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**“WATERS OF THE U.S.”
AFTER SWANCC**



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PREFACE

This paper has been prepared to facilitate discussion in a forthcoming workshop concerning the identification of “waters of the U.S.” for Section 404 wetland permitting and the role the states may play in closing the “gap” in federal Section 404 regulations created by the SWANCC decision. It focuses upon the identification of “waters of the U.S.” What did the U.S. Supreme Court hold in SWANCC concerning the identification of “waters of the U.S.”? What are some of the major legal issues and field identification problems in identifying such waters? What have lower federal district and court of appeals had to say with regard to CWA jurisdictional issues in both pre and post SWANCC contexts?

The paper has been written primarily for lawyers and, therefore, contains many case citations. However, it may also be of interest to federal, state, and local regulatory agency staff, planners and others working with the Clean Water Act.

The paper begins with a background on the use of terms “navigable waters” and “waters of the U.S.” in the Clean Water Act. It then examines the changes resulting from the SWANCC decision. This is followed by an examination of court cases and administrative guidance following SWANCC. The paper then turns to some combined field-level legal/factual issues in identifying waters of the U.S. on the ground. Finally, it concludes with some recommendations. Appendix A describes in greater depth some factual contexts which pose particular identification problems.

What is right? What is wrong? Remember, this paper is to stimulate discussion and is not the final word. It does not represent the official policy of the EPA, the Corps of Engineers or any other agency. Suggestions are welcome.

I appreciate ideas and materials provided by a wide range of individuals. I found particularly useful a summary of post SWANCC decisions prepared by the Stephen Samuels, Esq. and second summary prepared by Jan Goldman Carter, Esq. and Jim Murphy, Esq. The latter are with the National Wildlife Federation. See <http://www.nwf.org/ourprograms/>.

Thanks to all.

Sincerely,

Jon Kusler

FOREWORD

This paper has been prepared by Jon Kusler for the Association of State Wetland Managers. The Association is a not for profit (502(c)(3) organization dedicated to the protection and restoration of wetlands and related ecosystems. The Association has also the goals of building the capacity of states and local governments to protect and restore such systems and the strengthening of federal, state, tribal and local partnerships.

Determining what waters are and are not subject to the Clean Water Act is important to states, tribes and local governments as well as federal agencies for a number of reasons. First, protection of water quality, including source water protection and regulation of both point and nonpoint pollutants (stormwater, agricultural runoff, etc.), is a priority of states, tribes, and local governments. Gaps in such regulations resulting in inadequate protection for drinking water, inadequate control of stormwater pollution and inadequate control of point and nonpoint sources, are a concern at all levels of government. Protection of drinking waters from terrorist-related poisons has emerged as a major concern since 9/11.

Second, most states, tribes, and local governments do not regulate isolated wetlands and other waters. Reduced federal jurisdiction over these waters pursuant to the SWANCC decision therefore creates a gap in federal, state, Tribal and local regulations and threatens these waters from pollution, fills, impoundment, drainage and other activities. For example, the State of New York only regulates freshwater wetlands larger than 12.4 acres. Prior to SWANCC, the Corps of Engineers regulated smaller wetlands pursuant to Section 404 of the Clean Water Act. The State of New York also exercised a measure of control over smaller wetlands by approving or disapproving proposed Section 404 permits pursuant to Section 401 of the Clean Water Act. SWANCC removed federal protection for some of these smaller, “isolated” wetlands. It also removed New York Section 401 review for activities in these wetlands (since no federal or state permit is now needed).

Third, Wisconsin, Indiana, and Ohio have adopted legislation to at least partially close the gap in regulations. The three states require a state permit if a wetland is not regulated by the Corps of Engineers. This requires case by case decisions by the Corps and the states concerning “waters of the U.S.” versus other waters and wetlands.

Fourth, additional states are considering wetland legislation or administrative rule changes to close the gap created by SWANCC. These include but are not limited to New York, Illinois, Connecticut, North Carolina and South Carolina. Determining which waters are and are not subject to Corps jurisdiction is needed in designing new legislation and projecting wetland program budget and staffing needs.

Fifth, the scope of “waters of the U.S.” determines what waters the states must regulate pursuant to their NPDES programs, including control of point sources and stormwater. It affects the scope of the permitting which states and tribes must or may undertake as part of an “assumed” Section 404 program or a state programmatic permit from the Corps of Engineers. It affects the scope of CZM management consistency review since it affects most water related permits from the federal government.

For these reasons, states, tribes and local governments as well as federal agencies need to know what is and is not regulated by the Clean Water Act and related legislation.

**ACKNOWLEDGEMENTS,
DISCLAIMER**

The ideas expressed herein are the author's and should not be attributed to the U.S. Environmental Protection Agency or any of the cooperating parties for the forthcoming workshop.

The paper draws upon a wide range of sources. See selected readings and web sites.

EXECUTIVE SUMMARY/ RECOMMENDATIONS

The SWANCC decision. In January 2001 the U.S. Supreme Court issued a 5-4 opinion in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (531 U.S. 159, 2001) (herein referred to as SWANCC). In this decision, the Court held that the Corps of Engineers could no longer require Clean Water Act (Section 404) permits based upon the use of isolated ponds and other waters by migratory waterfowl alone. The Court distinguished but did not overrule an earlier Supreme Court decision—*Riverside Bayview*—in which the Court unanimously held that the Clean Water Act broadly applied to wetlands adjacent to navigable waters. The Court concluded in SWANCC that the Clean Water Act did apply to traditionally navigable waters and other, adjacent waters with a “significant nexus” to traditionally navigable waters. However, the Court did not make clear what tests for navigability are to be applied for the purposes of the Clean Water Act, nor the meanings of the terms “adjacency”, “tributary”, or “significant nexus.” This decision has, overall, broad implications for the “restoration and maintenance” of the Nation’s waters, particularly isolated waters.

Court decisions since SWANCC. Since the SWANCC decision, at least thirty six federal district court and court of appeals decisions have interpreted SWANCC. Federal district courts and courts of appeal began, shortly after the issuance of SWANCC, to split in their interpretation of SWANCC. The 5th Circuit Court of Appeals broadly interpreted the decision (excluding certain waters from Clean Water Act jurisdiction); several other district courts narrowly interpreted the decision. Despite this early division in cases, over the last three years judicial support has grown in the District and Appellate courts for a narrow interpretation of SWANCC. On appeal all but two of the decisions broadly interpreting SWANCC (and omitting specific waters from jurisdiction) have been overturned. In addition, 5 of the decisions narrowly interpreting SWANCC were appealed to the U.S. Supreme Court. The Court denied certiorari in the 5. Therefore, with the exception of the decisions from the 5th Circuit Court of Appeals, district and appellate courts since SWANCC have overwhelmingly supported a narrow interpretation of SWANCC.

Agency Guidance concerning SWANCC. In January 2001 the Army Corps of Engineers and EPA published preliminary guidance concerning CWA. This guidance was supplemented and updated in December of 2003. This guidance endorsed the general pre-SWANCC status quo with regard to jurisdiction with the exception of situations within the scope of the migratory bird rule. The 2003 guidance suggested that SWANCC may preclude the Corps from asserting CWA jurisdiction over waters such as isolated, non-navigable, intrastate vernal pools, playa lakes and pocosins based upon migratory birds alone (and perhaps other factors listed in the migratory bird rule as well). However, this guidance is quite general and does not address with specificity a number of “problem” situations.

In the field, Corps of Engineers and EPA staff and their state and local partners are having difficulty in determining whether CWA jurisdiction for several categories of waters (note, this list is illustrative and not exhaustive):

- Sheet flow and ground water flow connected waters and wetlands;
- Closed and partially closed basins;

- “Adjacent waters and wetlands including waters and wetlands at some distance for navigable waters and tributaries and/or separated by berms, roads, and other impediments; and
- Tributaries including tributaries a long distance from navigable waters, ephemeral streams, arroyos, and
- Artificial ditches, canals, pipes, culverts and drains.

See Appendix A of this paper for more detailed discussion.

Jurisdictional waters after SWANCC. Based upon the SWANCC decision, Clean Water Act decisions (district court, court of appeals, Supreme Court) prior to SWANCC but not overruled by SWANCC, district court, court of appeals and Supreme Court actions since SWANCC, one may conclude that:

--Traditionally “navigable” waters including wetlands and riparian zones contained in such waters are clearly regulated by the CWA. These include waters which have been used or are susceptible to use for interstate commerce. These include all waters subject to the ebb and flow of the tides to the mean high tide. These waters include major rivers and streams, and major lakes (Great Lakes, the Great Salt Lake) including shallow, nonnavigable areas of traditionally navigable waters to the ordinary high water mark. These also (arguably) include many lesser waters (lakes, streams, wetlands) used for rafting, canoeing, and other forms of commercial, interstate recreation navigation purposes. The Army Corps of Engineers has published lists of traditionally navigable waters although not all navigable in fact or in law waters are on these lists.

--Waters and wetlands “adjacent” to traditionally navigable waters are also regulated by the CWA. These include waters adjacent to tributaries to navigable waters. Adjacent regulated areas include areas separated from traditionally navigable waters by dikes, levees and the like but with a “significant nexus” to navigable waters. These include (arguably), not only waters joined to navigable waters by ditches and the like but by sheet flow, channelized runoff, or even subsurface flow.

--Waters “tributary” to navigable waters are regulated to the ordinary high water mark. These include ephemeral streams and arroyos with a significant nexus to navigable waters. These include waters linked to navigable waters or tributaries to navigable waters through natural channels and ditches and other artificial waterways. They also include (arguably) waters linked by sheet flow, ground water connections, and ecological connections.

--Waters in pipes, canals, ditches and other artificial waterways with a “significant nexus” to navigable waters are regulated as tributary waters. These include (arguably) waters linked to navigable waters or tributaries to navigable waters through ground water or sheet flow and ecological connections. See above.

The waters and associated wetlands most affected by SWANCC include closed basins waters and wetlands such as vernal pools and playas and ephemeral streams where the flow evaporates before reaching navigable waters. However, some basins and ephemeral streams which may not appear to be connected on the surface are connected through sheet flows or subsurface flow. Some may also be connected through “ecological” connections such as use by reptiles, amphibians, insects, and other plant and animal species. What connections constitute a significant hydrologic or ecological nexus has been addressed in a relatively small number of cases and more administrative guidance and court decisions are needed to define these limits.

Strategies for field staff. What strategies should field staff apply in light of SWANCC and other court decisions in achieving Clean Water Act goals? Several strategies may be suggested. See Part IV below for more detailed recommendations.

First, field staff should, based on court decisions to date, have confidence that courts will support, a broad interpretation of “waters of the U.S.” and a narrow interpretation of SWANCC including broad interpretations of “navigability”, “adjacency”, and “tributary” as long as some ultimate, “significant” connection is found between particular waters or wetlands and navigable waters. Staff in the 5th Circuit should have less confidence in a broad interpretation of “waters of the U.S.”

Second, courts are likely to defer to field staff statutory and administrative regulation interpretations and fact-finding on individual permits, particularly where expertise is required and exercised although there are limits to this deference. Courts in both pre and post SWANCC contexts have broadly deferred to field staff in determining whether a significant nexus exists between particular waters and navigable waters. Courts are likely to continue to do so.

Third, field staff should, in each factual situation, ask:

--Is this water or wetland interstate, “navigable” or susceptible to navigation including use for interstate commercial, recreation purposes? If so, it is clearly subject to CWA jurisdiction.

--If it is not navigable, is it “adjacent” to a navigable water or to a tributary to a navigable water (in the proximity and with a significant nexus)? If so, it is subject to CWA jurisdiction.

--If it not navigable or adjacent, is it “tributary” to navigable waters and with significant nexus to such waters? If so, it is subject to CWA jurisdiction.

--If it is not navigable, adjacent or tributary in the usual sense, is there, nevertheless, a “significant nexus” between this water or wetland and navigable waters? If so, the water may be jurisdictional (at least arguments may be made to this effect.)

Fourth, (in the author’s opinion) field staff should not let semantics and legal arguments concerning the use of terms “navigable” and “waters of the U.S.” drive science. In deciding whether particular wetlands and waters are “jurisdictional” under the Clean Water Act, the Corps of Engineers, EPA, USGS, NRCS, NOAA and other federal agencies need to temporarily set aside, in a particular context, “navigability” in investigating scientific and ecological connectivity and importance. Legal analysis in a particular situation should follow scientific investigation concerning the hydrologic and ecological relationships and the consequences of allowing both potential individual and cumulative discharges into waters. This would help

agencies and courts to make an informed decision concerning “significant nexus” “adjacency” and “tributary” although navigability or relationship to “navigable” waters needs ultimately to be addressed.

Assisting field staff. How could state, federal and local agencies help field staff make CWA jurisdictional determinations? Some suggestions include:

First, the Corps, EPA and other agencies should develop a more comprehensive list and analyses of “problem contexts” (See Appendix A for a starting point) with regard to field identification of “waters of the U.S.” The comments, concerns, experiences, and recommendations of field staff in various Corps Districts, EPA regions and other federal agency staff involved with regulatory permitting for waters and wetlands (e.g. Fish and Wildlife Service, National Marine Fisheries Service staff) should be solicited and summarized. This would go beyond the preliminary, internal review that is underway.

Second, agency scientists, with help from academic institutions and the private sector, should prepare papers summarizing wetland and water science with regard to these “problem” contexts. Perhaps a National Academy of Sciences Panel is needed. These summaries should carefully examine connections between various wetlands and waters and navigable waters and the importance (or unimportance) of controlling discharges into those waters in terms of the “restoration” and “maintenance” of all of the Nation’s waters including long term cumulative impacts. These papers should be widely circulated for review and then published.

Third, federal agencies should develop improved mechanisms for informing federal, state, and local field staff concerning post-SWANCC court decisions by posting them bi-monthly or monthly on the internet.

Fourth, federal agencies need to work with states, tribes and local governments to develop joint field procedures for defining wetlands and “waters of the U.S.” For example, efforts to regionalize the 1987 Corps of Engineers Manual for the Identification of Jurisdictional Wetlands which are now underway could be very helpful.

Fifth, federal agencies, along with their academic, state, tribal, local government and other partners, should prepare an overview report for Congress concerning the consequences of including or omitting certain “problem” classes of waters from CWA regulatory control in the short term and long term. This report should address the question: How will or will not exclusion of particular waters detract from efforts to “restore” and “maintain” the Nation’s waters? Alternatively this might be undertaken by a National Academy Committee. Congress could, then, better decide what amendments to the Clean Water Act are needed, including the definition of regulated waters and any modification in the roles of federal agencies, states, tribes, and local governments.

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BACKGROUND

Challenges Facing Regulatory Staff

Agency staff face a difficult task in identifying “waters of the U.S.” in some contexts. This includes staff of the U.S. Army Corps of Engineers along with the staff of U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service, the National Marine Fisheries Service other federal agencies and their state, tribal, local government wetland regulatory and consultant partners. Staff need to decide what are “waters of the U.S.” in order to apply the regulatory provisions of the Clean Water Act and related legislation (e.g., Pollution Control Act) to fills, drainage, pollution and other land and water activities in a broad range of factual contexts. Staff are faced with:

-- Limited U.S. Supreme Court guidance in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (531 U.S. 159, 2001) (herein referred to as *SWANCC*) and other U.S. Supreme Court decisions concerning the identification of “waters” regulated by the Clean Water Act other than traditionally “navigable” waters. The Court in *SWANCC* stated broad, but somewhat contradictory, principles concerning the scope of “waters of the U.S.” These uncertainties particularly concern the application of the terms “navigable”, “adjacent”, “tributary”, and “significant nexus” in specific contexts. See discussion below and Appendix A.

-- At least thirty six lower federal District Court and Courts of Appeal decisions after *SWANCC* with growing but not total (5th Circuit exception) agreement concerning the scope of Clean Water Act jurisdiction other than traditionally “navigable” waters. The decisions also address only a portion of the ambiguous issues.

--Scientific evidence that pollution must be broadly controlled to achieve Clean Water Act goals (e.g., comprehensive pollution control at its source) yet some language in *SWANCC* and two legal decisions (e.g., *SWANCC*, *Rice v. Harkin*) which suggest that that regulations should be limited to “navigable” waters and waters closely related (e.g., adjacent) to navigable waters.

--Limited mechanisms in place for field staff to stay current with regard to court decisions.

--Limited administrative guidance from the Corps of Engineers and EPA concerning the scope of waters in “problem” contexts (See discussion below and Appendix A).

--Many complicated factual situations which defy simple scientific or legal analysis.

--Scientific uncertainties (in some situations) and lack of scientific data in some specific situations with regard to ecological and hydrologic relationships between wetlands and waters and other “navigable” waters; and

--Limited regulatory agency budgets and small numbers of staff to carry out fact- finding on a case by case basis concerning “navigability”, wetland and water boundaries including ordinary high water mark, the relationship of particular wetlands and waters to other wetlands and waters, and other permit-by-permit assessment needs.

Congressional Intent and Scientific Needs

Agency staff are faced, in deciding whether particular waters are subject to CWA jurisdiction, with a number of difficult questions concerning the intent of Congress.

Congress in adopting the Clean Water Act provided, in part, in the Act (33 U.S.C. § 1251):

"(a) The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this chapter —

(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

(3) it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

....

Commenting upon Congressional intent, the Eleventh Circuit Court of Appeals stated in *United States v. Eidson*, 108 F.3d 1336, 1341 (11 Cir. 1997):

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251. In order to implement this daunting mandate, Congress "chose to define the waters covered by the Act broadly." *United States v. Riverside Bayview Homes, Inc.*, [474 U.S. 121, 133](#), 106 S. Ct. 455, 462, 88 L.Ed.2d 419 (1985). Courts have agreed that Congress intended the definition of navigable waters under the Act "to reach to the full extent permissible under the Constitution." *See United States v. Lambert*, 695 F.2d 536, 538 (11th Cir.1983).

In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) the U.S. Supreme Court observed that the Clean Water Act was part of a "comprehensive legislative attempt 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" *Id.* at 132. The Court noted Congress's recognition that "protection of aquatic ecosystems...demanded broad federal authority to control pollution, for 'water moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.'" *Id.* at 132-33 (quoting S. Rep. No. 92-414, p. 77 (1972)),

Yet, the Supreme Court in *SWANCC* indicated that Congress did not intend the Clean Water Act to apply to "isolated" waters based upon their use by migratory birds alone. See discussion below. The Court reached this decision, in part, based upon concerns about the outer limits of Constitutional Commerce Clause powers. But, what, then, is the intent of Congress: an intent to comprehensively restore and maintain the "chemical, physical, and biological integrity" of the Nation's waters; or, an intent to regulate some but not all waters (as interpreted by the Court in *SWANCC*)?

Ambiguities in Congressional intent lead to a second, scientific dilemma. How are agencies to achieve the Clean Water Act goal to comprehensively “restore and maintain” waters without regulating pollution and other discharges from a broad range of sources and discharges in all types of waters? The “navigability” or “nonnavigability” of water makes no difference in terms of pollution. Water and pollutants do run down hill. Point and nonpoint pollutants do, in most instances, flow from headwaters to small rivers, streams, and lakes and then to navigable waters and streams (e.g., nutrient pollution in Chesapeake Bay, hypoxia in the Gulf of Mexico). Scientifically, it makes little difference whether this flow is underground (pipe, culvert, stormwater system), through sheet flow, through defined natural or artificial channels, or through ground water. While an individual pollution sources (e.g., a farm, golf course, subdivision) may have a relatively insignificant affect on water quality of a particular water body, the cumulative impacts on water quality are great. This is the reason why nonpoint source pollution has become such a serious problem for waters in many parts of the Nation.

Isolated or partially isolated waters in some instances more effectively trap sediments and other pollutants and prevent them from reaching navigable waters than lakes, streams, and wetlands with more direct connections. Yet, these “isolated” wetlands and waters which may not be regulated pursuant to SWANCC.

Pollution is, of course, not the only issue in “restoring and maintaining the physical, chemical, and biological integrity of waters”. Many types of wildlife such as fish (e.g., salmon), amphibians (e.g. salamanders), mammals (e.g. moose and deer), and insects (e.g. dragon flies, mosquitoes) , as well as migratory birds utilize and link complexes of wetlands and other waters even where there may be a limited or no hydrologic connections. The cumulative impacts of pollution, fills, drainage and other activities destroy ducks and other water fowl, song birds, frogs, and other wildlife.

“Waters of the U.S.” Prior to SWANCC

In 1972 Congress adopted comprehensive Water Pollution Control Amendments which along with further amendments came to be known as the Clean Water Act (CWA). In Section 404 of the 1972 Amendments, Congress provided the Corps of Engineers and EPA with permitting authority over the discharge of dredged or fill material into “navigable waters at specified disposal sites”. See 1344(a) U.S.C. The Congress in Section 502(7) of the Amendments defined “navigable” waters as “waters of the United States, including the territorial seas.” This dual use of the terms navigable waters” and “waters of the United States” to define the scope of Clean Water Act jurisdiction has led to confusion as will be discussed shortly. Congressional hearings pursuant to this act indicate that it was the intent of Congress to authorize a broad pollution control program not confined to navigable waters. See Sen. Conf. Rep. No. 92-1236, 92 Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Admin. News, 3376, 3822. See also *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

In 1977, to provide more specificity and in response to court decisions, the Army Corps of Engineers, the principal implementing agency for Section 404, more specifically defined “waters of the U.S. in administrative regulations to “include the traditional definition of navigable waters and “isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the

degradation of which could affect interstate commerce.” The Corps and EPA have refined this definition over the next twenty years to provide the following definition:

- “(1) All 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 ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) 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 including such waters:
 - (i) which are or could be used by interstate or foreign travelers for recreational or other purpose; or
 - (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (iii) which are used or could be used for industrial purposes by industries in interstate commerce.
- (4) All impoundments of water otherwise defined as waters of the United States under the definition;
- (5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
- (6) The territorial sea/
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

See 40 CFR.230.3(s); 33 CFR 328.3(a).

In the preface of the 1986 version of their Section 404 administrative regulations, the Corps provided examples of links to interstate commerce which might serve as a basis under 40 CFR 230.3(a)(3) and 33 CFR 328.3(a)(3) for establishing CWA jurisdiction over intrastate waters which are not part of a tributary system or adjacent wetlands. These examples included waters “a. Which are or would be used as habitat by 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 are or could be used as habitat for endangered species; or (d) Used to irrigate crops sold in commerce. 51 Fed. Reg. 41217.

The bird-related criteria (and, arguably, the subsections (a)-(d) for defining “waters of the United States”) became known as the Migratory Bird Rule.

The Corps of Engineer’s and EPA’s broad definition of “waters of the U.S.” adopted in 1977 with subsequent revisions was sustained in many court cases during the 1970’s, 1980’s, and the 1990’s. See examples of cases cited below. During this period, courts found that Clean Water

Act jurisdiction extended beyond traditional “navigable waters” to tributaries and many other waters because waters run downhill and pollution in headwaters will, in many instances, ultimately pollute other waters. For example, in *United States v. Ashland Oil & Transp. Co.*, 504 F.2d 1317 (6th Cir. 1974) the Sixth Circuit Court of Appeals examined the purposes of the CWA and concluded that Congress intended to regulate not only traditionally navigable waters but other water bodies impacting such waters. The court held that a non-navigable creek which discharged into a non-navigable river that discharged into a navigable river was within the jurisdiction of the CWA. The court stated, in part (Id at 1326):

It would...make a mockery of...(Congressional) powers if its authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. The navigable part of the river could become a mere conduit for upstream waste.

Such a situation would have vast impacts on interstate commerce. States and cities and industries situated upstream on the nonnavigable tributaries of our great rivers could freely use them for dumping raw sewage and noxious industrial waters upon their downstream neighboring states. There would be great pressure on the upstream states to allow such usage. Reduced industrial costs and lower taxes thus resulting would tend to place industries, cities and states located on navigable rivers at a considerable competitive disadvantage in interstate commerce. In such a situation industrial frontage on a creek which flowed ultimately into a navigable stream would become valuable as an access point to an effectively unrestricted sewer.

Approving the analysis in this case, the Tenth Circuit in *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979) held that a non-navigable creek was within CWA jurisdiction because “Congress intended to regulate discharges made into every creek, stream, river, or body of water that in any way may affect interstate commerce.”

For examples of other pre-SWANCC cases endorsing a broad definition for “waters of the U.S.” see *United States v. Cumberland Farms of Connecticut*, 826 F.2d 1151, 1153 (1st Cir. 1987) in which, the First Circuit affirmed that freshwater wetlands were within the scope of the CWA and noted the ecological value of wetlands including the role in storing flood waters and acting as biological filters by purifying water. In *Leslie Salt Co. v. United States*, 896 F.2d 354 (9th Cir. 1990) the Ninth Circuit found that CWA jurisdiction applied to tidal wetlands located one quarter mile from San Francisco Bay. As already indicated above, in *United States v. Eidson*, 108 F.3d 1336 (11th Cir. 1997) the Eleventh Circuit court held that the fact that nonnavigable waters are manmade does not avoid CWA jurisdiction. A drainage ditch that during heaving rains and high tides connected to a drainage canal that emptied into a creek which was a tributary to Tampa Bay—a navigable water—was held subject to the CWA. In *United States v. Byrd*, 609 F.2d 1204 (7th Cir. 1979) the Seventh Circuit held that the CWA extends to wetlands adjacent to intra-state lake. In *Avoyelles Sportsman’s League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983) the Fifth Circuit held that CWA jurisdiction extends to wetlands that are only seasonally flooded because the area serves as a major overflow for flooding from a navigable water.

The practical effect of the Corps’ broad definition of “waters of the U.S.” including those encompassed by the “Migratory Bird Rule”, meant that almost all wetlands and waters in the U.S. were subject to Clean Water Act jurisdiction since practically all are used to a greater or

lesser extent by migratory birds. As indicated above, courts broadly interpreted the term “waters of the U.S.” with little concern about navigability. A few courts, however, held that the Corps’ jurisdiction did not extend to specific waters because the link to navigable waters was tenuous. See, e.g. *U.S. v. Sargent County Water Resource District*, 876 F. Supp. 1081 (D., N.D., 1992).

SWANCC

In the SWANCC decision the Supreme Court attempted to come to grips with the dual use of terms “navigable waters” and “waters of the U.S.” in the Clean Water Act. In the case, Chief Justice Rehnquist, writing for the majority of a narrowly divided Supreme Court (a 5-4 decision), held that the Corps’ denial of a Section 404 permit to the Solid Waste Agency of Northern Cook County to fill several permanent and seasonal ponds that served as a heron rookery was invalid because the Corps lacked jurisdiction over these ponds. These ponds were located on a 533-acre parcel purchased by a consortium of 23 suburban cities and villages as a disposal site for nonhazardous solid waste. The site was an abandoned sand and gravel pit operation that had reverted to a forest. Remnant excavation ditches had evolved into a scattering of permanent and seasonal ponds varying in size from under one tenth of an acre to several acres, and from several inches to several feet deep.

The Solid Waste Agency had applied for and received a number of state and local permits. These included a special use planned development permit from the Cook County Board of Appeals and from the Illinois Department of Conservation. The Solid Waste Agency also secured water quality certification from the Illinois Environmental Protection Agency.

The Solid Waste Agency also sought a Section 404 permit from the Corps, which initially concluded that it had no jurisdiction over the site because it contained no “wetlands”, or areas which support “vegetation typically adapted for life in saturated conditions.” 531 U.S. 159, 175 (2001). However, the Illinois Nature Preserves Commission informed the Corps that a number of migratory bird species had been seen at the site. The Corps ultimately found that approximately 121 bird species had been observed at the site, including “several known to depend upon aquatic requirements for a significant portion of their life requirements.” *Id.* at 164. The Corps reconsidered its initial conclusion and in 1987 formally determined that the area, while not wetlands, qualified as “waters of the United States” pursuant to the Migratory Bird Rule (see below). The Corps refused to issue a Section 404 permit because it concluded that SWANCC had not established that its proposal was the “least environmentally damaging, most practical alternative”; that SWANCC’s failure to set aside sufficient funds to remediate leaks posed “an unacceptable risk to the public’s drinking water supply”; and that project impact upon “area-sensitive species was unmitigatable since a landfill surface cannot be redeveloped into a forested habitat.” *Id.* at 165.

The Solid Waste Agency filed suit against the Corps in federal District Court claiming that the Corps did not have jurisdiction. The District Court ruled for the Corps on this issue. The Solid Waste Agency then appealed the jurisdictional determination to the U.S. Court of Appeals for the Seventh Circuit which also ruled in favor of the Corps. The Solid Waste Agency next appealed to the U.S. Supreme Court which accepted the case and overturned the District Court and Court of Appeals and ruled in favor of the consortium.

Specifically, the Supreme Court (Court) held that the Corps' "Migratory Bird Rule" which the Corps had adopted in 1986, exceeded the authority granted to the Corps by Congress in Section 404(a) and that Corps jurisdiction over these ponds was lacking. The Court held that Congress did not intend Section 404(a) to regulate such isolated waters based solely upon the use of such waters by migratory birds.

In reaching its decision, the Court stated that a "clear indication" of Congressional intent would have been needed for the Corps to regulate these isolated waters. *Id.* at 172. The Court suggested that such a clear indication of intent was needed "where an administrative interpretation of a statute invokes the outer limits of Congress' power." The Court also observed that the "concern is heightened where the administrative interpretation alters the federal-state framework by permitting federal encroachment upon a traditional state power." *Id.* at 173. The Court observed that permitting respondents to claim federal jurisdiction over ponds and mudflats falling within the 'Migratory Bird Rule' would result in significant infringement of the States' traditional and primary power over land and water use." *Id.* at 174. Finding that there was not a clear indication of Congressional intent, the Court declined to interpret the statute as allowing jurisdiction to be asserted over isolated waters based solely on the basis of their use as migratory bird habitat.

The Court rejected arguments that the Corps had sufficiently broad discretion to issue the Migratory Bird Rule based upon the broad definition of "waters of the United States" contained in the 1972 Water Pollution Control Amendments and comments by members of the Senate and House in the Congressional Record indicating that these Amendments should have the broadest possible interpretation in order to implement a comprehensive water pollution control scheme for the Nation. The Court rejected arguments that Congress endorsed the Corps' interpretation of the 1972 Amendments to apply Section 404 to isolated wetlands and waters by defeating a proposed House Bill in 1977 which would have restricted the scope of the Corps' authority. The Court rejected arguments that 1977 CWA amendments exempting some activities and isolated waters and wetlands from regulation and providing a mechanism to delegate to the states power to regulate waters and wetlands other than traditionally navigable waters indicated Congressional intent to regulate such isolated waters and wetlands.

Although the Court held that the Migratory Bird Rule was invalid it did not hold any other of the criteria for "waters of the U.S." contained in Corps guidance invalid although it did raise questions concerning the scope of the Commerce Clause. The Court did, in discussing various legal points in the case, provide some helpful but not entirely consistent hints concerning what is jurisdictional in the CWA.

The Court several times quoted from its earlier decision, *United States v. Riverside Bayview Homes*, 474 U.S. 121 (1985), in which the Court held that the Corps had sufficient power under Section 404(a) to regulate wetlands adjacent to navigable waters. The Court, in citing *Riverside Bayview Homes*, observed that in this case "we recognized that Congress intended the phrase 'navigable waters' to include 'at least some waters that would not be deemed "navigable" under the classical understanding of that term.'" Referring to *Riverside Bayview Homes*, the Court "found that Congress's concern for the protection of water quality and aquatic ecosystems indicated its intent to regulate wetlands 'inseparately bound up with the "waters of the United States.'" *Id.* at 167. The Court also observed that "It was the significant nexus between the wetlands and 'navigable waters' that informed our reading of the CWA (Clean Water Act) in *Riverside Bayview Homes*." *Id.* at 167. In addition, the Court observed: "We said in *Riverside Bayview Homes* that the word 'navigable' in the statute was of 'limited effect' and went on to

hold that Section 404(a) extended to nonnavigable wetlands adjacent to open waters. But it is one thing to give a word limited effect and quite another to give it no effect whatever.” Id. at 172. But, what, then, does it mean to give the term “navigable” in Section 404(a) “limited effect” but more than “no effect”? The Court’s use of the terms “significant nexus” and “inseparately bound up” provide a possible clue as will be discussed below. Unfortunately, the Court also provides contradictory suggestions. At one point in SWANCC the Court suggests a very narrow definition of regulated waters might be appropriate by stating that “(r)espondents put forward no persuasive evidence that the Corps mistook Congress’ intent in 1974” when it adopted initial regulations (which were later revised) limiting the Corps’ Section 404 jurisdiction to traditionally navigable waters. Id. at 167. But this statement by the Court is contradicted by other statements. Such a narrow reading by the Court would give the term “navigable” controlling effect rather than the “limited effect” the Court suggests it deserves. This would also be contradictory with the Court’s endorsement of Riverside Bayview and the regulation of adjacent wetlands which were not navigable in that case.

Court Decisions Since SWANCC

In the more than four years since the SWANCC decision, the U.S. Supreme Court has taken two Clean Water Act cases on certiorari—*Borden Ranch Partnership v. United States Army Corps of Eng’rs*, 261 F.3d 810 (9th Cir. 2001), *aff’d*, 537 U.S. 99 (2002) and *Miccosukee Tribe v. South Florida Water Management District*, 280 F.3d 1364 (11th Cir. 2002), *cert. granted* 541 U.S. 95 (2004). For different reasons, neither of the cases have been helpful in defining the outer limits of CWA jurisdiction. The lower courts in *Borden* held that “deep ripping” in infrequently wet areas including vernal pools in the semi arid west was subject to the Clean Water Act but the CWA geographic jurisdiction issue was not brought before the Supreme Court which affirmed, with a 4-4 tie vote, the court of appeals court. The Court in *Miccosukee* dealt with the definition of a “discharge” in terms of water transfers from one point in a water to another, not geographical jurisdiction. The Court remanded this case for further proceedings. Since January of 2001 at least sixteen appellate and another nineteen district court decisions have addressed Clean Water Act jurisdiction in light of SWANCC. The courts in all but three of these decisions narrowly interpreted SWANCC and found that the waters in question were jurisdictional waters.

Two contrary appellate decisions were issued by the 5th Circuit. Both dealt with oil spills and the Oil Pollution Act, not discharges of pollutants directly into waters. The 5th Circuit court in *Rice v. Harkin*, 250 F.3d 264 (5th Cir. 2001) observed that the Oil Pollution Act had a somewhat separate history and noted that “the district court's reluctance to apply an Act targeted at disasters like the Exxon Valdez oil spill to Harken's dry land operations in the Texas Panhandle is certainly understandable.”

In the first of these, *Rice v. Harkin Exploration Company*, 250 F.3d 264 (5th Cir. 2001) the 5th Circuit Court of Appeals held that the jurisdiction of the Oil Pollution Act did not extend to discharge of oil onto land which flowed through the ground water to creeks and streams. The court suggested that a discharge would be jurisdictional if to water...actually navigable or...adjacent to an open body of navigable water.” Id. at 269. The court emphasized the lack of evidence in this case showing an existing or potential connection between the oil spills and pollution of navigable waters.

In the second 5th Circuit decision, *In re: Needham*, 354 F.3d 340 (5th Cir. 2003), the court endorsed, in dicta, the language from *Rice* favoring a broad interpretation of SWANCC. The court observed that: “The CWA and the OPA are not so broad as to permit the federal government to impose regulations over “tributaries” that are neither themselves navigable nor truly adjacent to navigable waters...Consequently, in this circuit the United States may not simply impose regulations over puddles, sewers, roadside ditches and the like; under SWANCC “a body of water is subject to regulation . . . if the body of water is actually navigable or adjacent to an open body of navigable water...” Having said this, the court then, ironically, reversed a lower court decision holding that under the facts of this case there was no CWA jurisdiction and held that there clearly was Oil Pollution Act jurisdiction for the waters in question because they were adjacent to navigable waters.

The Supreme Court has denied certiorari in five cases where the lower courts of appeal had construed SWANCC narrowly and found CWA jurisdiction to exist in specific circumstances. See *U.S. v. Rueth Development Co.*, 189 F.Supp.2d 874 (N.D. Ind., 2001) aff’d, 335 F.3d 598 (7th Cir. 2003), cert. denied, 540 U.S. 1050 (S.Ct. 2003); *U.S. v. Rapanos*, 190 F. Supp.2d 1011 (E.D. Mich. 2002), rev’d 339 F.3d 4547 (6th Cir. 2003), cert. denied 124 S.Ct. 1875 (2004); *U.S. v. Deaton*, 332 F.3d 698 (4th Cir. 2003), cert. denied, 124 S.Ct. 1874 (2004); *U.S. v. Newdunn Associates*, 195 F.Supp.2d 751 (E.D.Va. 2002), rev’d, 344 F.3d 407 (4th Cir. 2003), cert. denied, 124 S.Ct. 1874 (2004); *United States v. Krilich*, 152 F. Supp. 2d 983 (N.D. Ill. 2001), affirmed 303 F.3d 784 (7th Cir., 2002), cert. denied, 123 S.Ct. 1782 (2003)

Administrative Guidance Since SWANCC

On January 19, 2001, shortly after the SWANCC decision, the legal offices of the Corps of Engineers and EPA issued preliminary guidance concerning the interpretation of SWANCC. This guidance supplemented existing Corps of Engineers and EPA Regulations defining navigable waters. See the definition of waters of the U.S. from 40 CFR.230.3(s); 33 CFR 328.3(a) above.

Existing regulations and guidance did not address many of the “problem” situations of the sort described in Appendix A. As a result, there were calls from both the environmental and development communities for the issuance of more specific administrative guidance. In response to this, the Bush Administration issued on January 15, 2003 an Intent for Advance Notice for Proposed Rule-Making (ANPRM). This announcement contained guidance (see appendix A of the announcement) which superceded earlier guidance by the Corps and EPA issued immediately after SWANCC (see above).

This ANPRM resulted in more than 130,000 responses including 43 from states. Of the forty three state responses, only two favored a broad reading of SWANCC to limit CWA jurisdiction. Many concluded that omission of tributaries would also have severe impacts. See discussion of tributaries below.

Before a rule could be issued by the Bush Administration, more than 200 members of Congress submitted a joint letter to President Bush requesting that there be no rule-making at that time. The Bush Administration announced on December 16, 2003 that there would be no rule making at that point in time.

Nevertheless, the Administration did not revoke the guidance for Corps and EPA field staff (appendix A) which was issued in conjunction with the ANPRM.

This guidance states that “field staff should not assert CWA jurisdiction over isolated waters that are both intrastate and non-navigable, where the sole basis available for asserting CWA jurisdiction rests on any of the factors listed in the “Migratory Bird Rule”. The guidance goes on to more specifically conclude that with regard to use by migratory birds the

EPA and the Corps are now precluded from asserting CWA jurisdiction in such situations, including over waters such as isolated, non-navigable, intrastate vernal pools, playa lakes and pocosins. SWANCC also calls into question whether CWA jurisdiction over isolated, intrastate, non-navigable waters could now be predicated on the other factors listed in the Migratory Bird Rule, 51 Fed. Reg. 41217 (i.e., use of the water as habitat for birds protected by Migratory Bird Treaties; use of the water as habitat for Federally protected endangered or threatened species; or use of the water to irrigate crops sold in interstate commerce.)

The guidance concludes that “field staff should seek formal project-specific HQ approval prior to asserting jurisdiction over waters based on other factors listed in 33 CFR. 328(a)(3)(i)-(iii).” This guidance (arguably) goes beyond the SWANCC ruling since the Court in SWANCC did not address these additional factors.

The guidance states that agencies will continue to assert jurisdiction over remaining waters including “isolated, intrastate waters that are capable of supporting navigation by watercraft”, “wetlands adjacent to traditional navigable waters”, and “wetlands adjacent to non-navigable waters that are tributaries to navigable waters.”

This guidance, while useful, is now somewhat outdated because it fails to reflect a number of court decisions cited by the guidance which have been overturned by appellate courts—Rampanos, Deaton, Rueth, New Dunn, and Needham (overturned on other grounds.) It also fails to address some of the most controversial “problem” situations.

Given this history, it is not surprising that Corps, EPA, state, tribal, and other field staff are having continued questions in deciding whether some waters are jurisdictional under the Clean Water Act.

INTERTWINED LEGAL AND FACTUAL ISSUES

Staff are, in many instances, faced with a variety of intertwined legal and factual issues in deciding whether particular waters are jurisdictional under the CWA. Some of the principal ones include the following (See Appendix A of this report for a brief discussion of each). Note, the list is not exhaustive and there is overlap between contexts:

--Wetlands and other waters connected by sheet flow and ground water to navigable waters or tributaries to navigable waters.

--Closed and semi-closed basin waters and wetlands where all or most of the precipitation evaporates before reaching navigable waters.

--Wetlands and other waters “adjacent” to navigable wetlands and waters (or tributaries) but some distance from navigable waters or not otherwise directly connected to the navigable waters,
--The headwater areas of tributaries to navigable waters including ephemeral streams,
--Arroyos, and
--Artificial drains, artificial channels, and similar man-made waters and alterations to waters.

These and other wetlands and waters are jurisdictional under the CWA if they are “navigable”, “adjacent” to navigable waters or tributaries to navigable waters, or “tributary” to navigable waters”. They also may be jurisdictional (arguably) in some situations where they have a “significant nexus” to navigable waters but may not be “navigable,” “adjacent”, or “tributary”. These “tests” or factors to be considered in determining jurisdiction will be discussed in greater depth below.

Courts are likely to defer to agency staff in both rule-making and fact-finding on jurisdictional determinations, particularly where expertise is required although the Supreme Court did not in SWANCC defer to the Corps on the Migratory Bird Rule. As indicated by the many cases cited below, courts in both pre and post SWANCC contexts have broadly deferred to field staff in determining whether a significant nexus exists between particular waters and navigable waters. Courts are likely to continue to do so. See, for example, *U.S. v. Thorson*, 03-C-0074-C ((W.D.Wis. 2004) in which a District court upheld the Corps of Engineers determination of a wetland boundary and the determination that specific wetlands were “waters of the U.S.” The court “deferred” to the Corp’s interpretations of statutes and fact-finding with the following statement: (Id. at 20):

Defendants do not address the issue of deference. They seem to assume that none is due. Their approach would burden the courts with evaluating competing scientific methods, a practice that courts are not qualified to perform. *Pauley v. BethEnergy Mines, Inc.*, 501 U.S. 680, 696 (1991) (deference particularly appropriate when agency administers “complex and highly technical regulatory program.”). If a court were to disregard the scientific standards set by an agency charged with enforcing an Act whenever it found another standard more appropriate, it would effectively usurp the agency’s expressly delegated authority, violating fundamental separation of powers principles. See *Id.* (“Judicial deference to an agency’s interpretation of ambiguous provisions of the statutes it is authorized to implement reflects a sensitivity to the proper roles of the political and judicial branches.”)

In another recent case, **City of Shoreacres v. Waterworth, 04-20527 (5th Cir. , 2005)** the 5th Circuit Court of Appeals refused to consider question whether Corps of Engineers abused its discretion in concluding that it could exercise regulatory jurisdiction over only 19.7 acres of wetland (post SWANCC) in contrast with 102 plus acres (pre SWANCC) because the Corps provided “ample mitigation to compensate for the loss of all aquatic areas on the site that will be filled in or otherwise degraded by the project” utilizing the 102 acres plus figure. However the court also observed that it should set aside a Corp permit only if the Corp’s “actions, findings, and conclusions are...arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law...” The court observed that “substantial weight” should be accorded to the Corp’s interpretation of its permitting granting authority and that the standard of judicial review is “highly differential”. The court concluded (quoting an earlier decision) that “We must look at the

decision not as the chemist, biologist or statistician that we are qualified neither by training nor experience to be, but as a reviewing court exercising our narrowly defined duty of holding agencies to certain minimal standards of rationality.” The court (footnote 3) characterized the jurisdiction issue in this case as a “question of fact concerning ‘the extent not the existence, of agency jurisdiction.’”

What Waters Are “Navigable” for Clean Water Act Purposes?

The first inquiry field staff should make in deciding whether a specific water body is subject to the CWA should be: “Is this a navigable water body?” If a water body is navigable under the federal test for navigability, it is subject to Clean Water Act jurisdiction.

But, what are “navigable waters”? The Corps of Engineers has developed lists of navigable waters for many Districts. These lists are helpful in determining navigability but they typically include only a portion of the waters which may be legally navigable. Navigability depends upon specific facts as will be discussed shortly and there are ambiguous situations. There are also questions concerning the extent to which the traditional tests for navigability are the only tests of “navigability” for CWA jurisdiction purposes. See discussion below.

Courts at both the federal and state levels have used the term “navigable” in somewhat different ways for different purposes as will be discussed below. They have also distinguished between “navigability in fact” and “navigability in law”. For example, the shallow portion of an estuary subject to the ebb and flow of the tide, a lake, or a river may be navigable at law (as part of a larger navigable body of water) although it is not navigable in fact.

The U.S. Supreme Court and lower federal courts have broadly held that waters subject to the ebb and flow of the tide, major rivers and streams, the Great Lakes and many other major lakes (e.g., the Great Salt Lake) are navigable in fact or in law to the high water mark. They have also held that many smaller rivers and streams, closed basin lakes and wetlands (e.g., the Great Salt Lake), tributaries, and other waters are similarly navigable in some instances.

What is the traditional test for “navigability”?

In 1870 the U.S. Supreme Court in an Admiralty case, *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) set forth the traditional definition of “navigable” waters. The Court held that the steamship *Daniel Ball* was subject to federal licensing requirements because it was traveling on “navigable” waters of the United States. The Court concluded that:

(R)ivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel over water. And they constitute navigable waters of the United States within the meaning of the acts of Congress, in contradistinction from the navigable waters of the States, when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water.

This language (and variations on this language) has been widely cited in court decisions over the last 130 years dealing with federal Admiralty jurisdiction and other types of federal jurisdiction based on navigability. This test for navigability--navigability in fact-- has been refined over a period of years. In *U.S. v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940), the Supreme Court described three ways that navigability can be established: 1) present use or suitability for use, 2) suitability for future use with reasonable improvements, or 3) past use or suitability for past use. See *Loving v. Alexander*, 745 F.2d 861, (1984). The test of navigability permits a finding of navigability from evidence of anything from “the carriage of ocean liners to the floating out of logs.....” *U.S. Appalachian Electric Power Co.*, 311 U.S. 377 at 405.

Several years after *Daniel Ball*, the Supreme Court in *The Montello*, 87 U.S. 430 (1874) expanded the *Daniel Ball* test for the purposes of Commerce Clause jurisdiction so that obstacles or difficulties to navigation would not defeat a legal finding of navigability as long as a river could “afford a channel for useful commerce”. The Court in that case held that the Fox River in Wisconsin was navigable although portions were difficult or impossible to navigate. The Court concluded that to hold otherwise would deprive the public of the use of the large rivers of the country “over which rafts of lumber or great value are constantly taken to market.” *Id.* at 441.

Over the last century, the Supreme Court has been asked to decide the navigability of a number of waters. As indicated above, navigability is a factually-based inquiry. In *United States v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940) the Court observed (*Id.* at 404):

The legal concept of navigability embraces both public and private interests. It is not to be determined by a formula which fits every type of stream under all circumstances and at all times. Our past decisions have taken due account of the changes and complexities in the circumstances of a river. We do not purport now to lay down any single definitive test. We draw from the prior decisions in this field and apply them, with due regard to the dynamic nature of the problem, to the particular circumstances presented by the New River. To these circumstances certain judicial standards are to be applied for determining whether the complex of conditions in respect to its capacity for use in interstate commerce render it a navigable stream within the Constitutional requirements. Both the standards and ultimate conclusion involve questions of law inseparable from the particular facts to which they are applied.

The court in that case summarized tests for navigability. It stated (*Id.* at Page 387-388):

Navigability in fact must exist under "natural and ordinary conditions." *United States v. Oregon*, *supra*, 23; *United States v. Cress*, 243 U.S. 316, 321, 325, 326; *United States v. Holt State Bank*, 270 U.S. 56. Exceptional use, or susceptibility of use, in times of temporary high water or under other abnormal conditions, is insufficient. *Oklahoma v. Texas*, *supra*, 587; *United States v. Rio Grande D. & I. Co.*, 174 U.S. 690, 699. To be navigable in fact, a water must have a “capacity for general and common usefulness for purposes of trade and commerce.” *United States v. Oregon*, *supra*, 23. *The Montello*, 20 Wall. 430, 442-3; *Donnelly v. United States*, 228 U.S. 243, 262. It must be used or susceptible of use for “commerce of a substantial and permanent character.” *Leovy v. United States*, 177 U.S. 621, 632; *United States v. Doughton*, 62 F.2d 936, 938. "A theoretical or potential navigability or one that is temporary, precarious and unprofitable, is not sufficient." *Harrison v. Fite*, 148 F. 781, 784; *United States v. Doughton*, *supra*,

939. Where "a stream has never been impressed with the character of navigability by past use in commerce, . . . commerce actually in esse or at least . . . in posse is essential to navigability," *Gulf & I. Ry. Co. v. Davis*, 26 F.2d 930, 933, *aff'd* 31 F.2d 109, cited with approval in *United States v. Doughton*, *supra*. Whether practical capacity for carrying useful, substantial and permanent commerce exists is a question of fact. *United States v. Utah*, 283 U.S. 64, 87; *Crowell v. Benson*, 285 U.S. 22, 55.

The Supreme Court has decided in favor of navigability of some waters and against in others. For example, in *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899) held that the portion of the Rio Grande in question was not navigable because "The mere fact that logs, poles, and rafts are floated down a stream occasionally and in times of high water does not make it a navigable river." *Id.* at 698. The court observed that the Rio Grande could only be used for any purposes of transportation "only in times of temporary high water." The Court also concluded that the Oklahoma and Red Rivers were not navigable in early cases. See *Oklahoma v. Texas*, 258 U.S. 574 (1922); *Brewer Oil & Gas Co. v. United States*, 260 U.S. 77 (1922). But the Court concluded that Mud lake in Minnesota was navigable. See *United States v. Holt State Bank*, 270 U.S. 49, 57 (1926). The Court concluded for Mud Lake that "In seasons of great drought there was difficulty in getting boats up the river and through the lake, but this was exceptional...."

In the 1930's the Court in *United States v. Utah*, 283 U.S. 64, 87 held that portions of the Green, Colorado, and Grand rivers were navigable because they could be used for navigation at least nine months of the year "not just during "short periods of temporary high water". The Court in this decision developed the "susceptibility" aspect of the federal test for navigability and concluded that a river may be navigable even if there was sparse evidence of actual use if "susceptibility to use as a highway of commerce may still be satisfactorily proved." *Id.* at 82.

In *United States v. Oregon* the Supreme Court held that Lake Malheur, Harney Lake, and Mud Lake were not navigable. See *United States v. Oregon*, 295 U.S. 1, 23 (1935). Evidence suggested that the lakes, although large and thousands of acres in size, were shallow and sometimes dry for an entire year or in dry seasons and Lake Maleur is "reduced to a relatively few acres of disconnected ponds surrounded by mud". Vegetation blocked off large areas of water although boaters could find passage through channels.

On the other hand, in 1971 the Court in *Utah v. United States*, 403 U.S. 9 (1971) held that the Great Salt Lake had been navigable in 1896 when the state entered the Union and was consequently in state ownership. Evidence suggested that this closed basin lake had been used sparingly by only a few boats to transport livestock and other cargo. Nevertheless, the Court held that it had been used as a "highway" and that was enough for navigability. The Court in other more recent decisions endorsed broader concepts of navigability as well. See, for example, *Economy Light and Power Co. v. United States*, 256 U.S. 113, 124 (1921) (Desplaines River used for transportation in the past and therefore navigable); *United States v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940) (New River held navigable based upon limited use by boats).

The Corps of Engineers has published in the Code of Federal Regulations (Title 33, section 329) quite detailed guidance pertaining to use of the terms "navigation" and "navigable waters". This guidance is in close conformance to the tests for navigability used by federal courts in determining "navigability" and should be consulted by anyone wishing to determine whether particular waters are "navigable" by federal tests. Nevertheless, the guidance recognizes that the

precise definitions of “navigable waters of the United States” and “navigability” are “ultimately dependent upon judicial interpretation....” Id., section 329.3. This guidance also states that the definition of navigable waters “does not apply to authorities under the Clean Water Act....” Id, section 329.1. See Appendix B, below, for discussion concerning multiple federal tests of “navigability”.

Are waters subject to the ebb and flow of the tide and outer portions of navigable lakes and streams “navigable” and regulated under the CWA?

All waters subject to the ebb and flow of the tide and outer portions of navigable lakes and streams are “navigable” in fact or navigable at law to the high water mark. See, e.g., *United States v. Stoeco Homes, Inc.* 498 F.2d 597 (3rd Circuit 1974) (Admiralty jurisdiction applies to tidal marshes); *United States v. Lewis*, 355 F. Supp. 1132, 1136 (S.D.Ga. 1973) in which the court stated:

The power to regulate extends to the entire bed of the stream and includes lands below the ordinary high water mark. *United States v. Chicago, Milwaukee, St. Paul and Pacific Railroad Company*, 312 U.S. 592, 597, 313 U.S. 543, 61 S.Ct. 772, 85 L.Ed. 1064. Jurisdiction embraces the whole surface of bodies of water subject to tidal action no matter how shallow or obstructed. A common sense view "permits no distinction upon the ground of navigability between the shallows and depths of navigable waters. . . ." *United States v. Turner*, 175 F.2d 644, 647 (5th Cir.), cert. denied, 338 U.S. 851, 70 S.Ct. 92, 94 L.Ed. 521.

In the Clean Water Act, navigable waters are defined as “waters of the United States including the territorial seas”. The Corps of Engineers definition of “navigable waters” includes the entire surface of navigable waters (tidal or not).33 CFR 329.4 (1978):

“Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigation capacity.

See citation of this definition in *Kaiser Aetna v. United States*, 444 US 164, 171 (1979). Nonnavigable wetlands adjacent to navigable tidal waters would also be subject to the Clean Water Act pursuant to the “adjacency” test applied in *Riverside Bayview and SWANCC*. See discussion below. See also *United States v. Stoeco Homes, Inc.* 498 F.2d 597, 605-06 (3rd Cir. 1974) in which the court held that estuarine areas subject to federal Section 10 jurisdiction are those which are regularly inundated by the mean high tide. These are also subject to federal navigation servitude.

What waters that “have been used in the past” or are “presently used” for transport of “interstate or foreign commerce?”

What constitutes a past or present use?

As described above, interstate and intrastate use by boats to transport goods in interstate commerce is clearly included. See, e.g., *Utah v. United States*, 403 U.S. 9 (1971 (Great Salt Lake used by small boats for commercial purposes.)). Courts have also found use for floating saw logs to be a present or past use qualifying waters for navigability status. See, e.g., *The Montello*, 87 U.S. 430 (1874) and other cases cited above.

The U.S. Supreme Court has held that once a water is a “navigable” water, changes in use will not deprive the water of that status. See *Economy Light and Power Co. v. United States*, 256 U.S. 113, 124 (1921). See also *United States v. Appalachian Electric Power Co.*, 311 U.S. 377, 408 (1940) in which the Court observed “When once found to be navigable, a waterway remains so.” The Court also observed that “Nor is it necessary for navigability that the use should be continuous. The character of the region, its products and the difficulties or dangers of the navigation influence the regularity and extent of the use...Even absence of use over long periods of years, because of changed conditions, the coming of the railroad or improved highways does not affect the navigability of rivers in the constitutional sense. It is well recognized too that the navigability may be of a substantial part only of the waterway in question. *Id.* at 409, 410. In *Appalachian Power*, 311 U.S. at 416 the Court further held that lack of commercial traffic is not “a bar to a conclusion of navigability where personal or private use of boats demonstrates the availability of the stream for the simpler types of commercial navigation.” *Id.* at 416.

The recreational use of waters by interstate and intrastate users and foreign visitors for commercial hunting, fishing, bird-watching, rafting/kayaking/canoeing is increasingly common. Does this make a water body “navigable” by federal standards? For example, is a closed basin lake or wetland that has not been traditionally used for navigation but it is now being used by commercial tour operators for birdwatchers, hunters, canoeists, rafters, kayakers and others who come from many states to observe birds and kayak and canoe the water body “navigable”? Are smaller streams that have never been used for navigation but are now being used in the spring and fall by interstate kayakers or canoeists and interstate rafting/kayaking/canoeing companies “navigable”?

They may be. See, e.g., *Colvin v. United States*, 181 F. Supp. 2d 1050, 1055 (C.D. Cal. 2001) in which the court held that an isolated, man-made body of water—Salton Sea—which was capable of boating and subject to ebb and flow of the tide was a “water of the United States”). The court stated (*Id.* at 1055):

The trial record reflects that the Salton Sea is a popular destination for out-of-state and foreign tourists, who fish and recreate in and on its waters and shoreline. Some tourists visit the Salton Sea for medicinal purposes, believing its water is good for their skin. Other international and domestic visitors frequent the Salton Sea to water ski, fish, hunt ducks, and race boats and jet skis on the Sea. Many Canadian tourists frequent the Sea in the winter, while many others use it in the summer. The record further shows that the Sea ebbs and flows with the tide. Under most any meaning of the term, the Salton Sea is a body of “navigable water” and “water of the United States.”

Thus, even after SWANCC, the CWA authorizes federal jurisdiction over illegal discharges into the Salton Sea.

See also *FPL Engery Maine Hydro LLC v Federal Energy Regulatory Commission*, 287 F.3d 1151 (D.C. Cir. 2002) in which the court held that three non-commercial, non recreational canoe trips were accepted as evidence of navigability of a portion of the Messalonskee Stream in Maine for federal FERC licensing purposes. There was no evidence of past commercial use.

As noted above, In *United States v. Appalachian Electric Power Co.*, 311 U.S. 377, 416 (1940) the Supreme Court held that "Nor is lack of commercial traffic a bar to a conclusion of navigability where personal or private use by boats demonstrates the availability of the stream for the simpler types of commercial navigation."

In *Alaska v. Ahtna, Inc.*, 891 F.2d 1401, 1405 (9th Cir. 1989), cert. denied, 495 U.S. 919 (1990) the 9th Circuit court held that the use of the Gulkana River in Alaska by aluminum power boats and inflatable rafts for guided fishing and sightseeing trips since 1970's was sufficient to prove the Gulkana's navigability for title purposes at time of statehood (1959.) "To deny that this use of the river is commercial because it relates to the recreation industry is to employ too narrow a view of commercial activity." [N]avigability is a flexible concept and "[e]ach application of the [Daniel Ball test] . . . is apt to uncover variations and refinements which require further elaboration." *Alaska v. United States*, 754 F.2d 851, 854 (9th Cir. 1985) (quoting *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 406, 61 S.Ct. 291, 299, 85 L.Ed. 243 (1940)). " *Id.* at 1405.

In *State ex rel. New York State Dept. of Conservation v. Federal Energy Regulatory Comm.*, 954 F.2d 56 (2d Cir. 1992) the 2nd Cir court found that the New York's Salmon River was navigable for FERC licensing purposes, in part based on evidence of use by drift boats and canoes.

In *Goodman v. City of Crystal River*, 669 F.Supp. 394 (M.D.Fla. 1987) the court found that Three Sisters Springs in Florida was navigable based on small craft use for private and commercial fishing and sightseeing operations.

In *Sawczvk v. U.S. Coast Guard*, 499 F.Supp. 1034 (W.D.N.Y, 1980) the district court held that the Lower Niagara River in New York was navigable for admiralty law purposes based in part on evidence of limited commercial white water rafting use over a period of years.

State courts have also recognized recreational uses as relevant to "navigability" under state tests. For example, in *Adirondack League Club, Inc. v. Sierra Club*, 706 N.E.2d 1192 (N.Y. App. 1998) the court held that navigability in fact depends upon recreational as well as other uses. Obstructions do not destroy navigability. In *Defenders of Wildlife v. Hull*, 18 P.3d 722 (Ct. App., Ariz) the Arizona supreme court held that Arizona state legislation disclaiming state's right, title or interest in river beds was an unconstitutional violation of Arizona's constitution's gift clause and public trust doctrine. The court recognized that different concepts of navigability exist for different purposes.

For other state cases recognizing navigability based on recreational uses (note there are some differences between state tests for navigability and federal tests) see, e.g., *People ex rel. Baker v. Mack*, 19 Cal.App.3d 1040 (Calif. 1971) (Court discussed "recreational boating" as the basis for

navigability, good summary of state cases); *Muench v. Public Service Comm.*, 53 N.W.2d 514 (Wis. 1952) (Court addressed public rights in waters, tests for navigability).

What waters may be “susceptible to use”?

Courts have held that a water is “navigable” even if it is not navigable in its natural condition if it is susceptible to use for navigation. See *United States v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940) in which the Supreme Court held that a waterway may be considered navigable in law if reasonable improvements would render it navigable in fact. The Court observed (*Id.* at 408):

To appraise the evidence of navigability on the natural condition only of the waterway is erroneous. Its availability for navigation must also be considered. ...A waterway, otherwise suitable for navigation, is not barred from that classification merely because artificial aids must make the highway suitable for use before commercial navigation may be undertaken...

.....

Improvements that may be entirely reasonable in a thickly populated, highly developed, industrial region may have been entirely too costly for the same region in the days of the pioneers. The changes in engineering practices or the coming of new industries with varying classes of freight may affect the type of improvement...The plenary federal power over commerce must be able to develop with the needs of that commerce which is the reason for its existence. It cannot properly be said that the federal power over navigation is enlarged by the improvements to the waterways. It is merely that improvements make applicable to certain waterways the existing power over commerce. *Id.* at 408, 409.

The courts have identified at least three types of evidence for susceptibility of use. See *FPL Energy Maine Hydro LLC v. Federal Energy Regulatory Commission*, 287 F.3d 1151, 1157 (D.C. Cir.) (2002). These include “physical characteristics and experimentation as well as the uses to which the streams have been put.” In evaluating the evidence concerning navigability for FERC licensing purposes, the court in *FPL* concluded that the “...experimental” test canoe trips provide sufficient evidence that the stream is navigable. Three witnesses, all with differing interests in the litigation, successfully navigated downstream without incident, and two attempted and succeeded in navigating upstream, albeit with some difficulty.” The court also accepted as evidence that “In addition to relying on the three test trips, FERC made a separate determination that the physical characteristics of the Stream rendered it suitable for commercial navigation.” *Id.* at 1159.

The use of artificial aids to navigability have not barred a finding of “navigability”. For example, the Ninth Circuit in 1982 reversed the District Court of Oregon to hold the McKenzie River navigable. See *State of Oregon v. Riverfront Protection Ass’n*, 672 F.2d 792 (9th Cir. 1982). The court held that the river was navigable because it was used for the transportation of saw logs albeit with difficulty. The court observed that “thousands of logs and millions of board feet of time were driven down the river. Such use of the McKenzie was not “occasional”. *Id.* at 795. The use of wing dams and dynamite to assist the flow of logs did not defeat navigability and the

part of the navigability test which requires a waterway to be evaluated in its “ordinary, unimproved condition”.

At what point in a navigability water body does “navigability” end?

This is not entirely clear. Corps regulations and courts have recognized that “navigability at law” extends to outer, shallow areas of tidal waters and navigable lakes and streams to the ordinary high water mark. See discussion above. A river or tributary also need not be navigable along its entire reach to be a navigable. See *The Montello*, 87 U.S. 430 (1874). A dam does not defeat navigability. See *Economy Light and Power Co. v. United States*, 256 U.S. 113 (1921). The U.S. Supreme Court has also held that waters “susceptible” to use through various improvements could be considered a navigable water”. See *United States v. Appalachian Electric Power Co.*, 311 U.S. 377, 416 (1940). Lakes, streams, ponds and other waters may also be “navigable” at points above those considered traditionally “navigable” if used under present day conditions or susceptible to use by hunters, fishermen, canoeists, kayakers, or rafters. See discussion and cases cited above.

Are “artificial bodies of water navigable?”

Courts have held that artificial bodies of water are navigable if they are navigable in fact. Admiralty jurisdiction extends to artificial bodies of water. See *Ex parte Boyer*, 109 U.S. 629 (1884). The U.S. Supreme Court in *United States v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940) held that a waterway may be considered navigable in law if reasonable improvements would render it navigable in fact. Courts have held that “Congress intended to regulate local aquatic ecosystems regardless of their origin.” See *Leslie Salt Co. v. U.S.*, 896 F.2d 354, 358 (9th Cir. 1990). See, for example *Swanson v. United States*, 789 F.2d 1368 (9th Cir. 1986) (Corps construction of a dam creates waters under Corps jurisdiction.); *United States v. DeFelice*, 641 F.2d at 1175 (Illegal and unauthorized acts of third parties can create Rivers and Harbor’s Act jurisdiction, cert. denied 454 U.S. 940 (1981), *Track 12 Inc. v. District Engineer, U.S. Army Corps of Engineers*, 618 F. Supp. 448, 449 (D. Minn. 1985) (Man-made wetland subject to CWA); *United States v. Tull*, 769 F.2d 182, 184 (4th Cir. 1985) (Federal construction of mosquito-control ditch creates waters regulated by the Rivers and Harbors Act), rev’d on other grounds, 481 U.S. 412 (1987).

See also *Stoeco Dev. Ltd. v. Dept. of the Army Corps of Eng’rs*, 701 F.Supp. 1075, 1078 (artificially created wetland jurisdictional), appeal dismissed, 879 F.2d 860 (3rd Cir. 1989); *U.S. v. Akers*, 651 F. Supp. 320 (E.D.Cal. 1987) (same); *United States v. Ciampitti*, 583 F. Supp. 483 (D.N.J. 1984) (same), affirmed, 772 F.2d 893 (3rd Cir. 1985), cert. denied, 475 U.S. 1014 (1986).

Is “navigability” for Clean Water Act purposes broader than traditional navigability?

In deciding whether particular waters are “navigable” adjacent to “navigable” or tributary to “navigable” and therefore subject to CWA jurisdiction, regulatory staff should recognize that the courts including the Supreme Court may apply a broader concept of navigability for CWA jurisdiction purposes than for bed title and other purposes. This is discussed in greater depth in Appendix B. Courts may be particularly willing to apply a broad concept of navigability (e.g.,

commercial bird watching from canoes) where CWA jurisdiction is questioned, given the goals of the CWA and the need to reconcile the terms “navigable” waters and “waters of the U.S.”

What Wetlands/Waters Are “Adjacent”?

If a specific water is not “navigable”, field staff should next determine whether specific waters or wetlands are “adjacent” to navigable waters or tributaries to such waters. The Corps defines “adjacent” as “bordering, contiguous, or neighboring” and considers wetlands to be adjacent to navigable waters even if they are separated from others waters of the U.S. by “man-made dikes or barriers, natural river berms, beach dunes and the like”. 33 C.F.R. 328.3(a)(c); 40 C.F.R. 230.3(s)(3). The Corps asserts jurisdiction under a concept of adjacency to wetlands adjacent to navigable waters and adjacent to nonnavigable tributaries. The Supreme Court in both *Riverside Bayview* and *SWANCC* concluded that at least some waters and wetlands “adjacent” to navigable waters are subject to Clean Water Act. But what does “adjacency” mean? How is the term to be applied?

More specifically, what difference does distance make to “adjacency”? A mile? Two miles? Tens of miles? Is one continuous wetland connected to a navigable water body “adjacent” when it includes a variety of types of wetland (e.g. open marsh, marsh, shrub, forested) over a long distance? In Alaska, wetlands stretch, without a break, for tens or hundreds of miles from a navigable stream or the ocean. At what point (if any) do they lose their status as “adjacent”? Is a wetland to be considered “adjacent” when it is separated from a navigable water by a dike, levee, road, fill, or natural levee? Such separations may take hundreds of different forms. For example, is a wetland or pond to be considered adjacent if it is partially hydrologically and/or biologically connected to a navigable water body and in the general vicinity but at some distance from the body of water?

Through ground water flows?

Through sheet flows?

Through flood flows?

Through manipulated flows (e.g., releases from a dam)?

Through use of the wetland and other water body by fauna?

Interestingly, almost one half of the federal court decisions since *SWANCC* have involved, to one extent or another, the concept of “adjacency”. It is significant that courts have found “adjacency” in all decisions in which adjacency was an issue.

Courts have considered a number of factors relevant to its determination of “adjacency” in both pre and post *SWANCC* contexts. For example, in a pre-*SWANCC* context, *Sierra Club v. U.S. Army Corps of Engineers*, 935 F. Supp. 1556, 1583 (So. D. Ala. 1996) the court observed:

In determining whether particular wetlands are “isolated” or “adjacent”, courts have considered such factors as the distance between the wetlands and the nearest rivers or tributaries and the extent of the hydrological and ecological links between the wetlands and the river system. See *Tilton*, 705 F.2d at 431 & n. 1 (relying on physical proximity, as well as hydrological and ecological linkages, in reaching finding of adjacency); *United States v. Banks*, 873 F. Supp. 650, 659 (S.D.Fla. 1995) (finding of adjacency is “bolstered” by presence of hydrological and ecological links).

Courts have broadly found “adjacency” where wetlands or waters were in general proximity to navigable waters or tributaries to navigable waters and there was a surface water hydrologic and/or ecological connection to navigable waters or tributaries. See cases cited below. Separation by a road or berm has not prevented a finding of adjacency. In addition, courts in several cases have held that sheet flow or ground water connection may suffice for a determination of “adjacency” or “tributary”.

However, courts in a few pre-SWANCC decisions failed to find adjacency. See *U.S. v. Sargent County Water Resource District*, 876 F. Supp. 1081 (D. N.D., 1992) in which the court held that specific wetlands were not “adjacent”. See also *Sierra Club, Mobile Bay Audubon Society v. U.S. Army Corps of Engineers*, 935 F. Supp. 1556 (S.D. Ala. 1996) in which the court did not find “connections” and held that wetlands were “isolated”. *Berens v. Cook*, 263 A.D.2d 521; 694 N.Y.S.2d 684 (N.Y.App. Div. 1999) in which the court held that the Federal Water Pollution Control Act did not cover wetlands where petroleum was allegedly discharged because wetlands were not adjacent to navigable waters nor did they fall within definition of navigable waters.

Distance.

Courts have recognized “adjacency” for wetlands or other waters some distance from navigable waters or tributaries. See, e.g.:

- *U.S. v. Banks*, 115 F.3d 916, 921 (11th Cir. 1997). In this pre-SWANCC decision, in which the Eleventh Circuit recognized that wetlands **one half mile** from navigable channels and separated by a road were, nevertheless, “adjacent”. (Note, this was a pre-SWANCC case) because

“(E)xperts testified that a hydrologic connection exists....This connection was primarily through groundwater, but also occurred through surface water during storms. The (District) court also found ecological adjacency based on the water connections and the fact that the lots serve as habitat for birds, fish, turtles, snakes and other wildlife.
- *United States v. Tilton*, 705 F.2d 429 (11Cir. 1983). The court also relied on evidence of hydrological and ecological links of a wetland **adjacent** to a nearby river but separated from the wetland by a berm. There was a hydrologic connection provided primarily through ground water with a surface water connection only at extreme high tides, such as a hurricane.
- *U.S. v. Lamplight Equestrian Center*, Civ. No. 00-C-6486, 2002 U.S. Dist. LEXIS 3694 (N.D. Ill. 2002). A district court of Illinois upheld CWA jurisdiction for a wetland **adjacent** to a tributary to navigable waters. The wetland drained through a man-made ditch, then through a 50 foot “delta” or “meandering drainage swale”, then into Brewster Creek, a nonnavigable stream, and then into the Fox River, a traditionally navigable water. The court held that a sufficient connection existed for jurisdiction and that the “drainage connection” could establish “adjacency” because the Corps’ regulations defines adjacency as “bordering, contiguous, or neighboring,” and contiguous means “being in actual contact: touching along a boundary or point.” Consequently, “(b)y virtue

of the path of water, whether it be a delta, a meandering swale, or a drainage connection, the wetlands come into actual contact with the tributary to Brewster Creek.”

- In re: Needham, 354 F.3d 340 (5th Cir., 2003) In an action to collect clean up costs in a bankruptcy court, the 5th Circuit held that because an oil spill had leaked into Bayou False, which was **adjacent** to Company Canal, a navigable in fact water, the spill was held to be jurisdictional under the Oil Pollution Act although the Court warned that some other waters not at issue in the case would not be jurisdictional.)

Separation by berms, roads, other barriers.

Courts have held that separation from navigable waters or tributaries to navigable waters by berms, roads, and other barriers does not prevent “adjacency” and CWA jurisdiction, particularly where there is a hydrologic or ecological connection. See, for example, Baccarat (above). See also

- United States v. Riverside Bayview Homes, 474 U.S. 121 (1985) U.S. Supreme Court held that the Corps had sufficient power under Section 404(a) to regulate wetlands adjacent to navigable waters. These wetlands were apparently separated from such waters by a road.
- Baccarat Fremont Developers v. U.S. Army Corps of Engineers, 327 F. Supp.2d 1121 (N.D.Ca. 2003). A district court in California ruled on a motion for summary judgment that wetlands may be jurisdictional as **adjacent** even without a present surface hydrologic or ecological connection. The case involved approximately 8 acres of seasonal wetland located about **250 feet** from the Alameda County Flood Control District channels which connect to San Francisco Bay. The wetlands were separated from a channel by a berm.
- U.S. v. Banks, 115 F.3d 916 (11th Cir. 1997). Court of appeals found adjacency found despite separation by a road.
- Carabell v. U.S. Army Corps of Engineers, 391 F.3d 704 (6th Cir. 2004). Court held that forested wetland area separated for a non-navigable manmade ditch by a four foot wide, manmade berm was **adjacent** and jurisdictional.
- San Francisco Baykeeper et al v. Cargill et al, No. 96-2161 (N.D. Cal. 2003) The District Court issued summary judgment in favor of plaintiffs hold that a bermed pond used for the dumping of salt-processing wastes located beside Mowry Slough, a navigable water, was jurisdictional.
- Northern California River Watch v. City of Healdsburg, No. C 01-04686 WHA (N.D. Ca. 2004). District court ruled that an abandoned sand and gravel pit and wetlands which was **adjacent** to the navigable Russian River but lacked a surface connection to the river were jurisdictional pursuant to the CWA. A municipality was dumping sewage into this pit. The court found that there was substantial subsurface connectivity between the river and pond. The court also found that, while a berm separated the River and pond, historic flooding occasionally saturated the pond area.

Adjacency to nonnavigable waters.

Courts have also recognized “adjacency” to nonnavigable waters which flow into navigable waters as providing the basis for CWA jurisdiction. See, for example:

- United States v. Rapanos, 339 F.3d 447 (6th Cir. 2003), cert. denied, 124 S.Ct. 1875 (2004). Court of appeals held that wetlands **adjacent** to a nonnavigable, manmade drain which eventually flowed 10 to 20 miles to navigable waters were jurisdictional.
- In Carabell v. U.S. Army Corps of Engineers, 391 F.3d 704 (6th Cir. 2004). Court of appeals held that forested wetland area separated for a non-navigable manmade ditch by a four foot wide manmade berm were **adjacent** and jurisdictional. The ditch eventually flowed into Lake St. Clair, about one mile away.
- In U.S. v. Deaton, 332 F.3d 698 (4th Cir. 2003) (Court upheld jurisdiction over wetlands **adjacent** to a roadside ditch that linked through a “winding, thirty-two mile path” to the Chesapeake Bay.)

Types of connections needed.

At least one court in a post-SWANCC context has held that adjacency, alone, suffices for CWA jurisdictional purposes without a further showing of significant nexus. In Northern California River Watch v. City of Healdsburg, No. C 01-0486 WHA (N.D. Ca. 2004) The court concluded:

Once adjacency is established, the tributary issue is superfluous. Once wetlands are found to be adjacent to a river actually navigable, there is no need to investigate whether the wetlands are interconnected by surface or ground waters. The regulation (of the Corps), approved in Riverside Bayview, recognizes this stating that wetlands separated by berms or levees are covered. Plainly, a berm or levee is inconsistent with any surface connection.” Id at 14.

Courts have cited a broad range of hydrologic and ecological connections. Examples are provided below.

Surface water connection.

- United States v. Rapanos, 339 F.3d 447 (6th Cir. 2004), cert. denied, 124 S.Ct. 1875 (2004) (hydrological connection of 11 to 20 miles).
- U.S. v. Lamplight Equestrian Center, Civ. No. 00-C-6486, 2002 U.S. Dist. LEXIS 3694 (N.D. Ill. 2002) (“drainage connection”).
- United States v. Hummel, U.S. Dist. No. 00 C 5284 (N.D. Ill. 2003) (hydrological connection).

Ground water connection.

- Idaho Rural Council v Bosma, 143 F.Supp. 2d 1169 (D. Idaho, 2001) (District court concluded that discharges into groundwater that leads to surface water may require a Section 402 permit.)
- Northern California River Watch v. City of Healdsburg, No. C 01-04686 WHA (N.D. Ca. 2004) (Court held that some abandoned sand and gravel pits separated from the navigable Russian River by a levee and used for dumping sewage were covered by the CWA because they were connected to the river through ground water flows.
- San Francisco Baykeeper et al v. Cargill et al, No. 96-2161 (N.D. Cal. April 30, 2003) (soils, potential leakage).

Ecological connection.

- U.S. v. Banks, 115 F.3d 916, 921 (11th Cir. 1997) Court held that wetlands **one half mile** from navigable channels and separated by a road were, nevertheless, “adjacent”. The lower court (District) had found ecological adjacency based on the water connections and the fact that the lots serve as habitat for birds, fish, turtles, snakes and other wildlife. This is a pre-SWANCC decision.
- United States v. Tilton, 705 F.2d 429 (11Cir. 1983) (Also, pre-SWANCC) Court recognized an ecological as well as a hydrologic connection between a wetland and a river.
- Northern California River Watch v. City of Healdsburg, No. C 01-04686 WHA (N.D. Ca. 2004). Court ruled that an abandoned sand and gravel pit which was **adjacent** to the navigable Russian River. The court concluded that SWANCC did not impose a rule of “hydrologic connection” much less a rule of “surface connection”. The court ruled that all adjacent wetlands are covered under the CWA regardless of hydrologic connectivity. The court held that some abandoned sand and gravel pits connected by ground water to the river are covered by the CWA and the factors which should be examined in determining jurisdiction include “proximity to the river, the beneficial role of the wetlands, the intertwined ecology and riparian habitat.”

What Waters Are “Tributary”?

Importance of tributaries.

If waters are neither “navigable” or “adjacent” they may, nevertheless, be subject to CWA jurisdiction because they are “tributary” to navigable waters. Nonnavigable tributaries constitute a large percentage of the streams in the U.S. It has been estimated that at least 80% of the mileage of rivers and streams occurs in headwater areas. See American Rivers and Sierra Club, *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands*. Available at http://www.amrivers.org/doc_repository/WhereRiversAreBorn 1.pdf

In responding to the Advance Notice for Proposed Rule Making concerning SWANCC, many states indicated that failure to regulate tributaries to navigable waters would have severe impact upon water pollution control programs. For example (See responses to the Advance Notice for Proposed Rule Making for SWANCC summarized by American Rivers, Inc. and others.):

- **Arizona.** The state concluded that over 95% of its waters are intermittent or ephemeral streams and redefinition of regulated water to omit intermittent and ephemeral streams would place 95% of its waters outside the CWA.
- **Iowa.** Between 11% and 72% of streams and wetlands will not be regulated, depending upon the definitions used for adjacency and tributary.
- **Kentucky.** If only streams that have perennial flow or are navigable were to be regulated, the CWA would not apply to the majority of stream miles.
- **Missouri.** If intermittent/ephemeral stream miles were omitted, 69-76% of all stream miles would be affected; 33% of the wetlands would be outside of CWA jurisdiction if an isolation threshold of 50 feet were used to determine isolation.
- **Montana.** If intermittent/ephemeral steam miles were omitted, 71% of all stream miles would be omitted.
- **Nebraska.** 76% loss of coverage of stream miles if intermittent streams were omitted from coverage.
- **New Mexico.** Approximately 80% of the drainages in New Mexico are not perennial.
- **Rhode Island.** Nonnavigable tributary streams constitute 85% of the total stream miles in the state.
- **Tennessee.** 57% of the rivers are non-navigable waters.
- **Texas.** Approximately 75-79 % of the stream miles are intermittent; approximately 48% of Texas Pollution Discharge Elimination Systems permitted wastewater discharges into intermittent streams; 8% of the wetlands in the coastal zone are isolated.

What, then, for the purposes of the CWA is a “tributary”? Are nonnavigable waters flowing into navigable waters tributary? Are waters flowing into navigable waters but a considerable distance from navigable waters “tributary”? Are intermittent streams tributary? Arroyos? Man-made drains, ditches, canals, pipes etc.? Waters connected to navigable waters through subsurface flow (ground waters) or sheet flow?

Definition of “tributary”.

The Corps and EPA take the position that waters including wetlands are regulated to the point at which the ordinary high water mark is no longer perceptible. 33 CFR 328.3(a)(5); 40 C.F.R. 230.3(s)(5). This includes tributaries.

The U.S. Supreme Court and lower courts have not adopted a precise definition for the term “tributary”. Random House College Dictionary broadly defines a “tributary” as a “stream which contributes flow to a larger stream or other body of water.” Random House College Dictionary 1042 (rev. ed. 1980).

For a quite detailed judicial analysis of the term “tributary” see U.S. v. Deaton, 332 F.3d 698, 710 (4th Cir. 2003) in which the 4th Circuit Court of Appeals observed:

Webster's Third New International Dictionary (1993) defines "tributary" as (1) "providing with or serving as a channel for supplies or additional matter" or (2) "one that is tributary to another: as . . . a stream." According to this definition, "tributary" in the regulation would encompass the entire feeder system for a navigable water because even a stream many branches away eventually provides "additional matter" for the navigable water. On the other hand, Webster's II New Riverside University Dictionary (1988) defines tributary as "[a] river or stream flowing into a larger river or stream." Under this definition a watercourse like the roadside ditch appears to be a tributary, but it is not clear that it would be a tributary of a larger river several branches downstream. It could be read to mean that only streams flowing directly into a larger river are the larger river's tributaries. The dictionaries thus agree that the roadside ditch is a tributary, but they do not settle the question of whether it is a tributary of a navigable water (here, the Wicomico River), which is what the regulation covers. "The existence of alternative dictionary definitions of the word '[tributary],' each making some sense under the [regulation], itself indicates that the [regulation] is open to interpretation." *Nat'l R.R. Passenger Corp. v. Boston & Maine Corp.*, 503 U.S. 407, 418 (1992). We conclude that the regulation is ambiguous on the question of how far the coverage of tributaries extends. We therefore turn to the agency's (Corps of Engineers') interpretation.

The 4th Circuit court, then, determined that the Corp's interpretation of tributary which included "any branch of a tributary system that eventually flows into a navigable body of water" (*Id.* at 711) was reasonable. It then applied this definition to the facts of this case, finding that the entire tributary system was jurisdictional pursuant to the CWA.

Court rationale for including tributaries as "waters of the U.S."

Prior to SWANNC, courts broadly held that tributaries were subject to CWA jurisdiction. The 9th Circuit Court of Appeals in *United States v. Phillips*, 367 F.3d 846 (9th Cir. 2004) sustained a lower District court's determination that a tributary creek was a water of the U.S. The 9th Circuit noted (*Id.* at 855):

The Army Corps of Engineers has long interpreted "navigable waters" in the CWA "to include not only actually navigable waters but also tributaries of such waters, interstate waters and their tributaries, and nonnavigable intrastate waters whose use or misuse could affect interstate commerce. Indeed, "navigable waters" within the meaning of the CWA has encompassed tributaries for almost thirty years.

See also, e.g., *United States v. Ashland Oil and Transportation Co.*, 504 F.2d 1317, 1329 (6th Cir.1974) in which the court stated "We believe that the analysis of the Act (CWA) ... amply demonstrates that Congress was concerned with pollution of the tributaries of navigable streams as well as with the pollution of the navigable streams. We also believe that it is incontestable that substantial pollution of one not only may but very probably will affect the other."

In *United States v. Eidson*, 108 F.3d 1336, 1342 (11 Cir. 1997) the court observed:

(C)ourts repeatedly have recognized that tributaries to bodies of water that affect interstate commerce are "waters of the United States" protected by the CWA. *See, e.g., United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th Cir.1979) (tributary to

navigable river); *Ashland Oil*, 504 F.2d at 1324 (tributary that eventually flowed into river that was navigable-in-fact); *State of Georgia v. City of East Ridge*, 949 F.Supp. 1571, 1578 (N.D.Ga.1996) (unnamed tributary of interstate creek); *United States v. Saint Bernard Parish*, 589 F.Supp. 617, 620 (E.D.La.1984) (canal flowing into wetland).

Justice Stevens in the dissenting opinion for SWANCC concluded that tributaries to navigable waters continued to be jurisdictional pursuant to the CWA. Lower courts, post- SWANCC have also, with the exception of *Rice v. Harkin Exploration Co.*, 250 F.3d 264 (5th Cir., 2001, reh'g (en banc) denied, 263 F.3d 167 (2001) and dicta in *In re: Needham*, 354 F.3d 340 (5th Cir., 2003) consistently held that tributaries are jurisdictional. For example, see *Treacy v. NewDunn Associates, LLP*, 344 F.3d 407, 417 (4th Cir. 2003) in which the 4th Circuit concluded:

The Deaton court upheld the Corps' exercise of jurisdiction over all of these waters, finding that "the Corps's regulatory interpretation of the term 'waters of the United States' as encompassing nonnavigable tributaries of navigable waters does not invoke the outer limits of Congress's power or alter the federal-state framework." Id. at 708. In dismissing a Commerce Clause challenge to the Corps' regulations, the Deaton court summarized Congress' well articulated purpose for crafting the CWA and concluded,

"The Corps has pursued this goal by regulating nonnavigable tributaries and their adjacent wetlands. This use of delegated authority is well within Congress's traditional power over navigable waters." Id. at 707. In sum, the Corps' unremarkable interpretation of the term "waters of the United States" as including wetlands adjacent to tributaries of navigable waters is permissible under the CWA because pollutants added to any of these tributaries will inevitably find their way to the very waters that Congress has sought to protect."

In *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001), the Ninth Circuit court held that irrigation canals are waters of the United States because they were tributaries to other waters of the United States. "A stream which contributes its flow to a larger stream or other body of water is a tributary." Id. at 533. See also *Community Ass'n for Restoration v. Bosma Dairy*, 305 F.3d 943, 954 (9th Cir. 2002).

See also many other cases cited below.

Are waters flowing long distances to navigable waters tributary?

Are waters which flow into navigable waters but are a considerable distance from navigable waters "tributary"?

Courts have found CWA jurisdiction where tributaries flow a considerable distance or are several times removed from navigable waters (i.e., tributaries of tributaries). Examples include the following. In *U.S. v. Buday*, 138 F. Supp. 2d 1282 (D. Mont. 2001) a Montana District court held that Fred Burr Creek was jurisdictional under the CWA despite the fact that the Creek was not navigable in fact. The Creek was about 35-40 miles from a navigable water (Clark Fork). It

was another 190 miles to the point where the Clark Fork is “indisputably navigable in fact.” The court reasoned (*Id.* at 1292, 1293):

...(T)ributaries that are distant from but connected to navigable waters are ecologically capable of undermining the quality of the navigable water. The potential for harm to the navigable waterway is compounded when water is scarcer and when drainage is concentrated into relatively few navigable waterways. Here there is no question that toxic wastes dumped in Fred Burr Creek are part of the waste dump held in the waters of the Clark Fork River at Bonner. Though the configuration of the waters that Congress must protect is not uniform, Congress’s interest in safeguarding navigable waters is uniform throughout the nation. The water quality of tributaries like Fred Burr Creek, distant though the tributaries may be from navigable streams, is vital to the quality of navigable waters. Therefore, Congress must have intended to reach them.

In *U.S. v. Deaton*, 332 F.3d 698, 702 (4th Cir. 2003), cert. denied, 124 S.Ct. 1875 (2004) the court upheld CWA jurisdiction over wetlands adjacent to a roadside ditch that linked through a “winding, thirty-two mile path to the Chesapeake Bay.” The court found that an extended set of links in the “tributary system” did not “invoke the outer limits of Congress’s power or alter the federal-state framework.” *Id.* at 708. The court further held that “(The power over navigable waters also carries with it the authority to regulate nonnavigable waters when that regulation is necessary to achieve Congressional goals in protecting navigable waters.” *Id.* at 707.

In *United States v. Rapanos*, 339 F.3d 447 (6th Cir. 2003), cert. denied, 124 S.Ct. 1875 (2004) the Sixth Circuit overturned a lower court decision that wetlands adjacent to a nonnavigable manmade drain which eventually flowed 10 to 20 miles before emptying into a navigable waterway were not subject to CWA jurisdiction.

In *Aiello v. Town of Brookhaven*, 136 F. Supp. 2d 81 (E.D. N.Y. 2001) the court held that a non-navigable pond and creek which flowed into Canaan lake and then into Great South Bay (a navigable water) were subject to CWA jurisdiction as nonnavigable tributaries of navigable waters.

In *United States v. Lamplight Equestrian Cts.* 2002 WL 360652 (ND. Ill. 2002) the court held that “Even where the distance from the tributary to the navigable water is significant, the quality of the tributary is still vital to the quality of the navigable waters.”

In *United States v. Texas Pipeline Co.*, 611 F.2d 345 (10th Cir. 1980) the court held that discharge into an unnamed tributary of a creek which discharged into another creek before flowing into a navigable river was jurisdictional

Are nonnavigable waters flowing into navigable waters tributary?

Courts have broadly held that they are. See, for example, *Treacy v. NewDunn Associates, LLP*, 344 F.3d 407, 417 (4th Cir. 2003), quoted above, in which the 4th Circuit concluded:

As stated before, the CWA's primary objective is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (2002). If

this court were to conclude that the I-64 ditch is not a “tributary” solely because it is manmade, the CWA's chief goal would be subverted. Whether manmade or natural, the tributary flows into traditional, navigable waters. Accordingly, the Corps may permissibly define that tributary as part of the "waters of the United States." See 33 U.S.C. § 1362(7).

See, e.g., *United States of America v. Gerke Excavating, Inc.* No. 04-3941 (7th Cir. 2005) in which the 7th Cir. Court of Appeals broadly sustained CWA jurisdiction for a wetland which drained into a ditch which emptied into a nonnavigable creek which emptied into a nonnavigable Lemonweir River which flowed into the Wisconsin River. The court broadly concluded: “Whether the wetlands are 100 miles from a navigable waterway or 6 feet, if water from the wetlands enters a stream that flows into the navigable waterway, the wetlands are “waters of the United States” within the meaning of the Act”.

See also cases dealing with intermittent streams, arroyos, and artificial drains below.

Are intermittent streams tributary?

Courts have repeatedly held that tributaries which flow intermittently are jurisdictional. In *United States v. Eidson*, 108 F.3d 1336, 1342 (11th Cir. 1997) the court observed:

...(T)here is no reason to suspect that Congress intended to exclude from "waters of the United States" tributaries that flow only intermittently. Pollutants need not reach interstate bodies of water immediately or continuously in order to inflict serious environmental damage. [7] As the Tenth Circuit noted in *Texas Pipe Line*, "[i]t makes no difference that a stream was or was not at the time of the spill discharging water continuously into a river navigable in the traditional sense." 611 F.2d at 347. Rather, as long as the tributary would flow into the navigable body of water "during significant rainfall," it is capable of spreading environmental damage and is thus a "water of the United States" under the Act. *Id.*; see also *Quivira Mining Co. v. United States Environmental Protection Agency*, 765 F.2d 126, 130 (10th Cir.1985) (upholding regulation because "during times of intense rainfall, there can be a surface connection" between tributary and navigable-in-fact streams), cert. denied, [474 U.S. 1055](#), 106 S.Ct. 791, 88 L.Ed.2d 769 (1986); *United States v. Phelps Dodge Corp.*, 391 F.Supp. 1181, 1187 (D.Ariz.1975) ("waters of the United States" include "normally dry arroyos" from which water could flow to public waters).

See *Headwaters v. Talent Irrigation District*, 243 F.3d. 526 (9th Cir. 2001) in which the court also held that tributaries that flow intermittently are, nevertheless, “waters of the U.S.”.

See *United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th., 1979) in which the court held that the intent of the Clean Water Act “was to cover all tributaries to waters like the Red River. It makes no difference that a stream was or was not at the time of the spill discharging water continuously into a river navigable in the traditional sense.”

See *Driscoll v. Adams*, 181 F.3d 1285, 1291 (11th Cir. 1999) in which the court held that “Spiva Branch stream” was subject to CWA jurisdiction even if it “flows only intermittently”.

See, also, federal cases dealing with arroyos below.

At the state court level, in *Morgan v. Natural Resources and Environmental Protection Cabinet*, 6 S.W.3d 833, 841 (Ky. Ct. App. 1999) the Court of Appeals of Kentucky endorsed the findings of a hearing officer and lower court and held that a ditch, capable of flow during times of heavy rainfall but dry at the time of discharge, was navigable as a tributary to a navigable water even where there was no evidence that the discharge actually flowed into a navigable water. The court stated that if it did not hold the ditch navigable “anyone producing a water stream with pollutants, or the potential for pollutants, would simply be able to avoid all water quality standards by...land applying their produced water, discharging it into an intermittent stream during periods of dry weather....”

Are arroyos tributary?

A few cases have addressed arroyos. These cases have held that arroyos connected to other waters during heavy rains were jurisdictional pursuant to the Clean Water Act. See, for example, *Quivera Mining Co. v. United States Env'tl. Prot. Agency*, 765 F.2d 126 (10th Cir. 1985), cert. denied, 474 U.S. 1055 (1986). Quivera Mining Company claimed that Arroyo del Puerto and San Mateo Creek into which the company discharged uranium milling waste were not covered by the CWA. The court, however, held that the intent of the CWA was to cover all waters of the United States, including those which flow only at times of heavy rainfall. *Id.* at 129 (citing *Deltona Corp. v. United States*, 657 F.2d 1184, 1186 (Ct. Cl. 1981).

See *United States v. Phelps Dodge Corp.*, 391 F. Supp. 1181, 1187 (D. Ariz 1975) in which the court held that for the purposes of the CWA to be realistically achieved, the scope of its control must extend to all pollutants which are discharged into any waterway, including dry arroyas through which water may flow, where such water will ultimately end up in a “navigable” waters.

See also *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979) in which the court held that water in an Colorado nonnavigable stream located entirely which flowed into a reservoir was jurisdictional: “It seems clear that Congress intended to regulate discharges made into every creek, stream, river or body of water that in any way may affect interstate commerce.”

Are artificial drains, ditches, canals, pipes etc. tributary?

Courts have broadly held that artificial channels, canals, pipes and drains flowing into navigable waters (directly or indirectly) or into tributaries to navigable waters are jurisdictional. Failure to recognize them as jurisdictional would be devastating to point, nonpoint and other national pollution control efforts because much of the point source pollution in the U.S. including stormwater discharges starts out with a discharge from a pipe or a ditch. In *United States v. Eidson*, 108 F.3d 1336, 1342 (11 Cir. 1997) the court observed:

There is no reason to suspect that Congress intended to regulate only the natural tributaries of navigable waters. Pollutants are equally harmful to this country's water quality whether they travel along man-made or natural routes. The fact that bodies of water are "man-made makes no difference.... That the defendants used them to convey the pollutants without a permit is the matter of importance." *United States v. Holland*, 373 F.Supp. 665, 673 (M.D.Fla.1974); see also *Leslie Salt Co. v. United States*, 896 F.2d

354, 358 (9th Cir.1990) (noting that protection of the CWA "does not depend on the how the property at issue became a water of the United States"), cert. denied, [498 U.S. 1126](#), 111 S.Ct. 1089, 112 L.Ed.2d 1194 (1991). Consequently, courts have acknowledged that ditches and canals, as well as streams and creeks, can be "waters of the United States" under § 1362(7). See, e.g., *United States v. Velsicol Chemical Corp.*, 438 F.Supp. 945, 947 (W.D.Tenn.1976) (sewers that lead to Mississippi River); *Holland*, 373 F.Supp. at 673 (mosquito canals that empty into bayou arm of Tampa Bay).

Courts have recognized many types of ditches, canals, pipes, and channels as jurisdictional. See, for example, *Treacy v. NewDunn Associates, LLP*, 344 F.3d 407, 417 (4th Cir. 2003) in which the 4th Circuit concluded:

That the I-64 ditch at issue in the present case is a manmade rather than a natural watercourse is an irrelevant distinction. As the Corps has explained:

The discharge of a pollutant into a waterway generally has the same effect downstream whether the waterway is natural or manmade. Indeed, given the extensive human modification of watercourses and hydrologic systems throughout the country, it would be difficult to identify a principled basis in this case for distinguishing between natural watercourses and watercourses that are wholly or partly manmade or modified.

As stated before, the CWA's primary objective is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (2002). If this court were to conclude that the I-64 ditch is not a "tributary" solely because it is manmade, the CWA's chief goal would be subverted. Whether manmade or natural, the tributary flows into traditional, navigable waters. Accordingly, the Corps may permissibly define that tributary as part of the "waters of the United States." See 33 U.S.C. § 1362(7).

See *United States of America v. Gerke Excavating, Inc.* No. 04-3941 (7th Cir. 2005) in which the court observed that with regard to wetlands abutting or not abutting waters that "It cannot make any difference if instead of abutting, the wetlands is connected to the waterway by a pipe two feet long."

See *U.S. v. Thorson*, 03-C-0074-C (W.D. Wis. 2004) in which the court held that wetlands adjacent to a drainage ditch running to Deer Creek, a tributary flowing into the south fork of the Lemonwire River which was a tributary of the Wisconsin River which was navigable in fact, were subject to CWA jurisdiction.

See *Restoration of the Env't v. Henry Bosma Dairy*, 305 F.3d 953 (9th Cir. 2002) in which the court held that a drain that flowed into canal that flowed into a river was jurisdictional.

See *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001) in which the court held that discharge into a storm drainage ditch which did not flow immediately or continuously into a navigable waterway, was subject to the CWA.

See *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1196 (D. Idaho 2001) in which the court held that drains and canals were “waters of the U.S.” and that ground water connected waters were also jurisdictional.

See *United States v. TGR Corp.*, 171 F.3d 762 (2d Cir. 1999) in which the court held that slurry flowing through a drain and stormwater system to navigable waters was jurisdictional under the CWA.

See *United States v. The New Portland Meadows, Inc.* No. 00-507 AS, 2002 U.S. Dist. LEXIS 19132 (D. Or., 2002) in which the court held that an “unnamed ditch” was a tributary based on a finding that ditch was hydrologically connected to traditionally navigable waters by pumping.)

Are waters connected to navigable waters through ground waters subject to the Clean Water Act?

Several courts have held that waters connected to other waters through subsurface flows are jurisdictional although ground water itself may not be regulated under the CWA. See discussion in *Idaho Rural Council v Bosma*, 143 F.Supp. 2d 1169, 1180, 1181 (D. Idaho, 2004) for a summary of cases both supporting and denying CWA jurisdiction for ground waters.

In one pre-SWANCC decision, *Quivera Mining Co. v. United States Env'tl. Prot. Agency*, 765 F2d 126, 129 (10 Cir. 1985), cert. denied, 474 U.S. 1055 (1986) the court supported an EPA finding that specific waters were interstate commerce affected waters in part because “the waters of the Arroyo del Puerto and the San Mateo Creek soak into the earth’s surface, become part of the underground aquifers, and after a lengthy period, perhaps centuries, the underground water moves toward eventual discharge at Horace Springs or the Rio San Jose.”

In *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1196 (D. Idaho 2001) the court held that drains and canals were “waters of the U.S.” and that ground water connected waters were jurisdictional. The court held at 1180 that “...the CWA extends federal jurisdiction over groundwater that is hydrologically connected connected to surface waters that are themselves waters of the United States.”

In *Northern California River Watch v. City of Healdsburg*, No. 3 01-04686 WHA (N.D. Ca., 2004) the court held that underground flows were “tributaries”. (Citing *Idaho Rural Council v. Bosna* line of authorities.)

See also *San Francisco Baykeeper et al v. Cargill et al*, No. 96-2161 (N.D. Cal. 2003) The district court issued a summary judgment in favor of plaintiffs holding that a bermed pond used for the dumping of salt-processing wastes located beside Mowry Slough, a navigable water, was jurisdictional. The court concluded that defendant’s experts “demonstrate that the Pond was adjacent to Mowry Slough...that the soils between the Pond and Mowry Slough are saturated, and that the berm between the Pond leaked and allowed Slough water to enter the Pond at high tide.”

But see *Rice v. Harkin*, 250 F.3d 264 (5th Cir., 2001, reh'g (en banc) denied, 263 F.3d 167 (2001) in which the 5th Cir. Court of Appeals held in an Oil Pollution Act case that discharges onto dry land which seeped through the ground into groundwater which, in turn, contaminated several intermittent streams were not jurisdictional under the Oil Pollution Act.

“Significant Nexus”

The next section of this paper will focus on the term “significant nexus”.

In SWANCC the Court stated that “It was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the CWA (Clean Water Act) in *Riverside Bayview Homes*.” *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (531 U.S. 159, 2001) .With the Court’s statement concerning “significant nexus” in mind, it is understandable that courts in post-SWANCC contexts have examined with particular care the connection or “nexus” between specific waters and navigable waters in deciding whether waters are subject to the Clean Water Act.

Determining whether a wetland or other water has a significant nexus with navigable waters provides a court with scientific/analytical framework for deciding whether waters are jurisdictional. . The term “navigability” may be used to legally divide waters into certain legal categories but navigability has little to do with the physical and biological connections between waters and the achievement of Clean Water Act goals.

When faced with actual factual situations (see discussion of cases below), courts of original jurisdiction or on appeal in post-SWANCC contexts have with only one exception (*Rice v. Harken*) found a connection between waters or wetlands and navigable waters sufficient for CWA jurisdiction. This result is understandable from a scientific perspective. Pollutants from an upstream source will, in most instances, ultimately reach downstream waters through continuous surface water flow in natural or artificial channels, temporary flows (floods) in natural or artificial channels, sheet flows, and ground water. It may take some time and impacts may be reduced through evaporation, dilution and biodegradation. But, a portion of the precipitation and whatever pollutants the precipitation contains will typically reach navigable ocean waters, estuaries, rivers and streams, and lakes.

As discussed above, the U.S. Supreme Court in SWANCC held that Congress in adopting the Clean Water Act had not indicated a clear intent to regulate all waters subject to use by migratory birds. Perhaps not, but Congress did in the Clean Water Act indicate a clear intent to establish a comprehensive pollution control program. This is not ambiguous. There is no legislative history suggesting that scientists or members of Congress believed that a comprehensive pollution control program could be achieved by regulating only a small portion of the nation’s waters or pollution sources. For example, there is no history to suggest that Congress was attempting to create a comprehensive pollution control program by omitting tributaries and regulating only 20% of the streams in the U.S.

There is much at stake at federal, state and local levels. With EPA help, states and cities throughout the Nation have recently completed “source water” inventories which examine pollution sources threatening water supplies. States and communities are now embarking on strengthening protection and restoration programs. These require comprehensive pollution

control efforts, not simple regulation of a few sources of pollution along main stem streams and rivers.

States and cities have also begun efforts to regulate stormwater discharges which contribute a large portion of the nutrients to the Nation's waters. States and cities have also begun efforts to regulate nonpoint sources such as sediment, nutrients from agriculture.

From a scientific perspective, a successful nationwide pollution control program must (arguably) involve regulation of discharges into all waters and wetlands with a "significant nexus" to navigable waters.

"Significant Nexus since SWANCC"

In post SWANCC contexts, courts have broadly found in favor of CWA jurisdiction where some combination of hydrologic and/or ecological connection and either proximity ("adjacency") or "tributary" status exists. No post SWANCC court has held that a "significant nexus" alone (without "adjacency" or "tributary") would be enough for Clean Water Act jurisdiction. But, there are decisions with logic suggesting this result. See, e.g., *United States of America v. Gerke Excavating, Inc.* No. 04-3941 (7th Cir. 2005); *U.S. v. Deaton*, 332 F.3d 698, 712 (4th Cir. 2003).

It may be argued scientifically that Clean Water Act jurisdiction should exist wherever there is a significant connection ("nexus") between a specific water body and navigable waters. This would include some waters which are neither "adjacent" to navigable waters nor "tributary" such as closed or partially closed basins which support amphibians, reptiles and other animals which live, in part, in navigable waters. It would also include more typical point source pollution by an industrial or municipal polluter.

Assume, for example, that toxic chemicals are discharged by an industry into a pipe which flows for several miles before it is discharged into a tributary to a navigable lake, river, or estuary making the water body unsuitable for recreation uses and killing aquatic life. The pipe would certainly not be navigable. The polluting activity would not be adjacent. And the pipe would hardly be tributary (in the ordinary sense of the word). But there would be a significant nexus and threat to navigable waters. Failure to regulate such point source pollution and pollution sources would seriously undermine the entire Clean Water Act point source pollution control program. Pollutants are often "piped" or flow in drains miles before they are discharged into navigable waters or their tributaries. See, e.g., *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga., 2003) in which the district court held that Oil Pollution Act applied to discharge of oil into a storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.

The district court in *North Carolina Shellfish Growers Association and North Carolina Coastal Federation v. Holly Ridge Associates*, 278 F. Supp.2d 654 (E.D.N.C. 2003) characterized determining whether there is "significant nexus" to navigable waters as the critical factor in determining the scope of CWA jurisdiction for nonnavigable waters. The court stated:

Rather than broadly restricting the Corps authority to regulate nonnavigable waters under the CWA, SWANCC clarified that the critical factor for the exercise of jurisdiction under

the CWA is a “significant nexus” between the body of water at issue and a traditional navigable water.”

The Fourth Circuit in *U.S. v. Deaton*, 332 F.3d 698, 712 (4th Cir. 2003) concluded that an entire tributary system was jurisdictional pursuant to the CWA based on the nexus between the waters in question and navigable waters:

In *Riverside Bayview* the Supreme Court concluded that the Corps regulation extending jurisdiction to adjacent wetlands was a reasonable interpretation (of the Clean Water Act) in part because of what SWANCC described as “the significant nexus between the wetlands and navigable waters.” SWANCC, 531 U.S. at 167. There is also a nexus between a navigable waterway and its nonnavigable tributaries. The Corps argues, with supporting evidence, that discharges into nonnavigable tributaries and adjacent wetlands have a substantial effect on water quality in navigable waters. The *Deatons* do not suggest that this effect is overstated. This nexus, in light of the “breadth of congressional concern for protection of water quality and aquatic ecosystems,” *Riverside Bayview*, 474 U.S. at 133, is sufficient to allow the Corps to determine reasonably that its jurisdiction over the whole tributary system of any navigable waterway is warranted. The regulation, as the Corps reads it, reflects a reasonable interpretation of the Clean Water Act. The Act thus reaches to the roadside ditch and its adjacent wetlands.

No court has apparently attempted to define “significant” or “nexus” with specificity. Instead courts have focused upon types of connections between various water bodies and navigable waters and whether pollution or other activities in such waters pose a threat to navigable waters.

Types of connections.

From a pollution control perspective, the type of hydrologic connection between one water body and another is often not important. Pollution damages lakes, rivers, streams and estuaries when it reaches such water bodies through artificial ditches, pipes, canals, natural channels, sheet flow, or subsurface waters. It damages such water bodies whether it reaches them quickly or more slowly.

Courts have recognized many types of connections between contested waters and navigable waters as establishing a “significant nexus”. See also discussion and cases above dealing with “adjacency” and “tributary”.

Hydrologic connection through surface water in natural or artificial channels.

Courts have most often found a significant nexus where there is a surface water hydrologic connection between surface waters/wetlands and navigable waters or their tributaries. See, e.g., the *Deaton* decision above. See also *United States v. Rapanos*, 339 F.3d 447 (6th Cir. 2003), cert. denied, 124 S.Ct. 1875 (2004) the Sixth Circuit in a criminal enforcement action overturned a lower court decision that wetlands adjacent to a nonnavigable manmade drain which eventually flowed 10 to 20 miles before emptying into a navigable waterway were not subject to CWA jurisdiction. The Court ruled (*Id.* at 453) (citations omitted) that:

Any contamination of the Rapanos wetlands could affect the Drain, which, in turn, could affect navigable-in-fact waters. Therefore, the protection of the wetlands on Rapanos's land is a fair extension of the Clean Water Act. *Solid Waste* requires a "significant nexus between the wetlands and 'navigable waters...for there to be jurisdiction under the Clean Water Act. Because the wetlands are adjacent to the Drain and there exists a hydrological connection among the wetlands, the Drain, and the Kawkawlin River, we find an ample nexus to establish jurisdiction.

In a later civil suit case dealing with essentially the same facts, *United States v. Rapanos*, 376 F.3d 629, 639 (6th Cir. 2004) the court elaborated on significant nexus:

What is required for CWA jurisdiction over "adjacent waters," ...is a significant nexus between wetlands and "navigable waters"... which can be satisfied by the presence of a hydrological connection...Waters sharing a hydrological connection are interconnected, sharing a symbiotic relationship.

In *United States v. Hummel*, U.S. Dist. No. 00 C 5284 (N.D. Ill. 2003) the court observed that SWANCC requires demonstration of a "significant nexus" between a body of water at issue and a navigable water, and that a "significant nexus" can be demonstrated where a body of water is "linked through other connections two or three times removed from the navigable water." The court held that there was a significant nexus between the wetlands and the navigable Des Plaines River despite there being "two steps removed from actually navigable water...."

In *U.S. v. Lamplight Equestrian Center*, Civ. No. 00-C-6486, 2002 U.S. Dist. LEXIS 3694 (N.D. Ill. 2002) the District Court of Illinois upheld CWA jurisdiction for a wetland adjacent to a tributary to navigable waters. The wetland drained through a man-made ditch, then through a 50 foot "delta" or "meandering drainage swale", then into Brewster Creek, a nonnavigable stream, and then into the Fox River, a traditionally navigable water.

In *USA v. Adam Bros Farming, et al*, Civ. No.00-7409 (C.D. Cal. 2002) the District Court held, in part, that since non-navigable intermittent tributaries of navigable waters are still "waters of the United States" post SWANCC, then, by extension, CWA jurisdiction "extends to wetlands adjacent to any tributary, whether or not it is navigable, which is hydrologically connected under certain conditions with a traditionally navigable water."

However, in *FD&P Enterprises v. United States Army Corps of Engineers*, 239 F.Supp. 2d 509 (D. N.J. 2003) the court denied the plaintiff's motion for summary judgment because there remained a material fact as to whether there was a "substantial nexus" between the FD&P wetlands and the Hackensack River. Government had argued that the wetlands were jurisdictional as wetlands adjacent to tributaries of traditionally navigable waters. The court indicated that more than a hydrologic connection would need to be shown to establish an adequate nexus. This case stands, alone, in such an approach. On the other hand, the court recognized that broader considerations were relevant to establishment of "significant nexus". The court stated: "The Corps has submitted sufficient evidence such that a reasonable jury could find that the filling of the wetlands will have a substantial injurious impact upon the chemical, physical, and/or biological integrity of the Hackensack River. Under these circumstances, there would be a substantial nexus between the wetlands and the river, and the Corps would have jurisdiction under the CWA." *Id* at 517. This case was ultimately dismissed after a permit was issued.

Connection through diffused surface water or sheet flow.

A number of courts have found a sufficient connection through diffused surface water or sheet flows (without a channel). See also cases cited above for “adjacency” and “tributary”. For example, the court in *U.S. v. Lamplight Equestrian Center, Inc.* No. 00-6486, 2002 WL 370652 (N.D. Ill. 2002) held that there was a “significant nexus” and that CWA jurisdiction applied to wetland which drained through a main-made drainage ditch, then through a 50 foot delta or meandering drainage swale, then into a nonnavigable stream, and finally into a navigable water. In *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga., 2003) the district court held that Oil Pollution Act applied to discharge of oil onto the ground and then into a storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.

In *North Carolina Shellfish Growers Association and North Carolina Coastal Federation v. Holly Ridge Associates*, 278 F.Supp.2d 654 (E.D.N.C. 2003) the court held (*Id.* at 671 (citations omitted)) that

An absence of a channelized flow between the two bodies of water does not necessarily prevent Cypress Branch from being considered a tributary of Batts Mill Creek. ... Numerous courts have also ... recognized that intermittent streams and tributaries are capable of carrying pollutants downstream during rain events and are therefore subject to regulation under the CWA. ... This position is consistent with the Supreme Court’s holding in SWANCC which stressed that the CWA was enacted under Congress’ “traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made.” Where a hydrological connection exists between a body of water and a traditional navigable water such that pollutants discharged into the body can move downstream and degrade the quality of the navigable water, the “significant nexus” required for CWA jurisdiction under SWANCC is clearly present.

Addressing the question more specifically of whether channelized flow is required for a tributary to be jurisdictional, the Court relied on the Fourth Circuit decision in *United States v. Deaton*, *supra*, in concluding *Id.* at 671-672 (citations omitted) that it is not:

As the Fourth Circuit recently explained in *United States v. Deaton*, “[t]he power over navigable waters also carries with it the authority to regulate nonnavigable waters when that regulation is necessary to achieve Congressional goals in protecting navigable waters.” This is true whether the hydrological connection occurs in a channelized flow or a network of flat bottoms and braids, continuously or intermittently.

However, in another case, **City of Shoreacres v. Waterworth, 04-20527 (5th Cir. , 2005)** the 5th Circuit Court of Appeals refused to overturn the Corp's factual determination that certain wetlands connected by sheet flow were not subject to Clean Water Act jurisdiction. The court did not decide the whether the Corp's fact-finding was correct or whether sheet flow would have been a sufficient connection in itself for Clean Water Act jurisdiction because the Corps provided "ample mitigation to compensate for the loss of all aquatic areas on the site that will be filled in or otherwise degraded by the project". These included the wetland areas connected by sheet flow.

Connection through intermittent flow.

A number of courts have found sufficient connection even when the waters flow intermittently. See cases cited above for tributaries and, more specifically, arroyos. For example, in *U.S. v. Lamplight Equestrian Center*, No. 00-C-6486, 200WL 360652 (N.D. Ill. 2002) the court held that "Water need not flow in an unbroken line at all times to constitute a sufficient connection to navigable water or its tributaries...." *Headwaters v. Talent Irrigation District*, 243 F.3d. 526 (9th Cir. 2001) (Tributaries that flow intermittently are "waters of the U.S."). The court in *United States v. Buday*, 138 F.Supp. 1282, 1291-92 (D. Mont. 2001) held that ("(W)ater quality of tributaries...distant though the tributaries may be from navigable streams, is vital to the quality of navigable waters" As long as a tributary would flow into a navigable body of water during a significant rainfall the tributary is capable of spreading environmental damage and is a water of the U.S."

Connection through ground water.

Several courts have also found an adequate connection through ground water. See cases cited above concerning ground water and tributaries such as *Northern California River Watch v. City of Healdsburg*, No. 3 01-04686 WHA (N.D. Ca., 2004) (Underground flows were potentially "tributaries"); *San Francisco Baykeeper et al v. Cargill et al*, No. 96-2161 (N.D. Cal. 2003) ("Saturated soils" between ponds and ocean); *Idaho Rural Council v. Bosma*, 143 F.Supp.2d 1169 (D. Idaho 2001) (Discharges of dairy wastes "through underground hydrologic connections between natural ponds and manmade lagoons on the dairy's property" were jurisdictional.) But see *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir., 2001), reh'g (en banc) denied, 263 F.3d 167 (2001) in which the 5th Circuit held in an Oil Pollution Act case that discharges onto dry land which seeped through the ground into groundwater which, in turn, contaminated several intermittent streams was not jurisdictional under the Oil Pollution Act where there was little evidence in the record concerning how often the creek runs, how much water flows in it, and whether the creek ever flowed into a navigable body of water.

Connection through ditches, drains, canals, pipes.

Courts in a many cases have recognized the connection provided by artificial drains and other man-made structures sufficient for CWA jurisdiction. See court cases cited above pertaining to "adjacency" and "tributary". See, e.g., *California Sportfishing Protection Alliance v. Diablo Grande*, 209 F.Supp. 2d 1059 (E.D. Ca. 2002) (Connection through an underground pipe enough.); *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001) (Connection through irrigation canals.); *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga.,

2003) (Connection through storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.)

Connection by pumping waters.

Several courts have recognized that a valid connection may exist through pumping of waters. See *U.S.A v. Adam Bros Farming, et al.* Civ. No. 00-7409 (C.D. Cal., 2002. in which the court upheld as subject to CWA jurisdiction connection of waters which flow through a “depression” and then through a system of channels or “by pumping” or both to the Santa Maria River and the Pacific Ocean. See also *United States v. The Portland Meadows, Inc.*, No. 00-507, 2002 U.S. Dist. LEXIS 19132 (D. Or. Sept. 9, 2002) in which the court held that waters flowing through a ditch and then pumped into the Columbia Slough had a sufficient connection.

Ecological connections.

Courts have also, endorsed ecological connections. See cases cited in discussion of “adjacency” and “tributary” above. For example, in *Northern California River Watch v. City of Healdsburg*, No. 3 01-04686 WHA (N.D. Ca., 2004) the court held that the factors that should be examined in determining jurisdiction are “proximity to the river, the beneficial role of wetlands, the intertwined ecology and riparian habitat.” *Id.* at 20.

In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) the Court held that was reasonable for the Corps to exercise jurisdiction over wetlands “adjacent” to other waters. The Court cited with approval the Corps’ findings that “wetlands...may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water” *Id.* at 135.

In *U.S. v. Banks*, 873 F.Supp. 650 (S.D.Fla. 1995) the court held that wetlands were “adjacent” to other waters because there was primarily a groundwater connection to neighboring navigable waters except at times of storms such as hurricanes. The court observed that (*Id.* at 659).

A finding of adjacency may be bolstered by a showing of ecological links with neighboring waters, such as serving as wetland habitat for wading and nonwading birds, reptiles and fish as well as testimony regarding the performance of water quality filtering functions. 873 F. Supp. At 659.

Factors relevant to determination of “significance”.

Courts have not extensively discussed “significance”. They have, instead, looked to see whether there is a real connection between specific wetlands/waters and navigable waters and whether there is a threat to navigable waters if activities in the specific waters are not regulated. They held that ecological as well as hydrologic factors are relevant. For example, in *Northern California River Watch v. City of Healdsburg*, No. 3 01-04686 WHA (N.D. Ca., 2004) the court held that the factors that should be examined in determining jurisdiction are “proximity to the river, the beneficial role of wetlands, the intertwined ecology and riparian habitat.” In *FD&P Enterprises v. U.S. Army Corps of Engineers*, 239 F.Supp.2d 509 (D.N.J. 2003) the court stated that for “geographic jurisdiction to exist, there must be a “significant nexus” between the wetland and “navigable waters” *Id.* The court suggested that a significant nexus exists if a

reasonable jury could find that the “filling of the wetlands will have substantial injurious impact upon the chemical, physical, and/or biological integrity of the “navigable water.” Id. at 517.

What other factors may be relevant?

In one 7th Circuit decision the court noted the relevancy of the hydrologic system. In this case, *United States of America v. Gerke Excavating, Inc.* No. 04-3941 (7th Cir. 2005) the Court sustained CWA jurisdiction for a ditch that flowed into a nonnavigable water which flowed into another nonnavigable water and finally into a navigable water. The court noted the interrelationships between the different water bodies and their impact on navigability:

Obviously, filling in a 5.8 acre tract (not all of it wetlands—we do not know how much of it is) is not going to have measurable effect on the depth of the Wisconsin or Mississippi Rivers. But that cannot be the test. The sum of many small interferences with commerce can be large, and so to protect commerce Congress must be able to regulate an entire class of acts if the class affects commerce, even if no individual act has a perceptible effect.

The potential impact of existing and reasonably anticipated future projects and activities upon navigable waters is also relevant. See, e.g., *FD&P Enterprises v. United States Army Corps of Engineers*, 239 F.Supp. 2d 509 (D. N.J. 2003). Not surprisingly, courts have been particularly willing to find CWA jurisdiction where toxic pollutants are involved and the possibility these pollutants will enter navigable waters. See, for example, *Quivera Mining Co. v. United States Env'tl. Prot. Agency*, 765 F.2d 126, 129 (10 Cir. 1985), cert. denied, 474 U.S. 1055 (1986) (toxic mining wastes); *United States v. Buday*, 138 F.Supp. 2d 1282 (D. Mont. 2001) (mining wastes).

Concern for toxic substances reaching water supply reservoirs and other sources of domestic water supply through acts of terrorism is an increasing concern at all levels of governments since 9/11.

It is worth noting that in the single post-SWANCC court of appeals decision broadly interpreting SWANCC and holding that specific waters were not subject to CWA jurisdiction, *Rice v. Harkin*, 250 F.3d 264 (5th Cir. 2001), the court focused on the lack of clear evidence concerning the impact or potential impact of activities on navigable waters. The court concluded (Id. at 272) that:

The Rices have offered significant evidence that the groundwater under Big Creek Ranch has been contaminated by oil discharges onto the surface of ranch land. But, the only evidence the Rices have produced of the hydrologic connection between this groundwater and the Canadian River is a general assertion by their expert that the Canadian River is down gradient from Big Creek Ranch. Drake's report briefly mentions a hydrologic connection between the groundwater and the Canadian River, but there is nothing in the report or in Drake's deposition to indicate the level of threat to, or any actual oil contamination of when or to what extent the contaminants in the groundwater will affect the Canadian River. There is also no evidence of any present or past contamination of the Canadian River. The only evidence in that record that any protected body of water is threatened by Harken's activities is Drake's general assertion that eventually the groundwater under the ranch will enter the Canadian river. The ground water under Big

Creek Ranch is, as a matter of law, not protected by OPA. And, the Rices have failed to produce evidence of a close, direct and proximate link between Harken's discharges of oil and any resulting actual, identifiable oil contamination of a particular body of natural surface water that satisfies the jurisdictional requirements of the OPA.

This language suggests that the result of the case might have been quite different if the Rices had provided the court with hydrologic models indicating the course and timing of pollutants entering the Canadian River.

Courts in other cases have held that in determining jurisdiction it is irrelevant whether pollutants have, as yet, actually reached waters. See *North Carolina Shellfish Growers Association and North Carolina Coastal Federation v. Holly Ridge Associates*, 278 F.Supp.2d 654 (E.D.N.C. 2003). It is the potential for pollution that counts.

The potential impact of a single activity upon navigable waters need not be great to justify regulation. There are sound reasons for courts to consider potential cumulative impacts in deciding whether a particular body of water is subject to CWA jurisdiction. Consider, for example, the proposal to create a small subdivision in an urban area adjacent to a small creek. The creek may be connected through a system of ditches and other creeks to navigable waters. Sediment and nutrient runoff from the single small subdivision may not constitute much of a threat to quality of the water in the navigable water. But, the cumulative impact of dozens of similar subdivisions in coming years would. What happens if a court declares that the small creek is not subject to CWA jurisdiction because there are no present threats to the navigable water? Would the court then need to reverse itself once many additional subdivisions are proposed or constructed for the same water?

Many of the same sorts of considerations relevant to determination of cumulative environmental impact analysis pursuant to NEPA are also (arguably) relevant to determination of "significance". For example, in *United States v. Buday*, 138 F.Supp. 2d 1282, 1293 (D. Mont, 2001) the district court held in a criminal enforcement action that wetlands surrounding a small, intermittent, non-navigable tributary some 235 miles upstream from the navigable in fact Clark Fork River were jurisdictional under the CWA. It examined the potential cumulative impacts of polluting activities on interstate commerce:

Buday does not argue, and Solid Waste Agency does not suggest, that federal legislation cannot regulate the quality of waters that flow across state lines and that are substantially involved in interstate commerce. In *Wickard v. Filburn*, 317 U.S. 111, 63 S.Ct. 82, 87 L.Ed. 122 (1942), a farmer who grew his own wheat for his own consumption and seed was held to be subject to federal regulation because the wheat he did not introduce into interstate commerce had a substantial effect on interstate commerce.[fn17] On the model of *Wickard*, "although [Fred Burr Creek's] own contribution to the [waters of the United States] may have been trivial by itself, that [is] not `enough to remove [it] from the scope of federal regulation where, as here, [its] contribution, taken together with that of many others similarly situated, is far from trivial.'" *Lopez*, 514 U.S. at 556, 115 S.Ct. 1624 (quoting *Wickard*, 317 U.S. at 127-28, 63 S.Ct. 82). Any activity that diminishes, increases, or pollutes the waters of Fred Burr Creek, though the water or the pollutant may be trivial in itself, is far from trivial when it is considered in connection with all the other, similarly slight and remote streams and creeks that contribute to the main

waterways of the nation. Furthermore, I would not characterize what happened here as trivial in any sense of the law.

The Corps must prepare an Environmental Impact Statement on a proposed Section 404 permit if a proposed project will have significant individual or cumulative impacts upon the environment. See *Fritiofson v. Alexander*, 772 F.2d 1225 (5th Cir. 1985). In this case the 5th Circuit held that the Corps needed to prepare a cumulative impacts analysis for a proposed wetland alteration on Galveston Island. The Fifth Circuit identified some of the factors relevant to such a review:

(A) meaningful cumulative-effects study must identify: (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate....

This is not to suggest that NEPA requirements for cumulative impact analysis should be formally incorporated into CWA jurisdictional determinations. Yet, it makes sense to consider potential cumulative impacts in deciding both whether there is a “nexus” between a particular wetland/body of water and a navigable water and whether it is “significant”.

The Wisconsin Supreme Court in *Hixon v. Public Servs. Comm’n*, 146 N.W.2d 577 (Wis. 1966) provided a lucid explanation why cumulative impacts must be considered. Here the Wisconsin Supreme Court affirmed the denial of a permit to maintain a breakwater on the grounds that the breakwater was an unnecessary obstruction to navigation, did not allow for free flow of water, and was detrimental to the public interest. The court observed:

There are over 9,000 navigable lakes in Wisconsin covering an area of over 54,000 square miles. A little fill here and there may seem to be nothing to become excited about. But one fill, though comparatively inconsequential, may lead to another, and another, and before long a great body of water may be eaten away until it may no longer exist. Our navigable waters are a precious natural heritage; once gone, they disappear forever.

Id. at 589.

See also *Pope v. City of Atlanta*, 255 S.E.2d 63 (Ga. 1979).

Concluding Remarks

In conclusion, then, what waters are subject to the Clean Water Act based on the SWANCC decision, prior case law, case law interpreting SWANCC, and agency guidance? It may be suggested that:

--Clearly, traditionally “navigable” waters by the federal navigability test including wetlands in such waters are regulated to the ordinary high water mark. This may include creeks, streams, rivers, lakes, ponds, estuaries, and wetlands used for recreational navigation as well as more traditional forms of navigation.

--“Tributaries” to navigable waters including ephemeral streams are also clearly regulated including many man made ditches, canals, and pipes but the upper limit of regulated tributaries in watersheds is somewhat unclear,

--Waters “adjacent” to navigable waters and tributaries to navigable waters are also clearly regulated including waters separated by artificial barriers and but the definition of “adjacent” is somewhat open, particularly for wetlands or waters at some distance from navigable waters or tributaries.

Post-SWANNC courts to date have broadly supported CWA jurisdiction wherever a “substantial nexus” can be shown to exist between particular wetlands/waters and navigable waters.

However, some undecided issues include:

--Does the traditional test for navigability (e.g., commercial use or potential for commercial use in interstate commerce) or a broader standard apply to Clean Water Act jurisdiction for “waters of the U.S.”?

--How far up tributaries may waters (including ephemeral streams and arroyos) be regulated? Is there any limit as long as there is a showing of “significant nexus”? Is the ordinary high water mark the limit?

--How far does “adjacency” extend in terms of distance, hydrologic connection, ecological connection and other factors (e.g, a mile, ten miles, 100 miles)?

--To what extent are wetlands or other waters with a linkage through sheet flow or ground water flow subject to CWA jurisdiction? Are there situations in which this linkage may suffice and situations in which it may not?

--Do wetlands or other waters with only an ecological connections to other waters such as fish spawning or turtles breeding have a “significant nexus” sufficient for Clean Water Act jurisdiction?

--Can a “significant nexus” to navigable waters form an independent basis for CWA jurisdictional apart from “navigability”, “adjacency”, or “tributary” status?

Of all the problem contexts, closed basins pose the most significant challenge to Clean Water Act jurisdiction. But some closed or partially closed basins may be navigable (under a broad reading of navigability) and others may be connected through ground water or during major rainfall events through runoff channels or sheet flow. Still others may be connected ecologically through use by amphibians, birds, mammals, reptiles, and other animals.

There will undoubtedly be continued litigation concerning the jurisdictional scope of the Clean Water Act. It is likely that the Supreme Court will revisit this issue over time although the Court appears to be in no hurry to do so. There is no way of predicting how the Supreme Court will interpret SWANCC in the future and much will likely depend upon the composition of the Court. Nevertheless, it is likely that the growing consensus of lower District and Appellate courts to interpret SWANCC narrowly will play a role. And, so will science. The Supreme Court will ultimately need to face the question posed to lower courts: “How can comprehensive pollution control be achieved without regulating virtually all polluting activities at their sources?”

The Executive Summary and Appendix A provide recommendations for staff in addressing “difficult” or “problem” situations with regard to determination of CWA jurisdiction. These recommendations are the author’s and should not be imputed to any agency.

Agency staff should not let semantics and legal arguments concerning the use of terms “navigable” and “waters of the U.S.” drive science. In deciding whether particular wetlands and waters are “jurisdictional” under the Clean Water Act, the Corps of Engineers, EPA, USGS, NRCS, NOAA and other federal agencies need to temporarily set aside, in a particular context, “navigability” in investigating scientific and ecological connectivity and importance. Legal analysis in a particular situation should follow scientific investigation concerning the hydrologic and ecological relationships and the consequences of allowing both potential individual and cumulative discharges into waters. This would help agencies and courts to make an informed decision concerning “significant nexus” “adjacency” and “tributary”.

Given the broad connections between all types of waters and the judicial support to date for a limited scope to SWANCC regulatory staff should, perhaps, presume that all wetlands and waters have a significant nexus to navigable waters unless this a presumption is factually rebutted in a particular setting.

Looking to the future, federal agencies along with their academic, state, tribal, local government and other partners should prepare an overview report for Congress concerning the consequences of including or omitting certain “problem” classes of waters from CWA regulatory control. How will or will not this detract from efforts to “restore” and “maintain” the Nation’s waters? This might best be undertaken by a National Academy Committee. With such a report in hand, Congress could, then, better decide what amendments to the Clean Water Act are needed including the definition of regulated waters and any modification in the roles of federal agencies, states, tribes, and local governments

Deciding that federal Clean Water Act oversight is needed to achieve comprehensive “restoration and maintenance” goals for the Nation’s waters does not mean that all waters need to be directly regulated at the federal level. Some measure of direct federal oversight is needed but states, tribes, and local governments can play more significant roles in restoring and protecting headwater streams, closed basins and other isolated or partially isolated waters with less direct connection to navigable waters. A framework of federal standards is needed combined with enhanced grants in aid, technical assistance, training, joint permitting procedures, and broader use of state “assumption” or state, tribal and local “programmatic general permit” programs. In this way, Clean Water Act goals to “restore and maintain physical, biological, and chemical” integrity of the Nation’s waters could be achieved while respecting the roles and integrity of the states, tribes, and local governments.

APPENDIX A: ADDRESSING “PROBLEM” CONTEXTS

Federal and state level regulatory staff are having problems in determining the outer limits of CWA jurisdiction in a number of contexts. Appendix A briefly describes some major “problem” contexts. Appendix A also suggests questions which federal and state agency staff should ask in deciding whether particular waters are subject to the CWA jurisdiction?

Generic Questions to Ask

Agency staff may find useful a number of “generic” questions which may apply to virtually all situations in which CWA jurisdiction is an issue: These include the following. More specific questions are then suggested for particular types of problem areas:

1. Is this wetland/ water body interstate, tidal, or “navigable” in its own right pursuant to traditional tests of navigability or by any expanded test of navigability which may be applied in this instance (use for commercial and recreational rafting, canoeing, kayaking by hunters, birdwatchers, etc.)? If so, the wetland or other water body is subject to CWA jurisdiction to the ordinary high water mark. Quite a broad range of waters might be considered “navigable”. Some more specific questions in determining whether a water body is navigable include: Has the water ever been used in the past for passage of saw logs, commercial navigation, or recreational navigation? If so, how? Is it presently being used? If so, how? By whom? Is it susceptible to use? If so, by what and how? See discussion of navigability in the report above.

2. If the water body is not navigable, is this wetland or other water body touching a navigable water or tributary to a navigable water? If so, it is “adjacent” and subject to the CWA to the ordinary high water mark. If it does not touch, is it in close proximity and hydrologically or ecologically linked to the navigable water or tributary (significant nexus)? If so, it is legally “adjacent” and subject to the CWA. Is there surface, channelized flow between the two water bodies? Sheet flow? Ground water flow? Are there biological connections beyond these waters and navigable waters by fish, amphibians, and other wildlife in addition to migratory birds? All of these connections may constitute sufficient connection for CWA jurisdiction. See discussion of adjacency above. There is also jurisdiction if there would be connections in the absence of dikes, levees, or berms.

3. Is this riverine wetland or river, creek, stream, ditch or canal “tributary” to a navigable water. If so, it is subject to CWA jurisdiction to the ordinary high water mark. See discussion of tributary above. In deciding whether a water is “tributary” staff should ask: Is a wetland water body hydrologically connected to a navigable water body however remote? Would pollutants or activities in this water body negatively impact navigable waters? Courts have very broadly interpreted “tributary” to include not only creeks and streams some distance from a navigable body of water but ephemeral streams including those flowing in arroyos and other waters flowing only a portion of the year. They have included entire drainage networks. They have included waters connected to other waters by sheet flow and ground water connection. They have included ditches, channels, and pipes.

4. Is there a “significant” hydrologic and/or ecological “nexus” between a particular wetland or other water and navigable waters? A finding of significant nexus is relevant to determination of “adjacency” and “tributary” and might also (arguably) serve as an independent

basis for CWA jurisdiction in some situations. See discussion of “significant nexus” above. How are the water bodies linked—natural channels, sheet flow, ground water flow? How closely are they linked? Is there the potential for pollution or other degradation including cumulative impacts to occur to navigable waters over time?

Problem Contexts

These questions apply to all “problem” contexts” or the sort described below. The contexts described are intended to be illustrative, not exhaustive.

1. Sheet flow or ground water (subsurface) flow connected waters.

Many lakes and ponds, small streams, potholes, floodplain wetlands, coastal bays, vernal pools and other waters and wetlands are hydrologically and ecologically linked by sheet flow or ground water to navigable waters or tributaries to such waters although there may not be identifiable surface channels to such waters created by erosion and deposition. Flows are also often temporary because sheet flow often occurs only during spring or fall high water, major rains, or floods. Ground water linkages may take place through steady, year-around flows or only seasonally or in years of high rainfall.

During these high water, intense rainfall, or flooding situations a broad range of pollutants and debris may be washed from waters into navigable waters.

Discussion. As indicated above, courts have been willing in a number of cases to find CWA jurisdiction for specific waters based upon sheet flow and a “significant nexus” between those waters and navigable waters or tributaries to such waters. See, for example, *U.S. v. Lamplight Equestrian Center, Inc.* No. 00-6486, 2002 WL 370652 (N.D. Ill. 2002 (Drainage through a 50 foot delta or meandering drainage swale, then into a nonnavigable stream, and finally into a navigable water subject to CWA); *North Carolina Shellfish Growers Association and North Carolina Coastal Federation v. Holly Ridge Associates*, 278 F.Supp.2d 654 (E.D.N.C. 2003) (Connection sufficient through “networks of flat bottoms and braids....”).

Courts have also, in some instances, found sufficient linkages between waters and navigable waters through ground water flows although the CWA does not normally regulate ground waters. See *Idaho Rural Council v Bosma*, 143 F.Supp. 2d 1169 (D. Idaho, 2001) (Discharges from a concentrated animal feeding operation were subject to CWA jurisdiction including a spring that ran into a pond that drained across a pasture into a canal ; discharges into groundwater that leads to surface water may also require a Section 402 permit.). See also *Northern California River Watch v. City of Healdsburg*, No. 3 01-04586 WHA (N.D. Ca., 2004) (Abandoned sand and gravel pit used for sewage treatment that lacked a surface water connection to the nearby Russian River (except for occasionally flooding) was subject to CWA jurisdiction.)

But see *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir., 2001, reh’g (en banc) denied, 263 F.3d 167 (2001) in which the court of appeals held in an Oil Pollution Act case that discharges onto dry land which seeped through the ground into groundwater which, in turn, contaminated several intermittent streams was not jurisdictional under the Oil Pollution Act where there was little evidence in the record concerning how often the creek runs, how much water flows in it, and whether the creek ever flowed into a navigable body of water.

It would be important for an agency attempting to decide whether CWA jurisdiction exists for a specific wetland or water linked by sheet flow or ground water to collect field data or to model hydrologic and ecological connections during both normal rainfall and flood events. How substantial is the connection between the wetlands/waters and navigable waters? What does this connection mean to navigable waters? It would be important to document or project not only existing movement of not only water but pollutants and animals between the waters and navigable waters or tributaries to such waters. It would also be important to project the possible pollution and other cumulative hydrologic and ecological impacts on navigable waters.

2. Closed basins.

There are tens of thousands of closed basin waters and wetlands, particularly in the arid regions of the west where precipitation is evaporated to the atmosphere before it reaches other water bodies. These include many arroyos, playa lakes, ponds, wetlands and small streams waters in the arid West where rainfall or ground water discharge is collected in these waters and evaporates before it can reach other water bodies. It also includes some temperate region lakes, ponds and wetlands including Prairie Potholes and vernal pools fed by ground and surface water where there no or is little discharge to other water bodies.

Discussion. The SWANCC decision has potentially greatest impact on closed basins. There has been limited litigation to date concerning CWA jurisdiction for closed basin lakes, ponds and wetlands. However, some closed basins have been recognized as navigable and subject to CWA jurisdiction. A district court in *Colvin v United States*, 181 F.Supp. 2d 1050 (C.D., Cal., 2001) held that the Salton Sea, a large, isolated, navigable in fact lake used for recreational purposes was jurisdictional pursuant to the CWA. See also *Utah v. United States*, 403 U.S. 9 (1971) in which the Supreme Court held that the Great Salt Lake had been navigable in 1896 when the state entered the Union. Such a “navigable” water body would be subject to the CWA.

Many closed basins are now being used for recreational and/or commercial boating purposes by birders, fishermen, hunters and white water rafters and others using canoes and kayaks. These forms of boating may constitute navigation for CWA jurisdiction purposes, particularly if such navigation is carried out as part of commercial, interstate enterprises. See many cases cited above and Appendix B.

An agency trying to decide whether there is CWA jurisdiction over a closed basin lake, pond, or wetland should ask: Is this water body navigable in its own right? If not, is this truly a “closed” basin during times of high rainfall? flood? Are there biological connections beyond these waters and navigable waters by fish, amphibians, and other wildlife in addition to migratory birds? These connections may be sufficient to characterize such waters as “tributary” or being jurisdictional as having a “significant nexus” to navigable waters (apart from “tributary” or “adjacency”). Does the closed basin “trap” sediment and nutrients which would otherwise pollute navigable waters? If so arguments might also be made that the basin has a significant nexus to such waters.

3. Partially closed basins.

There are millions of depressional and slope wetlands which are infrequently connected through the surface water to other navigable water bodies. These include many of Prairie Potholes. Many are fed partially by ground water or act as ground water discharge points although there is no

surface water discharge channel. In the Prairie Pothole region, many of these wetlands are linked to navigable waters through extensive networks of drainage ditches. Many of these drainage ditches follow natural overflow channels. Although hydrologically semi-isolated during low water periods, many of these wetlands are linked with surface connections to other wetlands and navigable waters during floods and years of high rainfall. Many serve important flood storage and pollution control functions for other waters. In addition, many serve as important amphibian, migratory bird, and other feeding, nesting, or resting habitat for fauna living in other waters.

These also include freshwater, depressional wetlands without a clearly defined outlet in areas adjacent to the coasts (e.g., Houston/Galveston) area. These wetlands may be connected with other waters through channels, drainage ditches or sheet flow a portion of the year. They may be connected through ground water flows. These apparently constitute a significant portion of the remaining wetlands in some coastal areas.

Discussion. There has been limited litigation to date concerning CWA jurisdiction for partially closed basin lakes, ponds and wetlands. However, a number of courts have found CWA jurisdiction for waters linked to other waters by temporary sheet flows or ground water flows during times of flood or high ground water. See cases cited above and cases cited below addressing “arroyos”.

An agency attempting to decide whether CWA jurisdiction exists over a partially closed basin lake, pond, or wetland should ask: Is there a significant hydrologic (temporary surface runoff, sheet flow, ground water) or ecological connection at least a portion of the year? What is the potential for pollution or other damage to navigable waters from existing or reasonably anticipated cumulative sources of pollution or other activities in waters?

4. Waters in proximity to but not touching navigable waters of tributaries.

Many of the nation’s most important wetlands are actually touching and directly connected to navigable waters including rivers and streams, tidal waters, the Great Lakes, and other larger lakes. These are clearly “adjacent” navigable waters and subject to the CWA. Others are in the proximity to navigable waters or their tributaries and connected with these waters and tributaries by natural channels, sheet flow, ground water flow, or artificial ditches, canals, and pipes.

Discussion. As discussed above, the U.S. Supreme Court in *Riverside Bayview* and many district and appellate courts have broadly held that specific wetlands or waters are subject to Clean Water Act jurisdiction because they were “adjacent” to navigable waters or their tributaries. Courts have found adjacency even when wetlands or waters have been at some distance from navigable water or separated by berms or roads. See, e.g., *U.S. v. Banks*, 115 F.3d 916, 921 (11th Cir. 1997) (Wetlands one half mile from navigable channels and separated by a road were, nevertheless, “adjacent”); *United States v. Tilton*, 705 F.2d 429 (11th Cir. 1983, (Wetland adjacent to a nearby river but separated from the wetland by a berm subject to CWA.)

An agency wishing to decide whether there is CWA should ask the following sorts of questions: How close to a navigable water or tributary is the water body? What are the hydrologic or ecological linkages between a wetland or water body and a navigable water body or tributary? How strong are they? Have existing connections been interrupted by berms, roads, levees, or

other man-made structures? Would pollution or other activities in the wetland/waters impact navigable waters?

5. Ephemeral tributaries and tributaries some distance from navigable waters.

Smaller, nonnavigable, creeks and streams determine the quality of water in larger lakes, estuaries, and rivers. Many flow only a portion of the year. Many also flow considerable distances before reaching navigable waters.

Discussion. District and appellate courts have broadly upheld CWA jurisdiction for “tributaries” including ephemeral streams and rivers and streams at long distances from navigable waters but discharging into such waters. Whole drainage networks may be subject to Clean Water Act even if they flow long distances before reaching navigable waters if there is a clear connection between such waters and navigable waters. See *United States v. Deaton*, 332 F.3d 698 (4th Cir., 2003), reh’g (en banc) denied (August, 2003), cert. denied, 124 S.Ct. 1874 (2004) (Roadside ditch jurisdictional that connects through a culvert and an eight mile long series of nonnavigable ditches and creeks to the navigable Wicomico River and ultimately to the Chesapeake Bay 25 miles later.) *United States of America v. Gerke Excavating, Inc.* No. 04-3941 (7th Cir. 2005) (CWA jurisdiction for a wetland which drained into a ditch which emptied into a nonnavigable creek which emptied into a nonnavigable Lemonweir River which flowed into the Wisconsin River. The court broadly concluded: “Whether the wetlands are 100 miles from a navigable waterway or 6 feet, if water from the wetlands enters a stream that flows into the navigable waterway, the wetlands are “waters of the United States” within the meaning of the Act”. The court deferred to the Corp’s interpretation of the Clean Water Act to include all nonnavigable tributaries; See *United States v. Buday*, 138 F.Supp. 2d 1282 (D. Mont, 2001) (Wetlands surrounding a small, intermittent, non-navigable tributary some 235 miles upstream from the navigable in fact Clark Fork River were jurisdictional under the CWA.); *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga., 2003) (Oil Pollution Act applied to discharge of oil into a storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.)

An agency wishing to determine whether a water body is “tributary” and subject to CWA jurisdiction may best focus first on the issue of “substantial nexus” including connectivity and the potential impact of proposed and other activities in wetlands and other waters on navigable waters. If there is a “substantial nexus” many wetlands and waters should be considered “tributary” even if connected at some point by sheet flows or ground water.

6. Arroyos.

Arroyos are a special case of “tributaries” and “ephemeral streams”. They are most common in the West. Water flows infrequently in arroyos which are located primarily in semi arid regions. Arroyos typically have well defined channels but flows are infrequent. Water velocities and sediment loadings may be very high when waters do flow in arroyos. Threats to public health and safety from flooding and erosion may also be great. Pollutants (oil, mine tailings, toxic chemicals) may be readily washed from adjacent lands into these water bodies because the desert surface is semi-impermeable leading to rapid runoff and there is little buffering vegetation.

Urbanization in the Southwest with the removal of natural vegetation and straightening of streams is causing increased flooding, erosion and pollution.

Discussion. As discussed above, several courts have held that arroyos connected to other waters during heavy rains were jurisdictional pursuant to the Clean Water Act. See, for example, *Quivera Mining Co. v. United States Env'tl. Prot. Agency*, 765 F.2d 126 (10 Cir. 1985), cert. denied, 474 U.S. 1055 (1986); *United States v. Phelps Dodge Corp.*, 391 F.Supp. 1181 (D. Ariz. 1975); *United States v. Earth Sciences, Inc.*, 599 F.2d 368 (10th Cir. 1979).

An agency wishing to determine whether CWA jurisdiction applies to a specific arroyo should ask the following sorts of questions: Does flood water from the arroyo ultimately reach navigable waters or is it all evaporated? Will activities in the arroyo cumulatively affect downstream navigable waters through water pollution, flooding and erosion, turbidity, fish and wildlife? Establishment of "significant nexus" may, again, may be the key to CWA jurisdiction.

7. Artificial (man-made) ditches, drains, pipes, canals, channels.

There are hundreds of different scenarios pertaining to connections between man-made ditches, channels and drains and navigable waters. These differences pertain to:

- The size of the ditches, channels, pipes, drainage or other conduits,
- The length of these man-made conveyance areas,
- The use of these man-made conveyance areas (e.g., navigation, irrigation, water supply),
- Whether flows are continuous, only a portion of the year, or only during extreme flood events
- Whether water flow underground through these conveyances or only on the surface or some combination of both,
- Whether all or a portion of the flows are evaporated or sink into the ground before they reach jurisdictional wetlands and waters,
- Whether there are impediments to flow such as culverts and dams,
- Whether they follow natural watercourse and, if so, the depth, size, and flow regimes of the natural watercourse,
- Whether the waters "spread out" in wetlands and swamps and lose their defined banks. They may or may not re-acquire banks and channels in downstream locations; and
- Whether the ditches or channels are part of a created and managed stormwater system or a constructed wetland system.

Discussion. To date, courts in both pre and post SWANCC have given little weight to these distinctions. They have broadly held that artificial or partially artificial bodies of water are jurisdictional where activities in such water bodies will cause downstream pollution or other degradation of navigable waters. See many cases cited above. See, e.g., *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga., 2003) in which the district court held that Oil Pollution Act applied to discharge of oil onto the ground and into a storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.

An agency should ask, in deciding whether specific waters are jurisdictional: Does or would cumulative pollution or other activities in these waters result in pollution or other degradation of downstream navigable waters? If so, under what circumstances and how much? What will happen to navigable waters if activities in these wetlands and waters are not regulated?

Based on existing cases, if there is a significant nexus, these waters are (arguably) all jurisdictional.

APPENDIX B: APPLYING A BROAD CONCEPT OF “NAVIGABILITY”

Reasons for Applying a Broad Concept of Navigability

Many closed or partially closed basin lakes and wetlands and headwater creeks and streams are now used for boating (canoes, kayaks, John boats) by both interstate and intrastate canoeists, kayakers, fishermen, hunters, and birdwatchers. Some are on commercial tours. Others travel on their own. As discussed above, federal and state courts have quite recognized recreational boating as a form of navigation to establish the “navigability” of lakes, rivers, streams in many cases.

A number of arguments can be made for applying a broad concept of navigability to waters for the purpose of CWA jurisdiction.

First, a broad concept of navigability (and resulting CWA jurisdiction) is consistent with the implementation of the CWA goal to create a comprehensive program to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters”. A broad concept of navigability for the Clean Water would be consistent with a comprehensive control scheme to “restore and maintain the physical, chemical, and biological integrity of the Nation’s waters including the territorial seas.” See more discussion below.

Second, a broad concept of navigability helps reconcile the use of two terms—“navigable” waters and “waters of the U.S.” in the Clean Water Act. The Supreme Court in SWANCC observed that “(W)e recognized that Congress intended the phrase ‘navigable waters’ to include ‘at least some waters that would not be deemed “navigable” under the classical understanding of that term.’” The Court also concluded that the term “navigable” in Section 404(a) should be given “limited effect” but more than “no effect”. A broad concept of navigability would be consistent with this.

The need to include waters other than classically navigable waters in a comprehensive pollution control program was recognized by the 4th Circuit in *U.S. v. Deaton*, 332 F.3d 698, (4th Cir. 2003), holding that the “whole system of tributaries” involved in this case were jurisdictional (*Id.* at 709):

The precise question here is whether the Clean Water Act extends to distant, nonnavigable tributaries of navigable waters. Section 404(a) of the CWA regulates discharges into “navigable waters,” 42 U.S.C. § 1344(a), and the Act defines “navigable waters” as “waters of the United States,” *id.* § 1362(7). The Corps’s regulations interpret the term “waters of the United States.” If Congress had stopped with the basic term “navigable waters,” the term used in § 404(a), 42 U.S.C. § 1344(a), many years of judicial precedent would give us the following clear meaning: “[waters] are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.” *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1871). See also *Appalachian Elec. Power Co.*, 311 U.S. at 404-10. In the Clean Water Act Congress elected to redefine “navigable waters,” moving away from the traditional definition. Its choice of the expansive phrase “waters of the United States”

indicates an intent to "regulate at least some waters that would not be deemed 'navigable' under the classical understanding of that term." *Riverside Bayview*, 474 U.S. at 133.

Court Recognition of Broad Concepts of “Navigability”

The Supreme Court and lower courts have recognized that there are somewhat different federal standards for “navigability”, depending upon the context. In *United States v. Kaiser Aetna*, 408 F.Supp. 42 (D. Ha.) the District Court of Hawaii, considering whether certain fish ponds subject to the ebb and flow of the tides had been “navigable” for the purposes of the federal navigable servitude, observed (*Id.* at 48, 49):

The term “navigability” has many legally distinct applications. (1) It may determine title to river and lake beds...(2) It has been the touchstone of ...Congressional jurisdiction over waters via the Commerce Clause..(3) It embodies the navigable servitude, a modern declaration of the common law right of public access to the surface of waters. In addition, (4) admiralty jurisdiction in federal courts flows from the general concept of navigability...The use of the term “navigability” for these four purposes, however, does not necessarily mean that each is co-extensive with the other. See *United States v. Appalachian Power Co.*, 311 U.S. 377, 408 (1940).

On appeal of this decision, the U.S. Supreme Court in *Kaiser Aetna v. United States*, 444 US 164 (1979) recognized, like the District court, that different definitions of navigability were appropriate for different purposes. The Court held that the contested waters in question--an area of fish ponds in Hawaii which was historically subject to the ebb and flow of the tide but not navigable by boats--were “navigable” for the purposes of the Commerce Clause and Corps of Engineers regulation, but they were not navigable for the purposes of recognizing a federal “navigable servitude” over such waters.

The Court somewhat ambiguously observed in applying a dual test for “navigability” in this case that:

The position advanced by the Government, and adopted by the Court of Appeals below, presumes that the concept of “navigable waters of the United States” has a fixed meaning that remains unchanged in whatever context it is being applied. While we do not fully agree with the reasoning of the District Court, we do agree with its conclusion that all of this Court’s cases dealing with the authority of Congress to regulate navigation and the so-called “navigable servitude” cannot simply be lumped into one basket.

....

It is true that Kuapa Pond may fit within definitions of “navigability” articulated in past decisions of this Court (i.e. subject to the ebb and flow of the tide). But it must be recognized that the concept of navigability in these decisions was used for purposes other than to delimit the boundaries of the navigational servitude: for example, to define the scope of Congress’s regulatory authority under the Interstate Commerce Clause...(citing many cases).

The broad nature of Congress' regulatory authority pursuant to the Commerce Clause over waters (whether or not navigable) was more fully articulated by the Supreme Court in *United States v. Appalachian Power Co.*, 311 U.S. 377, 409 (1940):

(I)t cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation....In truth the authority of the United States is the regulation of commerce on its waters. Navigability....is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control....(The) authority is as broad as the needs of commerce....The point is that navigable waters are subject to national planning and control in the broad regulation of commerce granted the Federal Government.

The Court in *Kasler Aetna*, 44 U.S. 164, 174 (1979) further observed:

...*Appalachian Power Co.* indicates that congressional authority over the waters of this...Nation does not depend on a stream's "navigability". And, as demonstrated by this Court's decisions in....(Citing cases)..a wide spectrum of economic activities "affect" interstate commerce and thus are susceptible of congressional regulation under the Commerce Clause irrespective of whether navigation, or, indeed, water is involved. The cases that discuss Congress' paramount authority to regulate waters used in interstate commerce are consequently best understood when viewed in terms of more traditional Commerce Clause analysis than by reference to whether a stream in fact is capable of supporting navigation or may be characterized as "navigable water of the United States."

Some federal courts in pre-SWANCC decisions held that "navigability" is irrelevant to Clean Water Act jurisdiction and that such jurisdiction is based upon broader Commerce Clause powers. See, for example, *United States v. GAF Corp.*, 389 F. Supp. 1379, 1382 (S.D. Tex. 1975). The court observed in this decision that "(t)he expression "navigable waters" is defined in § 1362(7) to mean 'the waters of the United States, including the territorial seas.' This definition effectively excludes from consideration any concept of navigability, in law or in fact. *United States v. Holland*, 373 F. Supp. 665 (M.D.Fla. 1974); *United States v. Ashland Oil & Transp. Co.*, 364 F. Supp. 349, 351 (W.D.Ken. 1973), *aff'd*, 504 F.2d 1317 (6th Cir. 1974)."

In light of SWANCC, the reasoning of these courts excluding from consideration "any concept of navigability" is no longer good law. But a broad use of the term "navigability" in terms of defining Clean Water Act jurisdiction would be consistent with SWANCC, cases like *Kaiser* above, and Clean Water Act goals.

APPENDIX C: POST-SWANCC COURT DECISIONS

Since January 2001, there have been at least 35 decisions interpreting CWA jurisdiction based on SWANCC. In all but three of the decisions which are briefly described below the courts took a narrow view of SWANCC and have held that waters were jurisdictional in a particular setting. Many of these decisions applied a broad concept of regulated “tributary” to include nonnavigable as well as navigable waters, a broad concept of “adjacency”, and a broad concept of “substantial nexus”. The following list of decisions is based upon an independent Lexis/Nexis search by the author and annotated lists of cases provided by the EPA, the National Wildlife Federation, and the U.S. Department of Justice. I found particularly useful summaries of post SWANCC decisions prepared by the Stephen Samuels, Esq. and Jan Goldman Carter and Jim Murphy of the National Wildlife Federation. See <http://www.nwf.org/ourprograms/>.

Court of Appeal Decisions Favoring a Narrow Interpretation of SWANCC

Decisions holding that particular wetlands and waters are subject to CWA jurisdiction include the following Court of Appeal Decisions:

United States of America v. Gerke Excavating, Inc. No. 04-3941 (7th Cir. 2005) (Court of Appeals broadly sustained CWA jurisdiction for a wetland which drained into a ditch which emptied into a nonnavigable creek which emptied into a nonnavigable Lemonweir River which flowed into the Wisconsin River.)

Parker v. Scrap Metal Processors, Inc. 386 F.3d 993 (11th Cir. 2004) (Court of Appeals held that runoff from a scrap metal processing site in Georgia that ran off the site into erosion gullies that fed a small stream that was a tributary to the Yellow River (a navigable tributary) was potentially jurisdictional under the CWA.)

United States v. Phillips, 356 F.3d 1086; 367 F.3d 846 (9th Cir. 2004) (Court of Appeals sustained District Court’s conclusion that a tributary creek was a water of the U.S.)

Carabell v. United States Army Corps of Engineers, 391 F.3d 704 (6th Cir. 2004) (Court of Appeals held that forested wetland separated from a non-navigable man made ditch which flowed into a drain and then into Lake St. Clair (a navigable water body) was jurisdictional under the CWA)

United States v. Rapanos, 376 F.3d 629 (6th Cir. 2004) (Court of Appeals upheld a civil action against Rapanos for filling 49 acres of wetlands at three sites hydrologically connected to navigable waters.)

United States v. Rapanos, 339 F.3d 447 (6th Cir. 2003), reh’g (en banc) denied, cert denied 124 S.Ct. 1875 (2004) (Court of Appeals reinstated a criminal conviction for filling wetlands which were adjacent and hydrologically connected to a 100 year old man-made drain which flowed into a creek which flowed into a navigable in fact river.)

United States v. Deaton, 332 F.3d 698 (4th Cir., 2003), reh’g (en banc) denied (August, 2003), cert. denied, 124 S.Ct. 1874 (2004) (Court of Appeals upheld the Corp’s jurisdiction over a wetland adjacent to a roadside ditch that connects through a culvert and an eight mile long

series of nonnavigable ditches and creeks to the navigable Wicomico River and ultimately to the Chesapeake Bay 25 miles later. The Court deferred to the Corp's interpretation of the Clean Water Act to include all nonnavigable tributaries.)

United States v. Rueth Development Co., 335 F.3d 598 (7th Cir., 2003), cert. denied, 124 S.Ct. 835 (2003) (Court of Appeals affirmed a consent decree in a Section 404 civil enforcement case which the plaintiff sought to reopen based on SWANCC. The Court upheld CWA act jurisdiction based on adjacency.)

United States v. Krilich, 152 F. Supp. 2d 983 (N.D. Ill. 2001), affirmed 303 F.3d 784 (7th Cir., 2002), cert. denied, 123 S.Ct. 1782 (2003) (Court of Appeals held that SWANCC was not an adequate basis for reopening a 1992 consent decree in a CWA Section 404 enforcement action because SWANCC did not represent such a significant change in the law that refusal to reopen was an abuse of discretion.)

Treacy v. Newdunn, 344 F.3d 407 (4th Cir., 2003), cert. denied, 124 S.Ct. 1874 (2004) (Court of Appeals held that wetlands that abutted and had a hydrologic connection to a drainage ditch which flows via a culvert to nonnavigable portions of a stream before flowing into traditional navigable water were jurisdictional under the CWA. The court also held that Virginia's regulation of waters was based upon independent state powers and were not simply tied to CWA jurisdiction.)

United States v. Interstate General Co., 152 F.Supp. 2d 843 (D. Md. 2001) affirmed, 2002 U.S. App. LEXIS 13232 (4th Cir, 2002) (Court of Appeals rejected the argument in a civil enforcement action that SWANCC restricted CWA jurisdiction to navigable-in-fact waters and wetlands immediately adjacent thereto.)

Community Ass'n for Restoration of the Env't v. Henry Bosma Dairy, 305 F.3d 943 (9th Cir., 2002) (Court of Appeals held that a drain that carried flows from an animal feeding operation either directly or by connecting waterways into the Yakima River was jurisdictional under the Clean Water Act.)

Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (9th Cir., 2001) (Court of Appeals held that shallow irrigation canals tributary to other waters of the U.S. were jurisdictional.)

District Court Decisions Favoring a Narrow Interpretation of SWANCC

U.S. v. Thorson, 03-C-0074-C (W.D. Wis., 2004) (District court held that wetlands adjacent to a drainage ditch running to Deer Creek, tributary flowing into the south fork of the Lemonwire River which is a tributary of the Wisconsin River which is navigable in fact were subject to CWA jurisdiction.)

Northern California River Watch v. City of Healdsburg, No. 3 01-04586 WHA (N.D. Ca., 2004). (District court held that an abandoned sand and gravel pit used for sewage treatment that lacked a surface water connection to the nearby Russian River (except for occasionally flooding) was subject to CWA jurisdiction.)

Baccarat Fremont Developers v. U.S. Army Corps of Engineers, 327 F. Supp.2d 1121 (N.D. Cal., 2003), appeal pending, No. 03-16586 (9th Cir.) (District court held that wetlands separated from jurisdictional waters by man-made berms are “adjacent” and waters of the U.S.)

United States v. Jones, 267 F. Supp. 2d 1349 (M.D. Ga., 2003) (District court held that Oil Pollution Act applied to discharge of oil into a storm drain that flowed into a drainage ditch that flowed into a creek that flowed into the navigable Ocmulgee River.)

North Carolina Shellfish Growers Association v. Holly Ridge Associates, 278 F. Supp. 2d 654 (E.D. N.C., 2003) (District court held that wetlands and other water bodies were jurisdictional under the CWA because there was a “significant nexus” between these waters and a traditionally navigable water “whether the hydrologic connection occurs in a channelized flow or a networks of flat bottoms and braids, continuously or intermittently.”

United States v. Robert L. Hummel, No 00 C 5184, 2003 WL 1845365 (N.D. Ill., 2003) (District court held that a “significant nexus” exists for wetlands which are hydrologically connected to a creek that flows into the navigable in fact Des Plaines River 11 miles away, and are therefore subject to CWA.)

San Francisco v. Cargill Salt Division, No. C 96-2161 (N.D. Cal., 2003) (District court held that a pond which was separated from a navigable in fact water only by a man-made berm was “adjacent’ and jurisdictional under the CWA. On Appeal.)

United States v. Bruce Dyer, No. 00-11013 (D. Mass., 2003) (District court refused to reopen consent decree based upon SWANCC for filling of wetlands adjacent to the Taunton River because the wetlands were adjacent to a navigable waterway.)

FD & P Enterprises, Inc. v. United States Army Corps of Engineers, 239 F.Supp. 2d 509 (D.N.J., 2003) (District court denied summary judgment because there were genuine issues of material fact regarding whether the filling of wetlands would have a substantial nexus to navigable in fact waters. Later the court entered a stipulation and order dismissing the case with prejudice.)

Route 26 Land Dev’t Assoc. v. U.S. Gov’t, 182 F. Supp.2d 382 (D. Del 2002) (Court refused to open based upon SWANCC a declaratory judgment action challenging a Corps of Engineers wetland delineation.

United States v. The New Portland Meadows, Inc. No. 00-507 AS, 2002 U.S. Dist. LEXIS 19132 (D. Or., 2002). (District court granted partial summary judgment for the United States based on a finding that ditches which are hydrologically connected to traditionally navigable waters by pumping are subject to CWA jurisdiction.)

USA v. Adam Bros Farming, et. al, Civ. No. 00-7409 (C.D. Cal., 2002) (District court held that there was at least a material question of fact pertaining to the hydrologic connection (surface flow, pumping) between a farm and downstream waters and wetlands to preclude summary judgment on the issue of CWA jurisdiction.)

California Sportfishing Protection Alliance v. Diablo Grande, Inc., 209 F.Supp. 2d 1059 (E.D. Cal., 2002) (District court held that a creek running over a weir and into an underground pipeline which eventually connected to the San Joaquin River was jurisdictional under the CWA.)

United States v. Lamplight Equestrian Center, Inc. No. 00-6486, 2002 WL 360652 (N.D. Ill. 2002) (District court held that CWA jurisdiction existed for a wetland that drained through a man made drainage ditch, then through a 50 foot delta or meandering swale, then into Brewster Creek (a nonnavigable stream) and ultimately into the navigable in fact Fox River because there was a significant nexus).

Colvin v United States, 181 F.Supp. 2d 1050 (C.D., Cal., 2001) (District court held that the Salton Sea, a large, isolated, navigable in fact lake used by interstate recreational users was a water of the U.S. and unaffected by SWANCC.)

Idaho Rural Council v Bosma, 143 F.Supp. 2d 1169 (D. Idaho, 2001) (District court held that discharges from a concentrated animal feeding operation were subject to CWA jurisdiction including a spring that ran into a pond that drained across a pasture into a canal that flowed into a creek that was either navigable in fact or flows into a navigable in fact river. The court also concluded that discharges into groundwater that leads to surface water may require a Section 402 permit.)

United States v. Buday, 138 F.Supp. 2d 1282 (D. Mont, 2001) (District court held in a criminal enforcement action that that wetlands surrounding a small, intermittent, non-navigable tributary some 235 miles upstream from the navigable in fact Clark Fork River were jurisdictional under the CWA.)

Aiello v. Town of Brookhaven, 136 F.Supp. 2d 81 (E.D.N.Y, 2001) (District court concluded that (arguably) nonnavigable pond and creek that flowed into a lake which in turn flowed into a traditional navigable water were jurisdictional.)

Robert Brace v. United States, 51 Fed. Cl. 649 (2002) (U.S. Court of Federal Claims denied U.S. motion for summary judgment based on ruling that there was a factual dispute as to whether, post-SWANCC, a sufficient jurisdictional nexus existed between the wetlands at issue and navigable waters.)

District Court and Court of Appeals Decisions Favoring a Broad Interpretation of SWANCC

Other decisions taking a less broad approach and holding that particular areas or waters were not jurisdictional include the following. It is to be noted that both Harken and Needham involve the Oil Pollution Control Act, not Section 404 of the Clean Water Act:

Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir., 2001), reh'g (en banc) denied, 263 F.3d 167 (2001) (Court of Appeals held in an Oil Pollution Act case that discharges onto dry land which seeped through the ground into groundwater which, in turn, contaminated several intermittent streams was not jurisdictional under the Oil Pollution Act where there was little evidence in the record concerning how often the creek runs, how much water flows in it, and whether the creek ever flowed into a navigable body of water.)

United States v. Needham, 2002 WL 1162790 (W.D. La. Ja. 22, 2002); rev'd by In re Needhman, 354 F.3d 340, (5th Cir. (2003). (District court held that an oil spill which was pumped into a drainage ditch the spilled into Bayou Cutoff and then into Bayou Flose, a water body adjacent to Company Canal which ultimately flowed into the Gulf of Mexico, was not jurisdictional. This was reversed on appeal because Bayou Flose was considered “adjacent” to Company Canal, a navigable water. The court, however, in dicta, endorsed a broad interpretation of SWANCC.

United States v. RGM Corp., 222 F. Supp. 2d 780 (E.D. Va., 2002), appeal pending, No. 02-2093 (4th Cir.) (District court held that Corps lacked regulatory jurisdiction over wetlands at issue.)

Court of Appeals Decisions Focusing Upon Corps of Engineers Fact-Finding for CWA Jurisdiction But Providing Neither Broad Nor Narrow Interpretations of SWANNC

City of Shoreacres v. Waterworth, 04-20527 (5th Cir. , 2005) (Court of Appeals refused to consider question whether Corps of Engineers abused its discretion in concluding that it could exercise regulatory jurisdiction over only 19.7 acres of wetland (post SWANCC) in contrast with 102 plus acres (pre SWANCC) because the Corps provided “ample mitigation to compensate for the loss of all aquatic areas on the site that will be filled in or otherwise degraded by the project” utilizing the 102 acres plus figure.)

APPENDIX D: SELECTED READINGS AND RECOMMENDED WEB SITES

SELECTED READINGS

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