is advisable to replace existing guidance documents interpreting *SWANCC* and *Rapanos* in order to implement the CWA in a manner that is consistent with those opinions, reflects the best available science, and recognizes recent field implementation experience. By reflecting such developments, the proposed guidance made available today for public comment is expected, once it is finalized after considering all comments received, to provide clearer direction to field staff in implementing the Court decisions and reduce uncertainty in the regulated community.

EPA and Army Corps of Engineers Guidance Regarding Identification of Waters Protected by the Clean Water Act

Dated: April 25, 2011.

Nancy K. Stoner,

Acting Assistant Administrator for Water Environmental Protection Agency.

Dated: April 26, 2011.

Jo Ellen Darcy,

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

[FR Doc. 2011–10565 Filed 4–29–11; 8:45 am]

BILLING CODE 6560–50–P

Draft Guidance on Identifying Waters Protected by the Clean Water Act

This draft guidance clarifies how the Environmental Protection Agency (EPA)*[i] and the U.S. Army Corps of Engineers (the Corps)[ii] will identify waters protected by the Federal Water Pollution Control Act Amendments of 1972[1] (Clean Water Act or CWA or Act) and implement the Supreme Court's decisions concerning the extent of waters covered by the Act (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)*[2] and *Rapanos v. United States (Rapanos)*[3]). This document clarifies how the EPA and the Corps understand existing requirements of the CWA and the agencies' implementing regulations in light of *SWANCC* and *Rapanos* and provides guidance to agency field staff in making determinations about whether waters are protected by the CWA.

This draft guidance document is intended to describe for agency field staff the agencies' current understandings; it is not a rule, and hence it is not binding and lacks the force of law. Once finalized, this guidance will supersede existing guidance to field staff issued in 2003 and 2008 on the scope of "waters of the United States" (also "waters of the U.S.") subject to CWA programs.[iii] Although guidance does not have the force of law, it is frequently used by Federal agencies to explain and clarify their understandings of existing requirements. In this case, the agencies believe that field staff across the country will benefit from new guidance that is informed by lessons learned since 2008 and that reflects the agencies' understandings with respect to CWA jurisdiction, consistent with Supreme Court decisions and existing agency regulations. Each jurisdictional determination, however, will be made on a case-by-case basis considering the facts and circumstances of the case and consistent with applicable statutes, regulations, and case law.

After receiving and taking account of public comments on this document, EPA and the Corps expect to finalize it and to undertake rulemaking consistent with the Administrative Procedure Act. This process is expected to start with a proposed rule, to clarify further via regulation the extent of Clean Water Act jurisdiction, consistent with the Court's decisions. EPA and the Corps decided to begin this process with draft, nonbinding guidance in order to clarify their existing understandings while also considering and receiving the benefit of public comments.

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and this guidance will help the agencies implement specific provisions of the Act to achieve this objective.[4] The CWA has a number of programs designed to protect and restore the Nation's waters. Together, these programs provide effective protection from pollution for waterbodies across the country, including waters that

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* To increase clarity of this document, endnotes that primarily provide citations will be indicated with Arabic numerals, and footnotes that provide additional substantive information will be indicated with Roman numerals.

[i] EPA Regions will use this guidance to oversee and implement programs under the Clean Water Act, including those under sections 303, 311, 401, 402 and 404, 33 U.S.C. §§ 1313, 1321, 1341, 1342 and 1344. (See endnote 1 for an explanation of the relevant history of the Clean Water Act.)

[ii] Corps Districts will utilize this guidance to implement Clean Water Act section 404, 33 U.S.C. § 1344.

[iii] Specifically, this memorandum supersedes the "Joint Memorandum" providing clarifying guidance on *SWANCC*, dated January 15, 2003 (68 Fed. Reg. 1991, 1995), and "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*," dated December 2, 2008.

supply drinking water, filter pollutants, provide water for irrigation, and support hunting and fishing, outdoor recreation, and tourism.

The Clean Water Act, however, applies only to waters that are "waters of the United States." This draft guidance clarifies how EPA and the Corps will identify waters to be protected under the Act consistent with the statute, regulations, Supreme Court caselaw, relevant science related to aquatic ecosystems, and the agencies' field experience. As noted above, this guidance, once finalized, will supersede previously issued guidance on the scope of "waters of the United States" (also "waters of the U.S.") subject to CWA programs. However, it is not the agencies' intention that previously issued jurisdictional determinations be re-opened as a result of this guidance.

The U.S. Supreme Court has addressed the scope of waters of the United States protected by the CWA in three cases. In *United States v. Riverside Bayview Homes, Inc.* (474 U.S. 121 (1985)), the Supreme Court held that wetlands adjacent to a traditional navigable water were properly considered to be "waters of the United States." In *SWANCC*, the Court addressed the question of CWA jurisdiction over isolated, non-navigable, intrastate ponds, and concluded that CWA jurisdiction could not be based solely on the presence of migratory birds. In *Rapanos*, the Court addressed CWA protections for wetlands adjacent to non-navigable tributaries, and issued five opinions with no single opinion commanding a majority of the Court. The plurality opinion, authored by Justice Scalia, stated that "waters of the United States" extended beyond traditional navigable waters to include "relatively permanent, standing or flowing bodies of water." Id. at 739. The plurality went on to clarify that relatively permanent waters "do not necessarily exclude" streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought, and seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months. The plurality opinion also asserted that only wetlands with a "continuous surface connection" to other jurisdictional waters are considered "adjacent" and protected by the CWA. Id. at 742.

Justice Kennedy's concurring opinion took a different approach from Justice Scalia's. Justice Kennedy concluded that "waters of the United States" included wetlands that had a significant nexus to traditional navigable waters, "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). The four justices who signed on to Justice Stevens' opinion would have upheld jurisdiction under the agencies' existing regulations and stated that they would uphold jurisdiction under either the plurality or Justice Kennedy's opinion (id. at 810).

The agencies continue to believe, as expressed in previous guidance, that it is most consistent with the *Rapanos* decision to assert jurisdiction over waters that satisfy either the plurality or the Justice Kennedy standard, since a majority of justices would support jurisdiction under either standard. However, after careful review of these opinions, the agencies concluded that previous guidance did not make full use of the authority provided by the CWA to include waters within the scope of the Act, as interpreted by the Court. This draft guidance provides a more complete discussion of the agencies' interpretation, including of how waters with a "significant nexus" to traditional navigable waters or interstate waters are protected by the CWA.

In addition, this guidance explains the legal basis for coverage of waters by the CWA in cases that were not addressed by the previous guidance (for example, interstate waters).

The agencies expect, based on relevant science and recent field experience, that under the understandings stated in this draft guidance, the extent of waters over which the agencies assert jurisdiction under the CWA will increase compared to the extent of waters over which jurisdiction has been asserted under existing guidance, though certainly not to the full extent that it was typically asserted prior to the Supreme Court decisions in *SWANCC* and *Rapanos*. However, each jurisdictional determination will be made on a case-by-case basis considering the facts and circumstances of the case and consistent with applicable statutes, regulations, and case law.

The agencies understand that decisions concerning whether or not a waterbody is subject to the CWA have consequences for State, tribal, and local governments and for private parties. Consistent with Executive Order 13563, and in particular its emphasis on predictability and certainty, key goals of this draft guidance are to increase clarity and to reduce costs and delays in obtaining CWA permits by reducing the complexity of Corps of Engineers and EPA decisions concerning waters protected by the CWA, thus improving the predictability of the process of identifying waters protected by the Act, and increasing consistency of decisions across the country.

There is only one CWA definition of "waters of the United States." Thus, this draft guidance, like the earlier guidance it replaces, necessarily will apply to decisions concerning whether a waterbody is subject to any of the programs authorized under the CWA. Although *SWANCC* and *Rapanos* specifically involved section 404 of the CWA and discharges of dredged or fill material, the term "waters of the United States" must be interpreted consistently for all CWA provisions that use the term. These provisions include the section 402 National Pollutant Discharge Elimination System (NPDES) permit program, the section 311 oil spill program,[5] the water quality standards and total maximum daily load programs under section 303, and the section 401 State water quality certification process. However, while there is only one CWA definition of "waters of the United States," there may be other statutory factors that define the reach of a particular CWA program or provision.[6]

This draft guidance does not address the regulatory exclusions from coverage under the CWA for waste treatment systems and prior converted croplands, or practices for identifying waste treatment systems or prior converted croplands.[7] It does not affect any of the exemptions from CWA section 404 permitting requirements provided by CWA section 404(f), including those for normal agriculture, forestry and ranching practices.[8] This guidance also does not address the statutory and regulatory exemptions from NPDES permitting requirements for agricultural stormwater discharges and return flows from irrigated agriculture.[9]

The CWA provisions and supporting regulations described in this document contain legally binding requirements. The agencies emphasize that this guidance does not substitute for those provisions or regulations and is not itself a regulation. It 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. Any decisions regarding a particular water will be

based on the applicable statutes, regulations, and case law. Therefore, interested persons are free to raise questions regarding particular situations, and EPA and/or the Corps will consider whether or not the recommendations or interpretations of this guidance are appropriate in that situation based on the statutes, regulations, and case law. The use of language such as "recommend," "may," "should" and "can" is intended to describe agency policies and recommendations, while the use of mandatory terminology such as "must" and "required" is intended to describe the agencies' interpretations of controlling requirements under the terms of the CWA, its implementing regulations, and relevant case law.

This draft guidance is divided into eight sections:

- The first two sections address the fundamental classes of waters subject to Clean Water Act jurisdiction: traditional navigable waters (Section 1) and interstate waters (Section 2).

- The next section provides general guidance relating to the "significant nexus" standard described by Justice Kennedy in the *Rapanos* decision (Section 3).

- The next three sections provide guidance on determining whether various types of waters are subject to CWA jurisdiction, including:
  - Tributaries (Section 4);
  - Adjacent wetlands (Section 5); and
  - Other waters (Section 6).

- The next section provides examples of waters that are generally not waters of the United States under the CWA (Section 7).

- The final section provides guidance on the documentation necessary to support decisions concerning whether waters are protected by the CWA (Section 8).

Additional scientific and legal information concerning these topics is provided in an appendix at the end of this document.

Summary of Key Points

Based on the agencies' interpretation of the statute, implementing regulations and relevant caselaw, the following waters are protected by the Clean Water Act:

- **Traditional navigable waters;**
- **Interstate waters;**
- **Wetlands adjacent to either traditional navigable waters or interstate waters;**
- **Non-navigable tributaries to traditional navigable waters that are relatively permanent, meaning they contain water at least seasonally; and**
- **Wetlands that directly abut relatively permanent waters.**

In addition, the following waters are protected by the Clean Water Act if a fact-specific analysis determines they have a "significant nexus" to a traditional navigable water or interstate water:

- **Tributaries to traditional navigable waters or interstate waters;**
- **Wetlands adjacent to jurisdictional tributaries to traditional navigable waters or interstate waters; and**
- **Waters that fall under the "other waters" category of the regulations. The guidance divides these waters into two categories, those that are physically proximate to other jurisdictional waters and those that are not, and discusses how each category should be evaluated.**

The following aquatic areas are generally not protected by the Clean Water Act:

- **Wet areas that are not tributaries or open waters and do not meet the agencies' regulatory definition of "wetlands";**
- **Waters excluded from coverage under the CWA by existing regulations;**
- **Waters that lack a "significant nexus" where one is required for a water to be protected by the CWA;**
- **Artificially irrigated areas that would revert to upland should irrigation cease;**
- **Artificial lakes or ponds created by excavating and/or diking dry land and used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;**
- **Artificial reflecting pools or swimming pools created by excavating and/or diking dry land;**
- **Small ornamental waters created by excavating and/or diking dry land for primarily aesthetic reasons;**
- **Water-filled depressions created incidental to construction activity;**
- **Groundwater drained through subsurface drainage systems and**
- **Erosional features (gullies and rills), and swales and ditches that are not tributaries or wetlands.**

Section 1: Traditional Navigable Waters

EPA and the Corps will continue to assert CWA jurisdiction over "[a]ll waters which are 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."[10] These waters are referred to in this guidance as "traditional navigable waters." The traditional navigable waters include all of the "navigable waters of the United States," as defined in 33 C.F.R. part 329 and by numerous decisions of the federal courts, plus all other waters that are navigable-in-fact (for example, the Great Salt Lake, Utah, and Lake Minnetonka, Minnesota). Thus, the traditional navigable waters include, but are not limited to, the "navigable waters of the United States" within the meaning of section 10 of the Rivers and Harbors Act of 1899 (also known as "Section 10 waters").[11]

For purposes of CWA jurisdiction and this guidance, waters will be considered traditional navigable waters if:

- They are subject to section 9 or 10 of the Rivers and Harbors Act; or
- A federal court has determined that the water body is navigable-in-fact under federal law; or
- They are waters currently being used for commercial navigation, including commercial waterborne recreation (for example, boat rentals, guided fishing trips, or water ski tournaments); or
- They have historically been used for commercial navigation, including commercial waterborne recreation; or
- They are susceptible to being used in the future for commercial navigation, including commercial waterborne recreation. Susceptibility for future use may be determined by examining a number of factors, including the physical characteristics and capacity of the water to be used in commercial navigation, including commercial recreational navigation (for example, size, depth, and flow velocity[iv]), and the likelihood of future commercial navigation, including commercial waterborne recreation. A likelihood of future commercial navigation, including commercial waterborne recreation, can be demonstrated by current boating or canoe trips for recreation or other purposes. A determination that a water is susceptible to future commercial navigation, including commercial waterborne recreation, should be supported by evidence.[v]

[iv] While a traditional navigable water need not be capable of supporting navigation at all times, the frequency, volume, and duration of flow are relevant considerations for determining if a waterbody has the physical characteristics suitable for navigation.

[v] A trip taken solely for the purpose of demonstrating a waterbody can be navigated would be sufficient. *See, e.g., FPL Energy Marine Hydro L.L.C. v. FERC*, 287 F.3d 1151, 1157 (D.C. Cir. 2002).

Section 2: Interstate Waters

EPA and the Corps will assert jurisdiction over all interstate waters, consistent with the agencies' current regulations defining "waters of the United States" to include "interstate waters including interstate wetlands."[12] Interstate waters, defined by the federal water pollution control statutes prior to the CWA as "all rivers, lakes, and other waters that flow across, or form a part of, State boundaries," remain jurisdictional waters under the CWA, even if such waters are not traditional navigable waters as described in Section 1 above.[13] For purposes of this guidance, lakes, ponds, and similar lentic (or still) water features crossing state boundaries are jurisdictional as interstate waters in their entirety. For streams and rivers, including impoundments, field staff should determine the upstream and downstream extent of the stream or river crossing a state boundary that should be considered the "interstate water." One method of determining the extent of a riverine "interstate water" is the use of stream order. Thus, for rivers and streams the "interstate water" would extend upstream and downstream of such boundary for the entire length that the water is of the same stream order.[14]

The agencies will analyze tributaries to interstate waters[15] consistent with the treatment of tributaries to traditional navigable waters under Justice Kennedy's standard discussed in Section 4 below. Similarly, the agencies will analyze wetlands adjacent to interstate waters (except wetlands that are adjacent to interstate wetlands)[16] consistent with the treatment of adjacent wetlands under Justice Kennedy's standard discussed in Section 5 below. Finally, EPA and the Corps will analyze other waters relative to an interstate water consistent with Section 6 below.

Section 3: Significant Nexus Analysis

The agencies will assert jurisdiction over waters with a significant nexus to traditional navigable waters or interstate waters in accordance with *SWANCC* and *Rapanos*. Justice Kennedy stated:

> "In *Solid Waste Agency of Northern Cook Cty. v. Army Corps of Engineers*, 531 U.S. 159 (2001) (*SWANCC*), the Court held, under the circumstances presented there, 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."[17]

Waters have the requisite significant nexus if they, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters or interstate waters.[vi] There is one significant nexus standard for waters of the United States, and this section provides general guidance for determining the presence or absence of a significant nexus. Sections 4, 5 and 6 provide more

[vi] In discussing the significant nexus standard, Justice Kennedy stated: "The required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the [CWA] to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters' . . . ." 547 U.S. at 779. Consistent with Justice Kennedy's instruction, EPA and the Corps will apply the significant nexus standard in a manner that restores and maintains any of these three attributes of traditional navigable waters and interstate waters.

specific guidance to field staff for applying the significant nexus standard when determining jurisdiction over:

- tributaries,
- adjacent wetlands, and
- other waters.

To evaluate the presence or absence of a significant nexus, the agencies intend to, as a general matter, consider:

(1) Waters to be "similarly situated" with waters of the same resource type, specifically (a) tributaries; (b) adjacent wetlands; or (c) other waters that are in close physical proximity to traditional navigable waters, interstate waters, or their jurisdictional tributaries ("proximate other waters");[vii]
(2) Waters to be "in the region" if they fall within the same watershed. For the purposes of this analysis, the watershed is defined by the area draining into the traditional navigable water or interstate water; and
(3) Waters to have a significant nexus if they alone or in combination with other similarly situated waters in the same watershed have an effect on the chemical, physical, or biological integrity of traditional navigable waters or interstate waters that is more than "speculative or insubstantial."

Therefore, field staff should first determine whether the water to be evaluated is a tributary, adjacent wetland, or proximate other water under the regulations - waters in the same category should be considered the similarly situated waters.

Next, field staff should determine the watershed, as defined by the area[18] draining into the nearest traditional navigable water or interstate water, and should identify the "similarly situated" waters in that watershed. The logical and scientifically valid "region" for determining whether similarly situated waters have a significant nexus is the watershed that drains to the nearest traditional navigable water or interstate water through a single point of entry. There may be circumstances in which field staff, for efficiency purposes, elect to begin the case-by-case significant nexus analysis utilizing a smaller watershed (for example, in some circumstances, the Hydrologic Unit Code (HUC)-10 "watershed" as identified by the U.S. Geological Survey and the Natural Resources Conservation Service, which are typically between 40,000-250,000 acres in size).[19] Field staff should not, however, utilize an area larger than the watershed that drains to the nearest traditional navigable water or interstate water through a single point of entry. When a smaller watershed provides sufficient science-based justification to establish jurisdiction, field staff need not unnecessarily expend administrative time and resources analyzing the entire single point of entry watershed. However, field staff should not use a watershed smaller than the single point of entry watershed as the basis for a finding of no jurisdiction.

[vii] For other waters that are not in close physical proximity to traditional navigable waters, interstate waters, or their jurisdictional tributaries, the agencies will apply the significant nexus standard to each of these waters individually, except in cases where there is a compelling scientific basis for treating a group of such waters as similarly situated waters in the same region (see Section 6).

Finally, field staff should determine whether the water they are evaluating, in combination with other similarly situated waters in the watershed, has a significant nexus to the nearest traditional navigable water or interstate water. Functions of waters that might demonstrate a significant nexus include sediment trapping, nutrient recycling, pollutant trapping and filtering, retention or attenuation of flood waters, runoff storage, and provision of aquatic habitat. A hydrologic connection is not necessary to establish a significant nexus, because in some cases the lack of a hydrologic connection would be a sign of the water's function in relationship to the traditional navigable water or interstate water, such as retention of flood waters or pollutants that would otherwise flow downstream to the traditional navigable water or interstate water.

Within a single point of entry watershed, over a period of time there will probably be multiple jurisdictional determinations. While field staff will have to make case-specific determinations, they may use information used in previous determinations, and the agencies would generally expect that if a significant nexus has been established for one water in the watershed, then other similarly situated waters in the watershed would also be found to have a significant nexus, because under Justice Kennedy's test, similarly situated waters in the region should be evaluated together. However, the documentation for each case should be complete enough to support the specific jurisdictional determination without cross-references to other files, including an explanation of which waters were considered together as similarly situated and in the same region.

Among the most important tasks for field staff is demonstrating that a <u>significant</u> nexus exists between the "similarly situated" waters that are the subject of a case-specific jurisdictional determination and the relevant traditional navigable water or interstate water. Justice Kennedy provides guidance about the nature of the nexus when he concludes that waters are not jurisdictional when their effects on the physical, chemical, or biological integrity of downstream traditional navigable waters are speculative or insubstantial. In the context used by Justice Kennedy, a "significant nexus" includes having a predictable or observable chemical, physical, or biological functional relationship between the similarly situated waters and the traditional navigable water or interstate water. EPA and the Corps should further demonstrate that the similarly situated waters significantly affect the traditional navigable water or interstate water.

Thus, field staff should look for indicators of hydrology, effects on water quality, and physical, chemical, and biological (including ecological) connections or functions when assessing whether a water, alone or in combination with similarly situated waters, has a more than speculative or insubstantial effect on the chemical, physical, or biological integrity of downstream traditional navigable waters or interstate waters. Examples of ways in which hydrology can significantly affect downstream waters include, but are not limited to, transport of water and materials and compounds carried by the water (e.g., suspended materials, dissolved compounds), water retention, as a medium for the movement of aquatic organisms such as fish and invertebrates, and water discharge (e.g., release of retained water to other waters). Effects on the chemical integrity of downstream waters may include the extent to which the waters have the capacity to carry pollutants (for example, petroleum wastes, toxic wastes, and sediment) or flood waters downstream to traditional navigable waters or interstate waters; the extent to which

the waters reduce the amount of pollutants or flood waters that would otherwise enter traditional navigable waters or interstate waters; and the extent to which the waters perform physical functions related to the maintenance of downstream water quality such as sediment trapping. Biological functions performed by the waters that may affect downstream traditional navigable waters or interstate waters include the capacity to transfer nutrients and organic carbon to downstream food webs (for example, macroinvertebrates present in headwater streams convert carbon in leaf litter, making it available to species downstream), and the maintenance of habitat that provides spawning areas for species in downstream waters.

Analysis of the above indicators, whether documented for an individual water or based on scientific literature describing functions applicable to the waters in question, along with an analysis of how the described functions affect a traditional navigable water or interstate water will allow field staff to evaluate whether the water alone or in combination with similarly situated waters in the watershed is likely to have a more than speculative or insubstantial effect on the chemical, physical, or biological integrity of a traditional navigable water or interstate water. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (for example, between a tributary and the traditional navigable water). Watershed ecosystems, and their interrelationships, are constructed of component parts that have relevance when considered collectively. Failure to protect the components can undermine the ecosystem in its entirety. Therefore, the agencies have an obligation to evaluate waters in terms of how they interrelate and function as ecosystems rather than as individual units, especially in the context of complex ecosystems where their integrity may be compromised by environmental harms that individually may not be measurably large but collectively are significant.

It is important to clarify that agency field staff, in conducting a significant nexus analysis, are not required to identify or evaluate every similarly situated water located within a particular watershed being assessed. Staff should evaluate as many waters of the same type as is necessary to support and document the presence or absence of a significant nexus for that type of water (e.g., adjacent wetland, tributary or proximate other water). Staff should be confident that their significant nexus determination based on evaluation of a representative subset of adjacent wetlands, tributaries, or proximate other waters in a particular watershed would be fully consistent with a determination based on an evaluation of all waters of the same type in the watershed. Field staff should look at the best available information to identify the similarly situated waters in the point of entry watershed and their effects on downstream traditional navigable waters or interstate waters. In many circumstances, a reliable affirmative jurisdictional determination may be based on consideration of a subset of similarly situated waters, since including additional waters in the analysis would only establish a more significant nexus to the traditional navigable water or interstate water. In general, field staff are not expected to develop new information on similarly situated waters (e.g., the identification or delineation of as yet unmapped wetlands or tributaries). In many cases, scientifically credible (e.g., peer reviewed) literature on the functions and effects of similarly situated waters generally will be sufficient, along with site-specific information for the water for which a determination is being conducted, to support a significant nexus jurisdictional determination. This information should be incorporated into a site-specific explanation of how the waterbody and similarly situated waters in the region significantly affect the physical, chemical, or biological integrity of a traditional navigable or interstate water.

Section 4: Tributaries

EPA and the Corps will assert jurisdiction over tributaries under either the plurality standard or the Kennedy standard, as described below.

For purposes of this guidance, a water may be a tributary if it contributes flow to a traditional navigable water or interstate water, either directly or indirectly by means of other tributaries. A tributary can be a natural, man-altered, or man-made water body. Examples include rivers and streams, as well as lakes and certain wetlands that are part of the tributary system and flow directly or indirectly into traditional navigable waters or interstate waters. A tributary is physically characterized by the presence of a channel with defined bed and bank. The bed of a stream is the bottom of the channel. The lateral constraints (channel margins) are the stream banks. Channels are formed, maintained, and altered by the water and sediment they carry, and the forms they take can vary greatly.

A means of identifying the lateral limits of a tributary, including where there are no contiguous wetlands, is the existence of an ordinary high water mark (OHWM). Corps regulations define OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."[20] In many tributaries, the bed is that part of the channel below the OWHM, and the banks often extend above the OHWM. Channel characteristics depend on variables such as hydrology, lithology, climate, physiography, and gradient,[21] among others. A tributary continues as far as a channel (i.e., bed and bank) is present. A natural or manmade break (e.g., rock outcrop, underground flow, dam, weir, diversion, or similar break) in the presence of a bed and bank or ordinary high water mark does not establish the upstream limit of a tributary in cases where a bed and bank and an ordinary high water mark can be identified upstream and downstream of the break. Tributaries that have been channelized by being lined with concrete are still considered tributaries for the purposes of this guidance.

Certain types of erosional features, such as gullies and rills, are not tributaries for purposes of this guidance. Gullies[22] are relatively deep channels that are ordinarily formed on valley sides and floors where no well-defined channel previously existed. They are commonly found in areas with low-density vegetative cover or with soils that are highly erodible. Rills[23] are formed by overland water flows eroding the soil surface during rain storms. Erosional features that are not tributaries for the purposes of this guidance can also be found in environments where compacted soil and sparse vegetation have increased overland flow significantly. The two main processes that result in the formation of gullies and similar erosional features are downcutting and headcutting, which are forms of longitudinal (incising) erosion. These actions ordinarily result in erosional cuts that are often deeper than they are wide, with very steep banks, often small beds, and typically only carry water during precipitation events. The principal erosional processes that modify streams are also downcutting and headcutting. In streams, however, lateral erosion is also very important. The result is that streams, except on steep slopes or where soils are highly erodible, are characterized by the presence of more defined

bed and banks as compared to typical erosional features that are more deeply incised. Field staff should consider these factors as they distinguish streams and other tributaries that may be subject to Clean Water Act jurisdiction from other types of erosional features.

Non-tidal ditches (including roadside and agricultural ditches) are also not tributaries except where they have a bed, bank, and ordinary high water mark; connect directly or indirectly to a traditional navigable or interstate water; and have one of the following five characteristics:

- natural streams that have been altered (e.g., channelized, straightened or relocated);
- ditches that have been excavated in waters of the U.S., including wetlands;
- ditches that have relatively permanent flowing or standing water;
- ditches that connect two or more jurisdictional waters of the U.S.; or
- ditches that drain natural water bodies (including wetlands) into the tributary system of a traditional navigable or interstate water.

If a ditch is considered a tributary, it will be evaluated in the same manner as other tributaries (i.e., plurality standard or Kennedy standard, as appropriate). Note that tidal ditches are by definition waters of the U.S.

Natural and man-made swales are also not tributaries for purposes of this guidance. In certain circumstances, however, ditches or swales include areas that meet the regulatory definition of "wetlands." Wetland ditches and swales will be evaluated as wetlands under the plurality or Kennedy standard, not as tributaries (unless the ditch itself is considered a tributary for one of the reasons stated above). Ditches and swales are considered wetlands when they meet the applicable criteria in the Corps of Engineers Wetland Delineation Manual or the appropriate regional supplement to that Wetland Delineation Manual.

Even when not jurisdictional waters, these geographic features (e.g., swales, ditches) may still contribute to a surface hydrologic connection between an adjacent wetland and a traditional navigable water or interstate water. In addition, these geographic features may function as "point sources" (i.e., "discernible, confined and discrete conveyance[s]" under CWA section 502(14)), such that discharges of pollutants to waters through these features could be subject to other CWA regulations (e.g., CWA section 402).

Tributaries Covered under the *Rapanos* Plurality Standard

EPA and the Corps will assert jurisdiction over "relatively permanent, standing or continuously flowing bodies of water" connected to traditional navigable waters.[viii] Under the plurality standard, relatively permanent waters are jurisdictional without making a significant nexus finding.

[viii] 547 U.S. at 739. The agencies will not assert jurisdiction over such waters under the plurality standard within the Eleventh Circuit, i.e., waters in the states of Florida, Georgia and Alabama. *See United States v. Robison*, 505 F.3d 1208 (11th Cir.); *reh'g en banc denied*, 521 F.3d 1319 (11th Cir. 2007), *cert. denied*, 129 S. Ct. 627, 630 (2008). Instead the agencies will use the Kennedy standard only.

Under the plurality standard, a non-navigable tributary is jurisdictional when it satisfies the following characteristics:

(1) The tributary is connected, directly or indirectly through other tributaries, to a downstream traditional navigable water, and
(2) Flow in the tributary, except for drought years, is at least seasonal.

A central issue to the plurality standard is what constitutes "seasonal flow." In this context, a water is "seasonal" when it has predictable flow during wet seasons in most years. The time period constituting "seasonal" will vary across the country. Rather than having distinct, rigid boundaries, stream reaches classified as perennial, intermittent, and ephemeral may more accurately be described as dynamic zones within stream networks. The length or extent of these zones may be highly variable and is dictated by multiple factors such as annual precipitation, evapotranspiration, and land- and water-use practices.[24] Thus, determination of whether a water meets the plurality standard for relatively permanent should involve determination of the length and timing of seasonal flows in the ecoregion in question.

Tributaries that are not relatively permanent will be evaluated under the Kennedy standard.

Tributaries Covered under the *Rapanos* Kennedy Standard

EPA and Corps regulations define "waters of the United States" to include tributaries to traditional navigable waters and to interstate waters.[25] Consistent with the agencies' interpretation of the CWA, these regulations and the relevant case law, EPA and the Corps expect to assert jurisdiction over all tributaries to traditional navigable waters or interstate waters, provided that the tributary, alone or in combination with other similarly situated tributaries in the watershed, significantly affects the chemical, physical, or biological integrity of traditional navigable waters or interstate waters.

Thus, a tributary is jurisdictional where:

(1) It is a tributary as defined for purposes of this guidance to a traditional navigable water or an interstate water; and
(2) The tributary, alone or in combination with other tributaries in the watershed, has a significant nexus with the traditional navigable water or interstate water.

When performing a significant nexus analysis for a tributary, the first step is to determine whether that tributary has a bed and bank and an ordinary high water mark. If the tributary possesses those characteristics, the next step is to determine whether the tributary drains, or is part of a network of tributaries that drain, into a downstream traditional navigable water or interstate water. If it can be demonstrated that the tributary has a bed and bank, and an OHWM, and is part of a tributary system to a traditional navigable water or an interstate water, and, therefore, can transport pollutants, flood waters or other materials to a traditional navigable water or interstate water, then the agencies would generally expect that the tributary, along with the

other tributaries in the watershed (the "similarly situated" waters), can be demonstrated to have a significant nexus with the downstream traditional navigable water or interstate water. This expectation is based on the significant harm that pollutants can have on the physical, chemical, or biological integrity of the downstream traditional navigable water or interstate water.[26] The presence of a bed and bank and an OHWM are physical indicators of flow and it is likely that flows through all of the tributaries collectively in a watershed with the above characteristics are sufficient to transport pollutants, or other materials downstream to the traditional navigable water or interstate water in amounts that would significantly affect its chemical, physical or biological integrity.

When considering whether the tributary being evaluated eventually flows to an interstate water or traditional navigable water, field staff should trace the tributary connection using resources such as direct observation or U.S. Geological Survey maps, aerial photography or other reliable remote sensing information, soil survey data or other appropriate information.

Although the agencies generally expect that tributaries will be found to have a significant nexus with downstream traditional navigable waters or interstate waters, as explained above, it is still important that field staff document such a significant nexus through a site-specific analysis for tributaries that are not relatively permanent. Field staff should document, using available or readily obtainable information wherever possible, the flow characteristics and functions of the tributary or tributaries, and their hydrologic relationship to the nearest downstream traditional navigable water or interstate water. Hydrologic information may include volume, duration, and frequency of flow (if such information is readily available, e.g., through publicly available reports or on-line resources), as well as physical indicators of flow. Field staff may document the flow characteristics of tributaries by using physical indicators of flow, observations of flow considered in the context of local precipitation patterns and recent precipitation events, field reports, local expert statements, and other sources of information. Ordinary high water mark determinations are made by examining recent physical evidence of flow.[27] It is not necessary to document actual flow data via stream gages.[28] Field staff should also document other functions provided by the tributary, and describe how those functions may significantly affect the physical, chemical, or biological integrity of downstream traditional navigable waters or interstate waters.

Flow characteristics and functions of the tributary or tributaries and their hydrologic relationship to the nearest downstream traditional navigable water or interstate water may include topographic maps, gage data, historic records of water flow, statistical data, personal observations/records, and other relevant information. Consideration may also be given to relevant contextual factors that directly influence the hydrology of tributaries, including the size of the watershed, average annual rainfall, and average annual winter snow pack. The significant nexus evaluation should also discuss the potential for the tributaries to transport pollutants to a traditional navigable water or interstate water. Direct observation of the tributary is not necessary if other available documentation is sufficient to establish the significant nexus.

Examples of other functions provided by tributaries that may significantly affect the physical, chemical, or biological integrity of downstream traditional navigable waters or interstate waters include: distributing sediment[29] to maintain stream and riparian habitat; nutrient cycling and removal; providing habitat for amphibians, fish, and other aquatic or semi-aquatic

species living in and near the stream that may use the downstream waters for other portions of their life stages (e.g., spawning areas for recreationally or commercially important species); improving or maintaining biological integrity in downstream waters; and transferring nutrients and organic carbon vital to support downstream food webs (e.g., macroinvertebrates present in headwater streams convert carbon in leaf litter making it available to species downstream).[30] Disruptions in these biological processes can significantly affect the functional capacity of the entire downstream system.[31] Tributaries help to maintain base flow in the larger rivers downstream, which is particularly important in times of drought. At the same time, a network of tributaries can regulate the flow of water into downstream waters, moderate low flow and high flow extremes, reduce local and downstream flooding, and prevent excess erosion caused by flooding.[32]

Section 5: Adjacent Wetlands

The agencies will assert Clean Water Act jurisdiction over adjacent wetlands that meet either the plurality standard or the Kennedy standard under *Rapanos*.

Wetlands Covered Under the *Rapanos* Plurality Standard

EPA and the Corps will assert jurisdiction over "wetlands with a continuous surface connection to" "relatively permanent, standing or continuously flowing bodies of water" connected to traditional navigable waters.[ix]

The plurality opinion in *Rapanos* created a standard for finding statutory jurisdiction under the CWA for wetlands, which is related to the presence of a physical connection between the wetland and the relatively permanent water to which it is adjacent. Under the plurality standard, wetlands with a continuous surface connection to relatively permanent waters are jurisdictional without the legal obligation to make a significant nexus finding.

Under the plurality standard, an adjacent wetland is jurisdictional when it satisfies the following characteristics:

(1) The wetland is adjacent to a relatively permanent, non-navigable tributary, that is connected to a downstream traditional navigable water, and

(2) A continuous surface connection exists between the wetland and a relatively permanent tributary where the wetland directly abuts the water (e.g., they are not separated by uplands, a berm, dike, or similar feature). A "continuous surface connection" does not require the presence of water at all times in the connection between the wetland and the jurisdictional water.

Wetlands Covered Under the *Rapanos* Kennedy Standard

[ix] 547 U.S. at 739, 742. As noted, the agencies will not assert jurisdiction over such waters under the plurality standard within the Eleventh Circuit, i.e., waters in the states of Florida, Georgia and Alabama. *See United States v. Robison*, supra, footnote h.

The agencies will assert Clean Water Act jurisdiction over wetlands[x] adjacent to traditional navigable waters or non-wetland interstate waters or to another water of the U.S. where such wetlands have a significant nexus with downstream traditional navigable or interstate waters.[xi] Adjacent wetlands will be considered to have a significant nexus if they, alone or in combination with similarly situated wetlands, have an effect on the chemical, physical, or biological integrity of traditional navigable waters or interstate waters that is more than "speculative or insubstantial."[33] As a general matter, "similarly situated" adjacent wetlands include all adjacent wetlands located in the point-of-entry watershed. Wetlands adjacent to traditional navigable waters or non-wetland interstate waters are *per se* jurisdictional and do not require a showing of significant nexus.[34]

Thus, an adjacent wetland is jurisdictional where such wetland meets the definition of "adjacent" as that term is defined in the agencies' regulations and is either:

> (1) Adjacent to a traditional navigable water or non-wetland interstate water; or
> (2) Adjacent to a tributary, lake, reservoir, or other jurisdictional water (except another wetland) and either alone or in combination with other adjacent wetlands in the watershed has a significant nexus to the nearest downstream traditional navigable or interstate water.

The regulations define "adjacent" as follows: "The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'"[35] Under this definition, a wetland does not need to meet all criteria to be considered adjacent. The agencies consider wetlands to be bordering, contiguous, or neighboring, and therefore "adjacent" if at least <u>one</u> of following three criteria is satisfied:

> (1) There is an unbroken surface or shallow sub-surface hydrologic connection between the wetland and jurisdictional waters; or
> (2) The wetlands are physically separated from jurisdictional waters by "man-made dikes or barriers, natural river berms, beach dunes, and the like"; or
> (3) Where a wetland's physical proximity to a jurisdictional water is reasonably close, that wetland is "neighboring" and thus adjacent. For example, wetlands located within the riparian area or floodplain of a jurisdictional water will generally be considered neighboring, and thus adjacent. One test for whether a wetland is sufficiently proximate to be considered "neighboring" is whether there is a demonstrable ecological interconnection between the wetland and the jurisdictional waterbody. For example, if resident aquatic species (e.g., amphibians, aquatic turtles, fish, or ducks) rely on both the wetland and the jurisdictional waterbody for all or part of their life cycles (e.g., nesting, rearing, or feeding), that may demonstrate that

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[x] Under normal circumstances, a wetland will meet all three factors of hydrology, hydrophytic vegetation, and hydric soils, as required by agency regulations, and described in the United States, U.S. Army Corps of Engineers, *Wetlands Delineation Manual* (Washington, D.C.: U.S. Army Corps of Engineers, 1987) or appropriate Regional Supplement. The regulatory definition of waters of the U.S. includes "wetlands adjacent to waters (other than waters that are themselves wetlands) identified [as jurisdictional]." 33 C.F.R. § 328.3(a)(7); 40 C.F.R. § 230.3(s)(7).

[xi] The plurality standard in *Rapanos* may provide an alternative basis for asserting jurisdiction. See Section 5.

the wetland is neighboring and thus adjacent. The agencies recognize that as the distance between the wetland and jurisdictional water increases, the potential ecological interconnection between the waters is likely to decrease.

An unbroken surface or shallow sub-surface hydrologic connection to jurisdictional waters may be established by a physical feature or discrete conveyance that supports periodic flow between the wetland and a jurisdictional water. Water does not have to be continuously present in this hydrologic connection and the flow between the wetland and the jurisdictional water may move in either or both directions. The hydrologic connection need not itself be a water of the U.S. A shallow subsurface hydrologic connection is lateral water flow through a shallow subsurface layer, such as may be found in steeply sloping forested areas with shallow soils, soils with a restrictive horizon, or in karst systems.[36] Shallow subsurface connections may be found below the ordinary root zone (below 12 inches), where other wetland delineation factors may not be present. A combination of physical factors may reflect the presence of a shallow subsurface connection, including, position in the landscape (for example, on a slope directing flow from wetland to jurisdictional waters), stream hydrograph, and soil surveys (for example, exhibiting indicators of high transmissivity over an impermeable layer).

If uplands separating a wetland from jurisdictional water can reasonably be characterized as "man-made dikes or barriers, natural river berms, beach dunes, and the like," then, under the agencies' regulations, the wetlands are adjacent even if no apparent hydrologic connection exists. It is important to note that natural river berms are formed by sediment deposits accumulating at or near the stream bank during flood events. Such berms vary in height from inches to feet, and also can be quite wide.[37] Similarly, multiple beach dunes may exist between a wetland and jurisdictional water (including primary and secondary dunes), because beach dunes typically function as an interdunal system (particularly on barrier islands).

The link between physical proximity and a physical or ecological (biological) connection is well documented in the scientific literature. A wetland within the riparian area[38] or floodplain[39] typically has such an interconnection. For example, adjacent wetlands typically help to store floodwaters, pollutants, and sediments that could otherwise reach a jurisdictional water.[40] Adjacent wetlands often provide important sources of stored water that augment stream flow during low-flow periods.[41] Species, such as amphibians, certain reptiles (e.g., watersnakes), waterfowl, invertebrates, and fish (including anadromous and catadromous fish), move between an adjacent wetland and a jurisdictional water for spawning, nesting, feeding, refuge, and other life stage requirements.[42] Species that move between an adjacent wetland and a jurisdictional water are distinguishable from migratory species. Migratory species use the wetland during a journey to a different area[43] and are not to be used as a scientific basis for demonstrating an ecological interconnection for adjacency. While it is not appropriate to determine adjacency based solely on any specific threshold of distance, as the distance between the wetland and jurisdictional water increases, the potential interconnection between the waters will decrease and a finding of adjacency is less likely. The distance between a tributary and its adjacent wetlands may vary by region, as well as based on site-specific factors within regions.

All wetlands within a wetland mosaic should ordinarily be considered collectively when determining adjacency. Wetlands present in such systems act generally as a single ecological

unit. A "wetland mosaic" refers to a landscape where wetland and non-wetland components are too numerous and closely associated to be appropriately delineated or mapped separately. These areas often have complex microtopography, with repeated small changes in elevation occurring over short distances. Tops of ridges and hummocks are often non-wetland but are interspersed with wetlands having hydrophytic vegetation, hydric soils, and wetland hydrology.

Under Justice Kennedy's standard, the following legal test for Clean Water Act jurisdiction applies: If a wetland is adjacent to a traditional navigable water or a non-wetland interstate water, a finding of adjacency is sufficient in and of itself to demonstrate that the wetland is subject to Clean Water Act jurisdiction. On the other hand, a finding that a particular wetland is adjacent to a jurisdictional waterbody other than a traditional navigable water or non-wetland interstate water is not sufficient in and of itself to establish Clean Water Act jurisdiction over that wetland. For the latter category of adjacent wetlands, in order to establish Clean Water Act jurisdiction, field staff, on a case-by-case basis, must determine whether the particular adjacent wetland, alone or in combination with similarly situated wetlands in that watershed, has a significant nexus with traditional navigable waters or non-wetland interstate waters (see discussion below).

A determination of *adjacency* is based on an evaluation of the relationship between a wetland and the nearest jurisdictional water, which includes consideration of both physical and ecological connections between those waterbodies. In contrast, a determination of *significant nexus* is a different inquiry, which is based on evaluating whether there is a significant nexus between that adjacent wetland (in combination with similarly situated adjacent wetlands in the watershed) and a traditional navigable water or a non-wetland interstate water.

As discussed in Section 3, the agencies generally consider all wetlands within the watershed that are adjacent to jurisdictional waters to be "similarly situated" waters "in the region." (Wetlands adjacent to non-jurisdictional waters are considered "other waters.") The relevant watershed is defined by the topographic area draining into the nearest traditional navigable water or interstate water. However, as with tributaries, field staff may utilize a smaller area for a significant nexus analysis where this is sufficient to establish the presence or absence of a significant nexus for adjacent wetlands within the watershed as a whole. When identifying other adjacent wetlands in the watershed to be considered in the significant nexus analysis, field staff may use resources such as direct observation or U.S. Geological Survey maps, aerial photography, or other reliable remote sensing information. Using such information, staff should include in the evaluation as many adjacent wetlands as is necessary to support and document the presence or absence of a significant nexus. Field staff are not required to identify or evaluate every adjacent wetland located within a particular watershed being assessed and are generally not expected to develop new information on the location of such wetlands. As with tributaries, field staff should use the best available information on the adjacent wetlands in the point of entry watershed, which may include scientific literature on the functions and effects of wetlands within the watershed generally and how those wetlands significantly affect the physical, chemical, or biological integrity of the traditional navigable waters or interstate waters. For affirmative determinations especially, consideration of a subset of adjacent wetlands may be sufficient, since including additional adjacent wetlands in the analysis would only establish a more significant nexus to the traditional navigable water or interstate water.

When evaluating significant nexus for adjacent wetlands, field staff should consider the many functions of waters such as sediment trapping, nutrient recycling, pollutant trapping and filtering, retention or attenuation of flood waters, runoff storage, and provision of habitat. In general, tributaries and their adjacent wetlands function as an integrated hydrologic system, and as a unit they may affect the amount of pollutants and floodwaters that reach the downstream traditional navigable waters or interstate waters.

Section 6: Other Waters

The "other waters" or "(a)(3) waters" provision of EPA's and the Corps regulations includes:

> All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. . . .[44]

The agencies recognize that Supreme Court decisions in *SWANCC* and *Rapanos* have identified limitations on the scope of (a)(3) waters that may be determined to be jurisdictional under the CWA. The agencies expect to further clarify the scope of waters subject to CWA jurisdiction, including jurisdiction over (a)(3) waters after *SWANCC* and *Rapanos,* as part of a notice and comment rulemaking. In the meantime, the agencies will make case-by-case, fact-specific determinations of jurisdiction under (a)(3) in the manner discussed below.

Physically Proximate Other Waters

EPA and the Corps will make fact-specific determinations of jurisdiction for other waters that are in close physical proximity to traditional navigable waters, interstate waters, or their jurisdictional tributaries, and that alone or in combination with similarly situated proximate other waters in the region significantly affect the chemical, physical, or biological integrity of traditional navigable waters or interstate waters. For purposes of this guidance, proximate other waters are non-wetland waters that would satisfy the regulatory definition of "adjacent" if they were wetlands. They include lakes, ponds, and other non-wetland waters that are bordering, contiguous, or neighboring to jurisdictional waters, including waters that are separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes and the like. Such waters have many of the same functions and effects with respect to jurisdictional waters as adjacent wetlands. The agencies believe it is scientifically appropriate and consistent with Justice Kennedy's opinion to evaluate significant nexus for such waters in the same manner as for adjacent wetlands.

For purposes of the significant nexus analysis, all physically proximate other waters in the same point-of-entry watershed should be evaluated together as similarly situated waters in the region. This is appropriate for the same reasons as it is appropriate to evaluate all adjacent wetlands in the point-of-entry watershed together as similarly situated waters.

Other Waters that Are Not Physically Proximate to Jurisdictional Waters

Non-physically proximate other waters are isolated, intrastate, non-navigable waters and wetlands that would not meet the regulatory definition of "adjacent" with respect to jurisdictional waters. The agencies note that the (a)(3) provisions of our regulations remain in effect and that the SWANCC decision specifically addressed only the presence of migratory birds as a basis for asserting jurisdiction, and not the validity of the (a)(3) provisions generally. However, the agencies interpret Justice Kennedy's opinion as suggesting that the same significant nexus standard that he articulated for adjacent wetlands is appropriate for (a)(3) waters, and we have thus clarified above how this standard should be applied in the case of (a)(3) waters that are in close physical proximity to jurisdictional waters. At the same time, we recognize that for other waters that are geographically separated from jurisdictional tributaries, establishing a significant nexus may be more challenging. Thus, at this time, we are not providing specific guidance on making such determinations and are instead directing agency field staff to continue the current practice of referring determinations for non-physically proximate other waters to their respective Headquarters and obtaining formal project-specific approval before asserting or denying jurisdiction.

The general approach for determining significant nexus for such waters would be the same as discussed in Section 3. Because such waters may be widely scattered geographically, and physically remote from jurisdictional waters, field staff should generally conduct significant nexus analyses for such waters individually, unless there is a compelling scientific basis for treating a group of such waters as similarly situated waters in the same region. In accordance with the decision in *SWANCC*, consideration of use by migratory species is not relevant to the significant nexus determination for such waters.

The agencies emphasize that this document is guidance, which lacks the force of law; the agencies expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States." As a part of that process, we will further consider, based on a review of the scientific literature, how a significant nexus analysis should be conducted for non-physically proximate other waters.

Section 7: Waters Generally Not Jurisdictional

The scope of "waters of the United States" does not include all waters. EPA and the Corps previously have described in preambles to CWA regulations waters that the agencies generally do not consider to be waters of the U.S.[45] The agencies' position regarding these waters is unchanged. The categories of waters generally not "waters of the U.S." include:

- Wet areas that are not tributaries or open waters and do not meet the regulatory definition of wetlands.[46]
- Waterbodies excluded from coverage under the CWA by existing regulations.
- Waters that lack a significant nexus when one is required for jurisdiction.

- Artificially irrigated areas which would revert to upland if the irrigation ceased.

- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.

- Artificial reflecting pools or swimming pools excavated in uplands.

- Small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.

- Water-filled 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.

- Groundwater drained through subsurface drainage systems.[xii]

- Erosional features (gullies and rills), and swales and ditches that are not tributaries or wetlands (see Section 4).

Section 8: Documentation

EPA and Corps field staff should document in the administrative record the available information supporting a jurisdictional determination. In addition to location and other descriptive information regarding the water at issue, the record should include a clear explanation of the rationale for the jurisdictional conclusion, and include, as appropriate:

- Information leading to a conclusion that a water falls within a category considered in this guidance to be jurisdictional without the need to demonstrate a significant nexus;
- Information used to conclude that a water has a significant nexus when one is required for jurisdiction;
- Information supporting a conclusion that a water lacks a significant nexus, when one is required for jurisdiction; or
- Information supporting a conclusion that a water falls within one of the categories of geographic features generally considered non-jurisdictional.

In short, both affirmative and negative jurisdictional determinations should be well-documented, to ensure both public transparency and defensibility should a jurisdictional

[xii] A "subsurface" drainage system is an agricultural practice designed to drain subsurface water through a below ground pipe system in order to maintain the groundwater table below the root zone to facilitate crop production. The construction or maintenance of subsurface drain systems may require a CWA permit, if it involves discharges of dredged or fill material into waters of the U.S.

conclusion be challenged. The level of documentation may be greater for jurisdictional determinations associated with complex projects.

Other sections of this guidance discuss the findings necessary for particular categories of waters to be considered jurisdictional and/or to have a significant nexus. Information relevant to these findings can come from many sources, including but not limited to maps, aerial photography, soil surveys, watershed studies, local development plans, literature citations, and references from studies pertinent to the parameters being reviewed. Such information need not always be specific to the water whose jurisdictional status is being evaluated; regional and national studies of the same type of water or similarly situated waters can help to inform a jurisdictional analysis as long as they are applicable to the water being evaluated. Information derived from field observation is not required in cases where a "desktop" analysis can provide sufficient information to make the requisite findings. However, for more complex or difficult jurisdictional determinations, it may be important to supplement such information with field observation.

An important part of a jurisdictional analysis is the location and type of water under consideration, so as to readily determine if the jurisdictional status of similarly situated waters in the region has been previously determined. If so, the jurisdictional conclusion, rationale, and supporting information for a similarly situated water are directly relevant. As Justice Kennedy noted in *Rapanos*, where a significant nexus has been established for a particular wetland, "it may be permissible, as a matter of administrative convenience or necessity, to presume covered status for other comparable wetlands in the region."[47] Therefore, once the jurisdictional status for a particular water within a watershed has been established, field staff can apply the significant nexus analysis for that water to any subsequent determinations if they establish (and document) that the water at issue is the same type and in the same watershed as the jurisdictional water.

APPENDIX

DISCUSSION OF LEGAL AND SCIENTIFIC BASIS FOR GUIDANCE SECTIONS

The U.S. Supreme Court has addressed the scope of waters of the United States protected by the CWA in three cases. In *United States v. Riverside Bayview Homes, Inc.* (474 U.S. 121 (1985)), the Supreme Court held that wetlands adjacent to a traditional navigable water were properly considered to be "waters of the United States." In *SWANCC*, the Court addressed the question of CWA jurisdiction over isolated, non-navigable, intrastate ponds, and concluded that CWA jurisdiction could not be based solely on the presence of migratory birds. In *Rapanos*, the Court addressed CWA protections for wetlands adjacent to non-navigable tributaries, and issued five opinions with no single opinion commanding a majority of the Court. The plurality opinion, authored by Justice Scalia, stated that "waters of the United States" extended beyond traditional navigable waters to include "relatively permanent, standing or flowing bodies of water."[48] The plurality went on to clarify that relatively permanent waters "do not necessarily exclude" streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought, and seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months. The plurality opinion also asserted that only wetlands with a "continuous surface connection" to other jurisdictional waters are considered "adjacent" and protected by the CWA.[49] Justice Kennedy's concurring opinion took a different approach than Justice Scalia's. Justice Kennedy concluded that "waters of the United States" included wetlands that had a significant nexus to traditional navigable waters, "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). The four justices who signed on to Justice Stevens' opinion would have upheld jurisdiction under the agencies' existing regulations and stated that they would uphold jurisdiction under either the plurality or Justice Kennedy's opinion (*id.* at 810). Neither *SWANCC* nor the opinions in *Rapanos* invalidated any of the regulatory provisions defining "waters of the United States."

Section 1: Traditional Navigable Waters

Legal Basis

The Supreme Court has recognized that navigability is a flexible concept and "[e]ach application of [the *Daniel Ball* test] . . . is apt to uncover variations and refinements which require further elaboration."[50] EPA and the Corps will be guided by examples of the types of evidence found relevant and sufficient for a traditional navigable waters determination in court decisions, although these will be fact-specific determinations and not every type of evidence will be available or needed in every circumstance. Field staff have sought guidance in particular on how to determine whether a water is susceptible to being used for commercial navigation such that it is a traditional navigable water. The cases discussed below provide specific examples of the types of evidence courts have found sufficient to demonstrate such susceptibility.

In *FPL Energy Marine Hydro L.L.C. v. FERC*, a case involving the Federal Power Act, the U.S. Court of Appeals for the District of Columbia Circuit reiterated the fact that "*actual use* is not necessary for a navigability determination" and repeated earlier Supreme Court holdings that navigability and capacity of a water to carry commerce could be shown through "physical characteristics and experimentation."[51] In that case, the D.C. Circuit upheld a Federal Energy Regulatory Commission navigability determination that was based upon three experimental canoe trips taken specifically to demonstrate the river's navigability.[52] The navigability determination was affirmed although the stream had five sets of rapids, and all parties agreed that the stream has never been used for commercial traffic, that there was no evidence of recreational use of the stream, and that the only evidence indicating actual use of the stream came from the three trips made for the purpose of litigation.[53]

The U.S Court of Appeals for the Ninth Circuit has also implemented the Supreme Court's holding that a water need only be susceptible to being used for waterborne commerce to be navigable-in-fact. In *Alaska v. Ahtna*, Inc., the Ninth Circuit held that current use of an Alaskan river for commercial recreational boating is sufficient evidence of the water's capacity to carry waterborne commerce at the time that Alaska became a state.[54] It was found to be irrelevant whether or not the river was actually being navigated or being used for commerce at the time, because current recreational boating showed that the river always had the capacity to support navigation by the types of boats that were in use at the time of statehood.[55] Here, the stream was found to be navigable although the shallowest part of the river is just a foot deep during the low season; the river is customarily used, or is susceptible to use, by watercraft such as powerboats, 12-foot-long inflatable rafts, and motorized freight canoes and double-ended paddle canoes; hunters and fishermen travelled the river by boat in the past; most of the use of the river is recreational; and it is possible to take guided fishing and sightseeing trips on the river.[56]

Section 2: Interstate Waters

Legal Basis

The language of the CWA indicates that Congress intended the term "navigable waters" to include interstate waters without imposing a requirement that they be traditional navigable waters themselves or be connected to traditional navigable waters. The precursor statutes to the CWA always subjected interstate waters and their tributaries to federal jurisdiction.[xiii] The text of the CWA, specifically CWA section 303 that establishes ongoing requirements for interstate waters, in conjunction with the definition of navigable waters, provides clear indication of Congress' intent to protect interstate waters that were previously subject to federal regulation.

[xiii] See endnote 13. Section 2(d)(1) of the Water Pollution Control Act of 1948, 62 Stat. at 1156, stated:

> The pollution of interstate waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge into a tributary of such waters), which endangers the health or welfare of persons in a State other than that in which the discharge originates, is hereby declared to be a public nuisance and subject to abatement as herein provided.

Other provisions of the statute provide additional textual evidence of the scope of the primary jurisdictional term of the Act. Congress defined "navigable waters" in CWA section 502(7) to mean "the waters of the United States, including the territorial seas." Interstate waters are the waters of the several States and, thus, the United States. While the 1972 Act was clearly not limited to interstate waters, it was equally clearly intended to include interstate waters. Most importantly, there is a specific provision in the 1972 CWA establishing requirements for those interstate waters which were subject to the prior Water Pollution Control Acts. The CWA requires States to establish water quality standards for navigable waters and submit them to the Administrator for review, including "interstate waters." CWA section 303(a)(1) states:

> In order to carry out the purpose of this Act, any water quality standard applicable to *interstate waters* which was adopted by any State and submitted to, and approved by, or is awaiting approval by, the Administrator pursuant to this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, *shall remain in effect*. . . .

(Emphasis added.) Thus, Congress intended continued protection of interstate waters.

While EPA and the Corps believe congressional intent is clear, the agencies also have a longstanding regulatory interpretation that interstate waters fall within the scope of CWA jurisdiction.[57] The agencies' interpretation was promulgated contemporaneously with the passage of the CWA and is consistent with the statutory and legislative history of the Act. Furthermore, the Supreme Court has never addressed the CWA's coverage of interstate waters, and its decisions in *SWANCC* and *Rapanos* do not question the jurisdictional status of interstate waters or impose additional jurisdictional requirements on interstate waters.

As noted above, the precursor statutes to the CWA always subjected interstate waters and their tributaries to federal jurisdiction. While Congress intended tributaries to interstate waters to be subject to the CWA, the statute does not define the extent of tributaries that are covered. In light of Justice Kennedy's opinion, the agencies believe it is reasonable to assert jurisdiction over tributaries, adjacent wetlands and other waters which have a significant nexus to interstate waters consistent with the framework established by Justice Kennedy in *Rapanos* for establishing jurisdiction over waters with a significant nexus to traditional navigable waters (see sections 4, 5, and 6 of this guidance for additional information). Justice Kennedy's standard seeks to ensure that waters Congress intended to subject to federal jurisdiction are indeed protected, both by recognizing that waters and wetlands with a significant nexus to covered waters have important beneficial effects on those waters, and by recognizing that polluting or destroying waters with a significant nexus can harm downstream covered waters.

Section 3: Significant Nexus

Legal and Scientific Basis

In *Rapanos*, Justice Kennedy provides an approach for determining what constitutes a "significant nexus" that can serve as a basis for statutory jurisdiction.[xiv] "The required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the law to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' 33 U.S.C. § 1251(a), and it pursued that objective by restricting dumping and filling in 'navigable waters,' §§ 1311(a), 1362(12)."[58] Justice Kennedy provided further guidance for determining whether wetlands should be considered to possess the requisite nexus in the context of assessing whether wetlands are jurisdictional: "if the wetlands, either alone or in combination with similarly situated [wetlands] in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.'"[59] While Justice Kennedy focused on adjacent wetlands in light of the facts of the cases before him, it is reasonable to utilize the same analysis for tributaries and other waters such as ponds, lakes and non-adjacent wetlands that are not themselves directly connected to a tributary system but may still have a significant nexus to a traditional navigable water or interstate water.

In determining which waters to consider "similarly situated" for purposes of analyzing whether they have a significant nexus "in combination" with the water at issue, it is reasonable to begin with the categories of waters the agencies identified in promulgating their definition of "water of the United States." For example, tributaries are similarly situated within the landscape because they are part of a stream network that provides flow to the downstream traditional navigable water or interstate water. Adjacent wetlands are similarly situated within the landscape because the agencies' definition is focused on their proximity to another water of the United States – "adjacent" is defined in regulations as bordering, neighboring or contiguous (see Section 5 for further discussion). Similarly, other waters ("(a)(3) waters") that are in close physical proximity to traditional navigable or interstate waters or their tributaries are similarly situated with respect to those waters in much the same way as adjacent wetlands. Justice Kennedy's standard allows the agencies to analyze whether all similarly situated waters in a region together have a significant nexus to the downstream traditional navigable water. With this standard, Justice Kennedy has recognized that even where it is difficult to demonstrate that a particular individual wetland adjacent to a small headwater tributary has a significant nexus to a traditional navigable water, the destruction of all such adjacent wetlands in a region could have a significant effect on the traditional navigable water and, thus, the CWA must protect those wetlands in order to protect the traditional navigable water. The same logic applies to tributaries and physically proximate other waters.

Waters should generally be considered "in the region" if they are within a watershed that drains to a traditional navigable water or interstate water, defined by the point at which a tributary system first enters a traditional navigable water or interstate water. Using a watershed as the framework for conducting significant nexus evaluations is scientifically supportable. Watersheds are generally regarded as the most appropriate spatial unit for water resource

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[xiv] Again, the four justices who signed on to Justice Stevens' opinion would have upheld jurisdiction under the agencies' existing regulations and stated that they would uphold jurisdiction under either the plurality or Justice Kennedy's opinion. Justice Kennedy concludes that *Riverside Bayview* and *SWANCC* "establish the framework for" determining whether an assertion of jurisdiction constitutes a reasonable interpretation of "navigable waters" - "the connection between a nonnavigable water or wetland and a navigable water may be so close, or potentially so close, that the Corps may deem the water or wetland a 'navigable water' under the Act"; "[a]bsent a significant nexus, jurisdiction under the Act is lacking." 547 U.S. at 767.

management.[60] Anthropogenic actions and natural events can have widespread effects within the watershed that collectively impact the quality of the relevant traditional navigable water or interstate water.[61] For this reason, it is more appropriate to conduct a significant nexus determination at the watershed scale than to focus on a specific site, such as an individual stream segment. The watershed that contributes flow to the point of entry to a traditional navigable or interstate water is a logical spatial framework for the evaluation of the nexus. The functions of the contributing waters are inextricably linked and have a cumulative effect on the integrity of the traditional navigable water or interstate water. The size of that watershed can be determined by identifying the topographic area that drains to the nearest traditional navigable water or interstate water, and then using that point of entry watershed to conduct a significant nexus evaluation.[62]

Justice Kennedy's opinion provides guidance pointing to many functions of waters that might demonstrate a significant nexus, such as sediment trapping, nutrient recycling, pollutant trapping and filtering, retention or attenuation of flood waters, runoff storage, and provision of habitat.[63] Furthermore, Justice Kennedy noted that a hydrologic connection is not necessary to establish a significant nexus, because in some cases the lack of hydrologic connection would show the significance of a water to the aquatic system, such as retention of flood waters or pollutants that would otherwise flow downstream to the traditional navigable water or interstate water.[64] Finally, Justice Kennedy was clear that the requisite nexus must be more than "speculative or insubstantial"[65] in order to be significant.

Section 4: Tributaries

Legal and Scientific Basis

Tributaries Covered Under the *Rapanos* Plurality Standard

As noted above, jurisdictional determinations based on the plurality standard would have the support of the four justices joining the plurality opinion as well as the four dissenting justices. The plurality concluded that the agencies' regulatory authority should extend only to "relatively permanent, standing or continuously flowing bodies of water"[66] connected to traditional navigable waters, and to "wetlands with a continuous surface connection to" such relatively permanent waters.[67] "Relatively permanent waters" were described as waters that typically flow year-round except in times of drought, or waters that have a continuous flow at least seasonally. The plurality opinion emphasized that relatively permanent waters do not include tributaries "whose flow is '[c]oming and going at intervals . . . [b]roken, fitful.'"[68] Therefore, "relatively permanent waters" do not include ephemeral tributaries which flow only in response to precipitation and intermittent streams which do not have continuous flow at least seasonally.[xv]

[xv] Note that under the Kennedy standard, such waters may be jurisdictional where they have a significant nexus.

Moreover, waters that have had at least seasonal flow on a historic basis remain jurisdictional despite the fact that man-made diversions for irrigation, water supply or other reasons have caused a tributary, or portion thereof, to flow less than seasonally.[xvi]

Field staff have flexibility to determine what seasonal flow means in each particular case.[69] Seasonal flow can be the result of snow melt, seasonal patterns in precipitation, and seasonal fluctuations in ground water levels. In the arid west, stream discharges are driven by three large-scale weather patterns.[70] Precipitation produced by these weather patterns varies greatly for any given locality, but generally, precipitation shifts from winter in the north to summer in the south. The variation of precipitation in time, coupled with the highly variable topography of the arid west, results in spatially variable precipitation patterns.[71] For example, seasonal flow in most of New Mexico and large portions of Arizona and Colorado would be during the period of two months, July and August, when they normally receive between 30-50 percent of their annual precipitation as rain.[72] In some areas, snow melt drives stream flow, and seasonal flow is typically in the spring.[73] Seasonal patterns of flow may be less pronounced in the semi-arid Midwest, perhaps because of less seasonal precipitation patterns and relatively more vegetative cover.[74] In the east precipitation is more uniform but increased evapotranspiration during the growing season can reduce ground water levels and surface flows to create seasonal and ephemeral flows.[75]

Tributaries Covered Under the *Rapanos* Kennedy Standard

Justice Kennedy rejected the plurality's approach that only "relatively permanent" tributaries are within the scope of CWA jurisdiction. Instead, Justice Kennedy concluded that "Congress could draw a line to exclude irregular waterways, but nothing in the statute suggests it has done so"; in fact, he states that Congress has done "[q]uite the opposite."[76] Further, Justice Kennedy concludes, based on "a full reading of the dictionary definition" of "water," that "the Corps can reasonably interpret the Act to cover the paths of such impermanent streams."[xvii] Even in Justice Kennedy's rejection of Justice Stevens' opinion it is clear that he was specifically rejecting the broad scope of jurisdiction over wetlands without further analysis, and not specifically addressing jurisdiction over tributaries: "[T]he dissent would permit federal regulation whenever wetlands lie alongside a ditch or drain, however remote and insubstantial, that eventually may flow into traditional navigable waters. The deference owed to the Corps' interpretation of the statute does not extend so far."[77]

Elsewhere, Justice Kennedy suggests that it may be appropriate to assert jurisdiction over all tributaries with an ordinary high-water mark. Justice Kennedy described the Corps' standard

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[xvi] *See S. D. Warren Co. v. Maine Bd. of Envtl. Prot.*, 547 U.S. 370, 379 n.5 (2006)("[N]or can we agree that one can denationalize national waters by exerting private control over them.").

[xvii] 547 U.S. at 770. First, Justice Kennedy notes that the term "waters" can mean "'flood or inundation,'" according to the *Webster's Second* definition, and that these events are "impermanent by definition." *Id.* Second, even looking to the plurality's preferred dictionary definition of "waters," i.e., "'water "[a]s found in streams and bodies forming geographical features such as oceans, rivers, [and] lakes,"'" Justice Kennedy notes that "intermittent flow can constitute a stream." *Id.* (alteration in original). And finally, Justice Kennedy notes that the plurality's reference to the statement by the *Riverside Bayview* Court comparing "wetlands to 'rivers, streams, and other hydrographic features more conventionally identifiable as "waters"' . . . could just as well refer to intermittent streams." *Id.* at 771 (citations omitted).

for asserting jurisdiction over tributaries: "[T]he Corps deems a water a tributary if it feeds into a traditional navigable water (or a tributary thereof) and possesses an ordinary high-water mark . . . ."[78] Justice Kennedy concluded that this standard "presumably provides a rough measure of the volume and regularity of flow."[79] In addition, if it is applied reasonably consistently, the Corps' existing standard for tributaries "may well provide a reasonable measure of whether specific minor tributaries bear a sufficient nexus with other regulated waters to constitute 'navigable waters' under the Act."[80] Thus, Justice Kennedy's opinion may reasonably be read as allowing the agencies to determine that a case-specific significant nexus determination is not necessary for tributaries possessing an ordinary high water mark, though it also indicates that he considers the presence of a significant nexus to be the appropriate test.

The agencies have decided that, given Justice Kennedy's indication that significant nexus is still the guiding standard, it is appropriate for purposes of this guidance to assert jurisdiction over tributaries utilizing the same standard Justice Kennedy articulated for adjacent wetlands. In establishing the significant nexus standard, Justice Kennedy recognized that upstream adjacent wetlands can have significant effects on the physical, chemical and biological integrity of downstream waters covered under the CWA. As a scientific matter, tributaries can, of course, have similar effects and it is reasonable to utilize the same standard for determining whether tributaries have a significant nexus to downstream covered waters. Through rule making, the agencies will further consider whether the existence of an ordinary high-water mark alone is sufficient to establish a significant nexus to downstream traditional navigable or interstate waters, without requiring a site-specific analysis, as Justice Kennedy invites in his opinion.

As noted in Section 3, it is reasonable to consider all tributaries in a watershed to be "similarly situated" for purposes of a significant nexus analysis because they contribute flow to the downstream traditional navigable water or interstate water and provide similar functions to those downstream waters. Further, Section 3 demonstrated that it is reasonable to consider the region for significant nexus analysis to be a watershed defined by the area draining into the nearest traditional navigable water or interstate water through a single point of entry.

The agencies' identification of the presence of an ordinary high water mark as one of the factors for considering a water to be a tributary for purposes of this guidance is consistent with Justice Kennedy's observation that an ordinary high water mark may be a reasonable measure of whether a tributary possesses a significant nexus with a traditional navigable water or interstate water. This observation, in turn, is supported by both the agencies' scientific judgment in the past and the scientific literature of the present. As the Corps stated in promulgating the definition of "waters of the U.S." in 1977 to include tributaries, "[t]he regulation of activities that cause water pollution cannot rely on . . . artificial lines, however, but must focus on all waters that together form the entire aquatic ecosystem. Water moves in hydrologic cycles, and the pollution of . . . part of the aquatic ecosystem . . . will affect the water quality of the other waters within that aquatic ecosystem."[81] For more than 30 years, EPA and the Corps have interpreted the CWA to protect "the many tributary streams that feed into the tidal and commercially navigable waters . . . since the destruction and/or degradation of the physical, chemical, and biological integrity of each of these waters is threatened by the unregulated discharge of dredged or fill material."[82] As Congress and the Supreme Court have recognized,

"'[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.'"[83]

A large volume of scientific literature documents the important functions that tributaries, including headwater streams, provide to downstream waters.[xviii] Headwater streams, which may include perennial, intermittent, and ephemeral streams, are the most common streams in the United States. Collectively, they determine the chemical, physical, and biological integrity of downstream waters, and provide many of the same functions as non-headwater streams.[84] Headwater streams reduce the amount of sediment delivered to downstream waters by trapping sediment from water and runoff.[85] Headwater streams are responsible for most nutrient cycling and removal, and thus transforming and changing the amount of nutrients delivered to downstream waters.[86] A close connection exists between the water quality of these streams and the water quality of downstream water bodies.[87] Activities such as discharging a pollutant into one part of the tributary system are well-documented to affect other parts of the system, even when the point of discharge is far upstream from the navigable water that experiences the effect of the discharge.[88] These streams provide habitat and protection for amphibians, fish, and other aquatic or semi-aquatic species living in and near the stream that may use the downstream waters, including traditional navigable waters, for other portions of their life stages.[89] They also serve as migratory corridors for fish. Tributaries can improve or maintain biological integrity and control water temperatures in the downstream waters. Headwater streams serve as a source of food materials such as insects, larvae, and organic matter to nourish the fish, mammals, amphibians, and other organisms in downstream streams, rivers, and lakes.[90] Disruptions in these biological processes affect the ecological functions of the entire downstream system.[91] Headwater streams help to maintain base flow in the larger rivers downstream, which is particularly important in times of drought. At the same time, the network of headwater streams can regulate the flow of water into downstream waters, mitigating low flow and high flow extremes, reducing local and downstream flooding, and preventing excess erosion caused by flooding.[92]

Section 5: Adjacent Wetlands

Legal and Scientific Basis

Adjacent Wetlands Covered under the *Rapanos* Plurality Standard

Under the plurality standard, wetlands that have a continuous surface connection with a relatively permanent, non-navigable tributary are jurisdictional without the need for a significant nexus finding. The plurality opinion indicates that "continuous surface connection" is a "physical connection requirement."[93] A continuous surface connection does not, however, require surface water to be continuously present between the wetland and the tributary.

Adjacent Wetlands Covered under the *Rapanos* Kennedy Standard

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[xviii] For purposes of applying the current body of scientific literature to the questions created by the *Rapanos* Supreme Court decision, traditional navigable waters can be considered analogous to downstream waters. This is because the vast majority of traditional navigable waters are downstream of headwater streams.

Because the question in *Rapanos* was whether particular adjacent wetlands were "waters of the U.S.," Justice Kennedy's opinion focused on the standard for determining whether wetlands have the requisite nexus:

> With respect to wetlands, the rationale for Clean Water Act regulation is, as the Corps has recognized, that wetlands can perform critical functions related to the integrity of other waters—functions such as pollutant trapping, flood control, and runoff storage. 33 CFR § 320.4(b)(2). Accordingly, wetlands possess the requisite nexus, and thus come within the statutory phrase "navigable waters," 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." When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."[94]

With respect to wetlands adjacent to traditional navigable waters, Justice Kennedy concluded that the agencies' regulation "rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone."[95] The agencies will apply Justice Kennedy's reasoning to conclude wetlands adjacent to non-wetland interstate waters are similarly jurisdictional without the need of demonstrating a significant nexus.

For wetlands adjacent to tributaries that have a significant nexus to a traditional navigable water or interstate water, however, absent more specific regulations, the agencies must establish that the wetland alone or in combination with other adjacent wetlands in the watershed has a significant nexus to a traditional navigable water or interstate water. Justice Kennedy provided some guidance as to the analysis necessary to conclude that a water has a sufficient nexus. Justice Kennedy's concern was that neither the Corps nor the reviewing courts applied the proper legal standard.[xix] Although evidence was presented in one of the consolidated cases that the wetlands were providing habitat, sediment trapping, nutrient recycling, flood peak diminution and reduction, and flow water augmentation, the Corps did not marshall this evidence to conclude that the wetlands had a significant nexus to downstream traditional navigable waters.[96] The administrative record in the other case noted the wetland's connection to wildlife habitat and water quality and "also noted that the project would have a major, long-term detrimental effect on wetlands, flood retention, recreation and conservation and overall ecology."[97] Justice Kennedy did not indicate that this evidence was irrelevant, in fact, he concluded that "[m]uch the same evidence" previously analyzed by the Corps could establish a significant nexus with traditional navigable waters, particularly with additional evidence about the connection between the wetlands and the navigable water.[98]

A hydrologic connection is neither determinative of nor required to show a significant nexus. Justice Kennedy noted that a "mere hydrologic connection should not suffice in all cases;

[xix] Justice Kennedy thought that in both the consolidated cases before the Supreme Court, "the record contains evidence suggesting the possible existence of a significant nexus according to the principles outlined above. Thus the end result in these cases and many others to be considered by the Corps may be the same as that suggested by the dissent, namely, that the Corps' assertion of jurisdiction is valid." 547 U.S. at 783.

the connection may be too insubstantial for the hydrologic linkage to establish the required nexus with navigable waters as traditionally understood."[99] On the other hand, Justice Kennedy was also clear that a hydrologic connection between a wetland and a tributary is not required to establish a significant nexus: "Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system."[100]

Section 6: Other Waters

Legal and Scientific Basis

Other waters are those for which jurisdiction was previously asserted under section (a)(3) of the Corps' regulations, which provide for CWA jurisdiction over "[a]ll other waters . . . the use, degradation, or destruction of which could affect interstate or foreign commerce. . . ." These include isolated, non-navigable intrastate waters. This provision of the regulations was the focus of the *SWANCC* decision. In that case, the Court was considering the validity of the Corps' assertion of jurisdiction over ponds and mudflats under (a)(3). In rejecting the assertion of jurisdiction in that case, the Court held that "[i]t was the significant nexus between the wetlands and 'navigable waters' that informed our reading of the CWA in *Riverside Bayview Homes*."[101] Justice Kennedy further explained the *SWANCC* decision – and his understanding of when EPA and the Corps could assert jurisdiction over "other waters" – in his concurring opinion in *Rapanos*: "In *Solid Waste Agency of Northern Cook Cty. v. Army Corps of Engineers*, 531 U.S. 159 (2001) (*SWANCC*), the Court held, under the circumstances presented there, 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."[102] Because the Court in *SWANCC* was considering the validity of the Corps' assertion of jurisdiction over ponds and mudflats under (a)(3) of the Corps' regulations, it is reasonable to conclude that Justice Kennedy intends his significant nexus standard to apply to the "other waters" of this regulation.

An "other water" is jurisdictional only if it both has a significant nexus to a traditional navigable water or interstate water and meets the regulatory definition. One of the ways of demonstrating that a water is one "the use, degradation or destruction of which could affect interstate or foreign commerce" is through demonstration that the water has a significant nexus to a traditional navigable water or interstate water. If a water meets Justice Kennedy's significant nexus standard, the degradation or destruction of that water could harm the traditional navigable water or interstate water and therefore could affect interstate or foreign commerce.

While all adjacent wetlands are reasonably proximate to a jurisdictional water by regulation and, therefore, "similarly situated," the other waters provision of the regulations encompasses a wide-range of waters. For purposes of this guidance, the agencies have decided that it is appropriate to divide other waters into two classes, those that are physically proximate to traditional navigable or interstate waters or their tributaries, and those that are not. For the first group, it is reasonable to treat these in much the same manner as adjacent wetlands, since they stand in the same relationship to and serve many of the same functions as such wetlands with respect to the aquatic systems that they are near. For instance, physically proximate waters

can function to retain floodwaters, recharge groundwater, provide habitat for waterfowl and other species, and process and retain nutrients and pollutants that may otherwise enter tributaries; they may even be connected to a river during high floods and provide a protected habitat for eggs and young of many fish species, as well as provide refuge for spawning for some species.[103]

For the reasons articulated in Section 3 of this guidance, the agencies will interpret "in the region" for such proximate other waters to be the watershed boundary defined by the geographic area that drains to the nearest downstream traditional navigable or interstate water through a single point of entry.

In applying the significant nexus standard to such waters, it is important to note that Justice Kennedy concluded that a water may have a significant nexus even if it does not have a hydrologic connection to the traditional navigable water or interstate water: "Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of a hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system."[104] This statement applies equally to proximate other waters. Thus, effects that should be considered include circumstances where proximate other waters trap pollutants such as nutrients or sediment, for example, or where they hold precipitation or snow melt, thereby reducing contamination or flooding of traditional navigable or interstate waters.

In contrast, applying the significant nexus standard to geographically isolated other waters is more challenging. Justice Kennedy recognized that physical proximity can be an important factor in the analysis of significant nexus.[xx] In light of the challenges in applying the significant nexus standard to geographically isolated other waters, the agencies have identified physical proximity as an important factor when conducting a significant nexus analysis for such waters.

The agencies believe that the significant nexus test articulated by Justice Kennedy is the right theoretical approach for assessing all other waters, isolated and proximate, but because of the greater practical difficulty of applying this standard to geographically isolated other waters, we are directing field staff to continue for now the current practice of referring determinations for non-physically proximate other waters to their respective Headquarters and obtaining formal project-specific approval before asserting or denying jurisdiction. Because such waters are often geographically dispersed and isolated from each other, as well as from other jurisdictional waters, it is also not clear at this time how such waters should be grouped for purposes of considering them "similarly situated" and "in the region." For this reason, until the agencies are able to further consider this issue through rule making, significant nexus determination will generally evaluate such waters individually, unless there is a compelling scientific basis for treating a group of such waters as similarly situated waters in the same region. In accordance with the decision in *SWANCC*, consideration of use by migratory species is not relevant to the significant nexus determination for such waters.

[xx] "Through regulations or adjudication, the Corps may choose to identify categories of tributaries that, due to their volume of flow (either annually or on average), their proximity to navigable waters, or other relevant considerations, are significant enough that wetlands adjacent to them are likely, in the majority of cases, to perform important functions for an aquatic system incorporating navigable waters." 547 U.S. at 780.

ENDNOTES

[1] The Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816. The 1972 legislation extensively amended the Federal Water Pollution Control Act (FWPCA), which was originally enacted in 1948. Further amendments to the FWPCA enacted in 1977 changed the popular name of the statute to the "Clean Water Act." *See* Pub. L. No. 95-217, 91 Stat. 1566; 33 U.S.C. 1251 note. The current FWPCA is codified at 33 U.S.C. §§ 1251-1387. This guidance will refer to provisions of the current act by relevant "CWA section."

[2] 531 U.S. 159 (2001).

[3] *Carabell v. U.S. Army Corps of Eng'rs,* 391 F.3d 704 (6th Cir. 2004); *United States v. Rapanos,* 376 F.3d 629 (6th Cir. 2004). After certiorari was granted, these cases were consolidated, and the resulting opinion cited as *Rapanos v. United States,* 547 U.S. 715 (2006).

[4] CWA section 101(a).

[5] While 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 CWA. *See United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th Cir. 1979); *United States v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1324-25 (6th Cir. 1974). In 2002, EPA revised its regulatory definition of "waters of the United States" in 40 C.F.R. part 112 to ensure that the actual language of the rule was consistent with the regulatory language of other CWA programs. *Oil Pollution & Response; Non –Transportation-Related Onshore & Offshore Facilities*, 67 Fed. Reg. 47,042 (July 17, 2002). A district court vacated the rule for failure to comply with the Administrative Procedure Act, and reinstated the prior regulatory language. *American Petroleum Ins. v. Johnson*, 541 F.Supp. 2d 165 (D. D.C. 2008). However, EPA interprets "navigable waters of the United States" in CWA section 311(b), in the pre-2002 regulations, and in the 2002 rule to have the same meaning as "navigable waters" in CWA section 502(7).

[6] For example, the CWA section 402 program regulates discharges of pollutants from "point sources" to waters of the United States, whether these pollutants reach jurisdictional waters directly or indirectly. The plurality opinion in *Rapanos* noted that "there is no reason to suppose that our construction today significantly affects the enforcement of §1342. . . . The Act does not forbid the 'addition of any pollutant *directly* to navigable waters from any point source,' but rather the 'addition of any pollutant *to* navigable waters.'" 547 U.S. at 743. Clean Water Act section 311(b)(1) provides: "[I]t is the policy of the United States that there should be no discharges of oil or hazardous substances into or upon the navigable waters of the United States [or] adjoining shorelines . . . or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States." (Emphasis added.) "Discharge" is broadly defined in CWA section 311(a)(2) to include "any spilling, leaking, pumping, pouring, emitting, emptying or dumping," with certain enumerated exceptions, and is not limited to point source discharges.

[7] 33 C.F.R. § 328.3(a)(8); 40 C.F.R. § 230.3(s); 40 C.F.R. § 122.2 ("waters of the U.S.").

[8] CWA section 404(f); 40 C.F.R. § 232.3; 33 C.F.R. § 323.4.

[9] CWA section 402(l)(1) ("The Administrator shall not require a permit under this section for discharges composed entirely of return flows from irrigated agriculture. . . ."); CWA section 502(14)("[The] term [point source] does not include agricultural stormwater discharges and return flows from irrigated agriculture."); 40 C.F.R. § 122.3(f) (return flows from irrigated agriculture are excluded from the NPDES program); 40 C.F.R. § 122.2 (The term "point source" "does not include return flows from irrigated agriculture or agricultural storm water runoff.").

[10] *See, e.g.*, 33 C.F.R. § 328.3(a)(1); 40 C.F.R. § 230.3(s)(1); 40 C.F.R. § 122.2 ("waters of the U.S."(a)); 40 C.F.R. § 110.1 ("navigable waters" (a)).

[11] Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C. § 403.

[12] *See, e.g.*, 33 C.F.R. § 328.3(a)(2); 40 C.F.R. § 230.3(s)(2); 40 C.F.R. § 122.2 ("waters of the U.S."(b)), 40 C.F.R. §110.1 ("navigable waters" (b)).

[13] Water Pollution Control Act of 1948, § 10(e), 62 Stat. 1155, 1161.

[14] Field staff generally should use the Strahler method. In Strahler's method, a first-order stream has no tributaries, a second-order stream is formed by the joining of any two first-order streams, and a third order stream is formed by the junction of any two second-order streams. Arthur N. Strahler, "Quantitative Analysis of Watershed Geomorphology," *American Geophysical Union Transactions* 38 (1957): 913-920.

[15] 33 C.F.R. § 328.3(a)(5); 40 C.F.R. § 230.3(s)(5); 40 C.F.R. § 122.2 ("waters of the U.S."(e)).

[16] 33 C.F.R. § 328.3(a)(7); 40 C.F.R. § 230.3(s)(7); 40 C.F.R. § 122.2 ("waters of the U.S."(e)).

[17] 547 U.S. at 759.

[18] James M. Omernik, "The Misuse of Hydrologic Unit Maps for Extrapolation, Reporting and Ecosystem Management," *Journal of the American Water Resources Association* 39.3 (2003): 563-73.

[19] The country is divided and subdivided into successively smaller watersheds, and the U.S. Geological Survey has developed a standardized watershed classification system--the Hydrologic Unit System--to organize watershed boundaries in a nested hierarchy by size. A unique hydrologic unit code (HUC) consisting of two to twelve digits (based on the level of classification) identifies each watershed in the country. The system divides the country into 21 regions, and progressively smaller sub-regions, accounting units, cataloging units, watersheds, and sub-watersheds, with the Natural Resources Conservation Service delineating the boundaries for the smallest two levels. The 10-digit HUC, for instance, is the "watershed" level in the classification system. *See* United States, Department of Agriculture, Natural Resources Conservation Service, "Overview and History of Hydrologic Units and the Watershed Boundary Dataset," *Natural Resource Conservation Service*. Web. 25 Jan. 2011.; United States, United States Geological Survey, USGS Water-Supply Paper 2294, *Hydrologic Unit Maps* (Washington, D.C.: U.S. Government Printing Office, Paul R. Seaber, F. Paul Kapinos, and George L. Knapp, 1987).

[20] 33 C.F.R. § 328.3(e).

[21] Luna B. Leopold, M. Gordon Wolman, and John P. Miller, *Fluvial Processes in Geomorphology* (San Francisco: W.H. Freeman and Company, 1964).

[22] Nyle C. Brady and Ray R. Weil, *The Nature and Properties of Soils*, 13th Edition (Upper Saddle River, NJ: Prentice Hall).

[23] Luna B. Leopold, *A View of the River* (Cambridge: Harvard University Press, 1994) 3.

[24] United States, U.S. Environmental Protection Agency, EPA/600/R-06/126: *Field Operations Manual for Assessing the Hydrologic Permanence and Ecological Condition of Headwater Streams* (Washington D.C.: U.S. Environmental Protection Agency, Ken M. Fritz, Brent R. Johnson, and David M. Walters, 2006) 5.

[25] *See, e.g.*, 33 C.F.R. § 328.3(a)(2), (5); 40 C.F.R. § 230.3(s)(2)(5).

[26] Richard B. Alexander, *et al.*, "The Role of Headwater Streams in Downstream Water Quality," *Journal of the American Water Resource Association* 43.1 (2007): 41-59; Stephen R. Carpenter, *et al.*, "Nonpoint Pollution of Surface Waters with Phosphorous and Nitrogen," *Ecological Applications* 8.3 (1998): 559-68; Dana W. Kolpin, *et al.*, "Pharmaceuticals, Hormones and Other Organic Wastewater Contaminants in U.S. Streams: 1999-2000: A National Reconnaissance," *Environmental Science and Technology* 36.6 (2002): 1202-1211.

[27] United States, U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, ERDC TR-04-1: *Review of Ordinary High Water Mark Indicators for Delineating Arid Streams in the Southwestern United States* (Hanover, NH: U.S. Army Engineer Research and Development Center, Robert W. Lichvar and James S. Wakeley, 2004).

[28] Generally, only the very large streams and rivers in the U.S. are monitored with stream gages for flow and the U.S. Geological Service maintains a network of only 7500 stream gages. United States, USGS, Fact Sheet 2009-3020, *National Stream Flow Information Program Implementation Status* Report (March 2009). Smaller streams often do not have gages located on them, and not only would it be costly to monitor flow at sites like small headwater streams that are not currently gaged (Ken M. Fritz, Brent R. Johnson, and David M. Walters, "Physical Indicators of Hydrologic Permanence in Forested Headwater Streams." *Journal of the North American Benthological Society* 27.3 (2008): 690-704), monitoring studies can take one to two years (United States, U.S. EPA, EPA 600/R-06/126, *Field Operations Manual for Assessing the Hydrologic Permanence and Ecological Condition of Headwater Streams* (Cincinnati, Ohio: U.S. EPA Office of Research and Development, National Exposure Research Laboratory, Fritz *et al.*, 2006)).

[29] Joan L. Florsheim, Jeffery F. Mount, and Anne Chin, "Bank Erosion as a Desirable Attribute of Rivers," *Bioscience* 58 (2008): 519-29.

[30] Takashi Gomi, Roy C. Sidle, and John S. Richardson, "Understanding Processes and Downstream Linkages of Headwater Systems," *BioScience* 52 (2002): 905-16 (Gomi, *et al.*).

[31] Louis A. Kaplan, Richard A. Larson, and Thomas L. Bott, "Patterns of Dissolved Organic Carbon in Transport," *Limnology and Oceanography* 25 (1980): 1034-43; Robin L. Vannote, *et al.*, "The River Continuum Concept," *Canadian Journal of Fisheries and Aquatic Sciences* 37 (1980): 130-37; J. Bruce Wallace, Sue L. Eggert, Judith L. Meyer, and Jackson R. Webster, "Multiple Trophic Levels of a Stream Linked to Terrestrial Litter Inputs," *Science* 277 (1997): 102-04; Mark S. Wipfli and David P. Gregovich, "Export of Invertebrates and Detritus from Fishless Headwater Streams in Southeastern Alaska: Implications for Downstream Salmonid Production," *Freshwater Biology* 47.5 (2002): 957-69.

[32] *Id.*

[33] 547 U.S. at 779-80.

[34] *Id.* at 780.
[35] 33 CFR § 328.3(c); 40 CFR § 230.3(b).
[36] Kevin J. Devito, Alan R. Hill, and Nigel Roulet, "Groundwater-Surface Water Interactions in Headwater Forested Wetlands of the Canadian Shield," *Journal of Hydrology* 181 (1996): 127-47; Michael A. O'Driscoll and Richard R. Parizek, "The Hydrologic Catchment Area of a Chain of Karst Wetlands in Central Pennsylvania, USA," *Wetlands* 23 (2003): 171-79; Bradley J. Cook and F. Richard Hauer, "Effects of Hydrologic Connectivity on Water Chemistry, Soils, and Vegetation Structure and Function in an Intermontane Depressional Wetland Landscape," *Wetlands* 27 (2007): 719-38.
[37] Charles H. Wharton, Wiley M. Kitchens, and Timothy W. Sipe, *The Ecology of Bottomland Hardwood Swamps of the Southeast: A Community Profile* (Washington, D.C.: U.S. Fish and Wildlife Service, FWS/OBS-81/37, 1982) 9.
[38] As defined by the National Research Council, "riparian areas" are "transitional between terrestrial and aquatic ecosystems and are distinguished by gradients in biophysical conditions, ecological processes, and biota. They are areas through which surface and subsurface hydrology connect waterbodies with their adjacent uplands. They include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., a zone of influence). Riparian areas are adjacent to perennial, intermittent, and ephemeral streams, lakes, and estuarine-marine shorelines." United States, National Research Council, *Riparian Areas: Functions and Strategies for Management* (Washington, D.C. : National Academy Press, 2002) 33.
[39] A "flood plain" is the relatively broad and smooth valley floor that is constructed by an active river and periodically covered with floodwater from that river during intervals of overbank flow. *See also* Theodore H. Schmudde, "Floodplain," The Encyclopedia of Geomorphology, ed. Rhodes W. Fairbridge (New York: Reinhold, 1968) 359-62.
[40] William J. Mitsch and James G. Gosselink, "The Value of Wetlands: Importance of Scale and Landscape Setting," *Ecological Economics* 35.200 (2000): 25-33; Curtis J. Richardson, "Ecological Functions and Human Values in Wetlands: A Framework for Assessing Forestry Impacts," *Wetlands* 14.1 (1994): 1-9.
[41] Arid West Water Quality Research Project, *Habitat Characterization Study Final Report* (Phoenix: URS Corporation, 2002); William J. Mitsch and James G. Gosselink, *Wetlands, 4th ed.* (Hoboken, NJ: John Wiley & Sons, Inc., 2007) 347.
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[47] 547 U.S. at 782.
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[53] *Id.* at 1157.
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[57] The term "waters of the United States" is defined by regulation to include "all interstate waters including interstate wetlands." 33 C.F.R. § 328.3(a)(2), (5); 40 C.F.R. § 230.3(s)(2)(5).
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