

In The
Supreme Court of the United States

JOHN A. RAPANOS, et ux., et al.,
Petitioners,

v.

UNITED STATES,
Respondent.

JUNE CARABELL, et al.,
Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, et al.,
Respondents.

ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

**BRIEF OF AMICI CURIAE ASSOCIATION OF STATE WETLAND MANAGERS,
ASSOCIATION OF STATE FLOODPLAIN MANAGERS, AND NEW ENGLAND
INTERSTATE WATER POLLUTION CONTROL COMMISSION IN SUPPORT OF
RESPONDENT UNITED STATES**

STEPHEN M. JOHNSON
MERCER UNIVERSITY
SCHOOL OF LAW
1021 Georgia Avenue
Macon, Georgia 31207
(478) 301-2192

*Counsel for Amici Curiae
Association of State Wetland
Managers, et. al.*

PATRICK PARENTEAU
ENVIRONMENTAL AND NATURAL
RESOURCES LAW CLINIC
VERMONT LAW SCHOOL
PO Box 300
South Royalton, Vermont 05068
(802) 831-1305

*Counsel of Record for Amici Curiae
Association of State Wetland
Managers, et. al.*

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Water Pollution Control Act of 1948, ch. 758, 62 Stat. 1155	
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------------------------------------	--

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LEGISLATIVE HISTORY

Congressional Research Service, 95 th Cong., 1 st Sess., Legislative History of the Federal Water Pollution Control Act Amendments, Vol. 2 (1973) (Senate Committee Report)	
H.R. Rep. 87-306 (Apr. 25, 1961), <i>reprinted in</i> 1961 U.S.C.C.A.N. 2076.....	
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COURT RULES

S. Ct. R. 37.3(a) and 37.6	
----------------------------------	--

OTHER REFERENCES

Alexander, R.B., R.A. Smith and G.E. Schwartz, <i>Effect of stream channel size on the delivery of nitrogen to the Gulf of Mexico</i> . Nature 403 (2000)	
Association of State Wetland Managers, State Wetland Programs, <i>available at</i> http://www.aswm.org/swp/statemainpage9.htm	
CENR, <i>Integrated Assessment of Hypoxia in the Northern Gulf of Mexico</i> . National Science and Technology Council Committee on Environment and Natural Resources, Washington, D.C. (2000).....	
Chesapeake Bay Program, referenced in Fn. 45, <i>available at</i> http://chesapeakebay.net	
Craun, G.F., F.S. Hauchman and D.E. Robinson (eds.), <i>Microbial Pathogens and Disinfection By-Products in Drinking Water: Health Effects and Management of Risks</i> . ILSI Press, Washington, D.C. (2001).....	

- Cuyuhoga River Contamination, referenced in Fn. 2, *available at*
<http://www.epa.gov/glnpo/aoc/Cuyahoga.html>
- Dahl, Thomas E., *Status of Trends of Wetlands in the Conterminous United States 1986-1997* (U.S. Fish and Wildlife Service 2000).....
- Dieterich, M. and N.H. Anderson, *Dynamics of abiotic parameters, solute removal and sediment retention in summer-dry headwater stream of Western Oregon*. *Hydrobiologia* 379 (1998).....
- Gomi, T., R.C. Sidle and J.S. Richardson, *Understanding Processes and Downstream Linkages of Headwater Systems*. *Bioscience* 52 (2002).....
- Goolsby, D.A., W.A. Battaglin, G.B. Lawrence, R.S. Artz, B.T. Aulenbach, R.P. Hooper, D.R. Keeney and G.J. Stensland. *Flux and Sources of Nutrients in the Mississippi-Atchafalaya River Basin: Topic 3 Report for the Integrated Assessment on Hypoxia in the Gulf of Mexico*. NOAA Costal Ocean Program Decision Analysis Series No. 17. NOAA Costal Ocean Program, Silver Spring, MD (1999), *available at*
http://www.nos.noaa.gov/Products/hypox_t3final.pdf
- Great Lakes Program, referenced in Fn. 44, *available at*
<http://www.epa.gov/glnpo/>
- Hall, K.J. and B.C. Anderson, *The toxicity and chemical composition of urban stormwater runoff*. *Canadian Journal of Civil Engineering* 15 (1988)
- Johnson, J.E., E. Weiss and S. Maclean, *Catalog of waters important for spawning, rearing, or migration of anadromous fishes – Interior Region*, Effective Jan. 15, 2005. Alaska Dept. of Fish and Game, Special Publication No. 04-04 (2004), *available at*
<http://www.sf.adfg.state.ak.us/FedAidPDFs/sp04-04.pdf>
- Lake Erie Pollution, referenced in Fn. 3, *available at*
<http://www.usatoday.com/news/science/enviro/2002-06-14-erie.htm>
- Larsen, J., *Dead Zones Increasing in World's Costal Waters*. *Eco-Economy Update* (June 16, 2004), *available at*
<http://www.earth-policy.org/Updates/Update41.htm>
- Leopold, Luna B., M. Gordon Wolman, J.P. Miller**, *Fluvial Processes in Geomorphology*. W.H. Freeman and Company San Francisco 1964
- Lieb, D.A. and R.F. Carline, *Effects of urban runoff from a detention pond on water quality, temperature and caged Gammarus minus (Say) (Amphipoda) in a headwater stream*. *Hydrobiologia* 441 (1/3) (1988).....
- Long Island Sound Study, referenced in Fn. 46, *available at*
<http://www.epa.gov/region01/eco/lis/epane.html>.....

- Lowe, W.H. and G.E. Likens, *Moving headwater streams to the head of the class*. Bioscience 55 (2005)
- Meyer, J.L. and J.B. Wallace, *Lost linkages in lotic ecology: rediscovering small streams*. Ecology: Achievement and Challenge (M.C. Press, N.J. Huntly and S. Levin, eds., Blackwell Science) (2001)
- Mitsch, W.J., J.W. Day, Jr., J.W. Gilliam, P. Groffman, D.L. Randall and N. Wang, *Reducing nitrogen loading to the Gulf of Mexico from the Mississippi River basin: Strategies to counter a persistent ecological problem*. Bioscience 52(2) (2002)
- Morrice, J.A., H.M. Valett, C.N. Dahm and M.E. Campana, *Alluvial characteristics groundwater-surface water exchange and hydrological retention in headwater streams*. Hydrological Processes 11 (1997)
- National Academy of Sciences, “Sedimentation Control to Reduce Maintenance Dredging of Navigational Facilities in Estuaries” (1987)
- National Research Council, Wetlands: Characteristics and Boundaries. National Academy Press, Washington, D.C. (1995)
- Novotny, V., Water Quality: Diffuse Pollution and Watershed Management, (2nd ed.). John Wiley & Sons, Inc., New York, N.Y. (2002)
- Oberstar, Hon. James, *The Clean Water Act in Peril*, House Committee on Transportation (Oct. 18, 2002), available at http://www.house.gov/transportation_democrats/Of_Interest/021017_CleanWaterActRept.pdf
- Rabalais, N.N., R.E. Turner and D. Scavia, *Beyond Science into policy: Gulf of Mexico hypoxia and the Mississippi River*. Bioscience 52(2) (2002)
- Santa Barbara Oil Spill, referenced in Fn. 4, available at <http://www.countyofsb.org/energy/information/1969blowout.asp>
- State of Ohio Environmental Protection Agency, *Nonpoint source impacts on primary headwater streams* (2003), available at http://www.epa.state.oh.us/dsw/wqs/headwaters/HWH_nonpoint_jan2003.pdf
- U.S. Army Corps of Engineers, The Highway Methodology Workbook Supplement; Wetlands Functions and Values, a Descriptive Approach. NEDEP-360-1-30a; New England Division (1995), available at <http://www.nae.usace.army.mil/reg/hwsplmnt.pdf>
- U.S. Environmental Protection Agency, A Benefits Assessment of Water Pollution Control Programs Since 1972: Part 1, The Benefits of Point Source Controls for Conventional Pollutants in Rivers and Streams (Jan. 2000), available at <http://www.epa.gov/ost/economics/assessment.pdf>

- U.S. Environmental Protection Agency, *Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy*. EPA-800-R-96-002 (1996), Office of Water (4101), available at <http://www.epa.gov/water/liquidassets/assets.pdf>.....
- U.S. Environmental Protection Agency, *Liquid Assets 2000: America's Water Resources at a Turning Point*. EPA-840-B-00-001(2000), Office of Water (4101), available at <http://www.epa.gov/water/liquidassets/assets.pdf>.....
- U.S. Environmental Protection Agency, FACTOIDS: Drinking Water and Ground Water Statistics for 2004. Safe Drinking Water Information System (SDWIS) (2006), available at http://www.epa.gov/safewater/data_factoids_2004.pdf
- Wipfli, M.S. and D.P. Gregovich, *Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska: Implications for downstream salmonid production*. *Freshwater Biology* 47 (2002)

INTEREST OF AMICI¹

The Association of State Wetland Managers (ASWM), the Association of State Floodplain Managers (ASFPM), and the New England Interstate Water Pollution Control Commission (NEIWPCC) submit this brief in support of Respondent United States. ASWM is a nonprofit membership organization established in 1983 to enhance protection and management of wetland resources, to promote application of sound science to wetland management efforts, and to provide training and education for our members and the public. ASFPM is an organization of professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, and flood preparedness, warning and recovery. NEIWPCC is a nonprofit interstate agency established by an Act of Congress in 1947 that serves and assists its member states in the Northeast by providing coordination, public education, research, training, and leadership in water management and protection.

INTRODUCTION AND SUMMARY OF ARGUMENT

The Federal Water Pollution Control Act Amendments of 1972, the modern Clean Water Act (Act), established a national commitment to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. The Act has been instrumental in improving the health of rivers, lakes, and coastal waters. It has stopped billions of pounds of pollution from fouling the water, saved thousands of acres of wetlands, protected public water supplies, and dramatically increased the number of waterways that are safe for swimming and fishing. Yet much remains to be done. Nearly forty percent of the nation’s waters still do not meet water quality standards. Continued progress depends on how the Court resolves the fundamental jurisdictional issues presented in these consolidated cases.

Petitioners offer crabbed and unscientific interpretations of the term “waters of the United States” as used in the Act. Rapanos asserts that the Act reaches no farther than “traditionally navigable waters” and wetlands that “physically abut” them. By this measure the vast majority of the waters of the United States that Congress intended to protect, and many of the sources of pollutants that Congress intended to regulate, would lie outside the geographic scope of the Act. Such a dramatic reduction in the Act’s scope at this late date would wreak havoc within a broad spectrum of water quality programs at every level of government.

Carabell takes a somewhat different tack, arguing that “waters of the United States” can never include a body of water that lacks a “physical connection” to a traditional navigable water. According to Carabell’s theory, the Environmental Protection Agency (EPA) and the Army Corps of Engineers (Corps) must prove such a connection

¹ Pursuant to S. Ct. R. 37.3(a) and 37.6, the undersigned represents that (1) all parties consented to the filing of this brief, (2) no counsel for any party authored this brief in whole or part, and (3) no person or entity other than the above-named amici curiae and their counsel made a monetary contribution to the preparation or submission of this brief.

for every discharge permit, a wholly unworkable and unnecessary requirement that would impose substantial costs on both the government and permit applicants.

There is no merit to either of these novel jurisdictional theories.

First, petitioners' statutory interpretations flatly contradict Congressional intent. Both as initially enacted in 1972 and as amended in 1977, Congress made it clear that the purpose of the Clean Water Act was to restore and maintain the integrity of the nation's waters by controlling polluting discharges at the source. Congress intentionally abandoned its previous reliance on concepts of navigability and instead made water quality and ecological integrity the touchstones of the statutory and regulatory program. Moreover, Congress repeatedly demonstrated its commitment to protecting wetlands as key components of aquatic ecosystems. Significantly, in 1977 Congress rejected proposals to reduce the geographic scope of the section 404 permit program as petitioners suggest.

Second, petitioners misconstrue this Court's unanimous decision in *Riverside Bayview*. Contrary to Rapanos' argument, *Riverside Bayview* did not hold that adjacent wetlands must "physically abut" a traditional navigable water. Rather the Court upheld the Corps' broad, programmatic interpretation of "waters of the United States" as including the entire tributary system of navigable waters and adjacent wetlands. Further, contrary to Carabell's argument, *Riverside Bayview* did not require proof of a "physical connection" between wetlands and navigable waters. Rather the Court deferred to the Corps' expert judgment that wetlands in close proximity to "waters of the United States" were "within the class of waters" subject to regulation under the Act.

Third, petitioners' reliance on *SWANCC* is misplaced. *SWANCC* held that the Corps overreached when it asserted jurisdiction over an "isolated" sand and gravel pit used by migratory birds. Here, the Corps has asserted jurisdiction over wetlands that are "adjacent to," and "inseparably bound up" with, tributaries of navigable waters within the meaning of *Riverside Bayview* as reaffirmed in *SWANCC*.

Fourth, the weight of judicial authority strongly supports the agencies interpretation here. Petitioners' reliance on the minority view of the Fifth Circuit, expressed in dictum, is misplaced in light of the countervailing authority as reflected in the thorough and well reasoned decisions of the Fourth Circuit in the *Deaton* case and the Seventh Circuit in *Gerke*.

Finally, petitioners' arguments that the regulation of these wetlands raises Federalism concerns under the Commerce Clause are well off the mark. Under its broad power over the "channels of commerce," Congress has ample authority to prevent degradation of navigable waters by regulating discharges into nonnavigable tributaries and adjacent wetlands. Moreover, Congress has authority under the Commerce Clause to regulate the discharge of pollutants as a class of economic activity having, in the aggregate, a substantial effect on interstate commerce.

For all of these reasons, Amici respectfully request that the judgment of the Sixth Circuit in each of these cases be affirmed.

ARGUMENT

I. BY DEFINING “NAVIGABLE WATERS” TO MEAN “WATERS OF THE UNITED STATES” CONGRESS MEANT TO EXPAND THE GEOGRAPHIC SCOPE OF THE CLEAN WATER ACT TO INCLUDE TRIBUTARIES AND ADJACENT WETLANDS

The Clean Water Act prohibits the discharge of pollutants, including dredge or fill material, into “navigable waters” without a permit under sections 402 or 404 of the Act. 33 U.S.C. § 1331(a). The Act defines “navigable waters” as “waters of the United States including the territorial sea.” 33 U.S.C. § 1362(7). Regulations of the Corps and the EPA further define “waters of the United States” to include tributaries and adjacent wetlands. 33 C.F.R. § 328.3(a)(5)(7); 40 C.F.R. § 122.2. Petitioners challenge the validity of these regulations as applied to wetlands on their property. Thus, the crux of the issue here is whether the agencies’ interpretation of Congressional intent is entitled to deference under *Chevron U.S.A. v. Natural Resources Defense Council*, 467 U.S. 837 (1984) (*Chevron*).

It is axiomatic that, in determining the meaning of a statute, courts look not only to the particular statutory language, but to the design of the statute as a whole and to its object and policy. *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 291 (1988); *Bob Jones Univ. v. United States*, 461 U.S. 574, 586 (1983). Contrary to this core principle of statutory construction, petitioners insist on a literal reading of the words “navigable waters” that disregards the object, structure, policy, and historical context of the 1972 Act. To understand what Congress had in mind at that time, it helps to recall a few of the dramatic events that stirred it to action. The Cuyuhoga River was so contaminated with industrial waste it regularly caught fire.² Lake Erie was so polluted with untreated sewage scientists pronounced it “dead.”³ An oil spill in 1969 coated the beaches of Santa Barbara.⁴ A record-setting fish kill – 26 million fish – had just occurred in Lake Thonotasssa, Florida.⁵

These conditions did not arise overnight. Congress had enacted no less than six federal statutes in the previous 24 years in an effort to develop a workable approach to

² See <http://www.epa.gov/glnpo/aoc/cuyahoga.html> (accessed Jan. 5, 2006).

³ See <http://www.usatoday.com/news/science/enviro/2002-06-14-erie.htm> (accessed Jan. 5, 2006).

⁴ See <http://www.countyofsb.org/energy/information/1969blowout.asp> (accessed Jan. 5, 2006).

⁵ See Hon. James Oberstar, *The Clean Water Act in Peril*, 6, House Committee on Transportation (Oct. 18, 2002), available at http://www.house.gov/transportation_democrats/Of_Interest/021017_CleanWaterActRept.pdf (accessed Jan. 5, 2006).

pollution control,⁶ only to conclude that the entire effort had been “inadequate in every vital aspect.” Congressional Research Service, 95th Cong., 1st Sess., Legislative History of the Federal Water Pollution Control Act Amendments (hereafter “Leg. Hist.”) Vol. 2 at 1425 (1973) (Senate Committee Report). As this Court recognized in *Env’tl. Prot. Agency v. California ex rel. State Water Resources Bd.*, 426 U.S. 200, 203 (1976), the 1972 Act was passed to remedy these failings, including the complete failure of the federal enforcement program. Under the pre-1972 legislation, federal abatement suits were limited to pollution of interstate, navigable-in-fact, or coastal waters.⁷ As a result only one case had been brought between 1948 and 1972, and it failed.

Viewed against this backdrop, petitioners’ argument that Congress intended to do no more than tinker at the edges of federal navigability doctrines is unpersuasive. By defining “navigable waters” to mean “waters of the United States” Congress clearly signaled its intent to abandon the jurisdictional limits that had foiled its earlier attempts to cure the problem of water pollution. Importantly, it is Congress’ definition that is controlling, not, as petitioners would have it, the common law definition of traditional navigable waters. *Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon*, 515 U.S. 687, 697-98 n.10 (1995) (looking to the statutory definition of “take” instead of the common law definition). The legislative history strongly confirms Congress’ intent that the term “navigable waters” was to be given “the broadest possible constitutional interpretation.” S. Conf. Rep. No. 92-1236, at 144 (Sep. 28, 1972), *reprinted in* 1972 U.S.C.C.A.N. 3776, 3822. Indeed, even before the 1972 Act, Congress had broad power to regulate “navigable waters,” which included nonnavigable tributaries.⁸

Further, this Court has repeatedly recognized the comprehensive nature of the Act and its geographic scope. *See, e.g., City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304, 318 (1981) (Act was intended to “establish a comprehensive long-range policy for the elimination of water pollution.”); *see also Int’l Paper Co. v. Ouellette*, 479 U.S. 481, 486 n.6 (1986) (“While the Act purports to regulate only ‘navigable waters,’ this term has been considered expansively to cover waters not navigable in the traditional sense.”).

⁶ Water Pollution Control Act of 1948, ch. 758, 62 Stat. 1155; Federal Water Pollution Control Act Amendments of 1956, ch. 518, 70 Stat. 498; Federal Water Pollution Control Act Amendments of 1961, Pub. L. No. 87- 88, 75 Stat. 204; Water Quality Act of 1965, Pub. L. 89-234, 79 Stat. 903; Clean Water Restoration Act of 1966, Pub. L. No. 89-753, 80 Stat. 1246; Water Quality Improvement Act of 1970, Pub. L. 91-224, 84 Stat. 91.

⁷ *Id.* 1948 Act, §§ 2(d) and 3(e); 1956 Act §§ 8 and 11(e); 1961 Act §§ 8 and 8(f)(2); *see also* H.R. Rep. 87-306 (Apr. 25, 1961), *reprinted in* 1961 U.S.C.C.A.N. 2076, 2082-84 (definition of “navigable waters”).

⁸ *See* Section 13 of the Rivers and Harbors Act, also known as the Refuse Act, prohibiting *inter alia*, the “discharge . . . of any refuse matter . . . into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water.” 33 U.S.C. § 407 (emphasis added); *see also Oklahoma ex rel. Phillips v. Guy F. Atchison Co.*, 313 U.S. 508, 525 (1941) (Congress’ Commerce Clause power also extends to nonnavigable intrastate tributaries which flow into traditional navigable streams).

In the seminal case of *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985) (*Riverside Bayview*), the Court, after thoroughly examining the text, purpose, and history of the Act, reached the unanimous conclusion that Congress intended “to repudiate limits that had been placed on federal regulation by earlier pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed ‘navigable’ under the classical understanding of that term.” The Court reaffirmed *Riverside Bayview*’s core holding in *Solid Waste Auth. of Northern Cook County v. Corps of Engineers*, 531 U.S. 159 (2001) (SWANCC).⁹

II. RIVERSIDE BAYVIEW UPHELD THE AGENCIES’ INTERPRETATION THAT “WATERS OF THE UNITED STATES” INCLUDES TRIBUTARIES AND ADJACENT WETLANDS

Petitioner Rapanos contends that the decisions in *Riverside Bayview* and SWANCC establish a “strict significant nexus” requirement that can only be satisfied if wetlands “actually abut and are inseparably bound up with a traditional navigable water.” (Rapanos Br., 16). Petitioner Carabell contends that *Riverside Bayview* and SWANCC together stand for the proposition that the Corps must establish a “continuous hydrological connection,” via surface or groundwater, between a wetland and a navigable water before it can assert jurisdiction. (Carabell Br., 23-28). Petitioners misconstrue both decisions.

A. *Riverside Bayview*

As framed by the Court, the issue in *Riverside Bayview* was whether the Corps had authority to require landowners to obtain permits “before discharging fill material into wetlands adjacent to navigable bodies of water and their tributaries.” 474 U.S. at 123 (emphasis added). The Court answered in the affirmative: “We are thus persuaded that the language, policies and history of the Clean Water Act compel a finding that the Corps has acted reasonably in interpreting the Act to require permits for the discharge of fill material into wetlands adjacent to the ‘waters of the United States’.” *Id.* at 139. The Court specifically found that Congress intended the term “waters of the United States” to be given broad geographic scope because “[p]rotection of aquatic ecosystems . . . demanded broad federal authority to control pollution” at the source. *Id.* at 132-33.

Petitioners, however, seize on the fact that the wetland at issue in *Riverside Bayview* was adjacent to a navigable creek that flowed into Lake St. Clair, and attempt to draw two untenable inferences. First, Rapanos argues that the Court’s holding must be limited to wetlands that “immediately abut” navigable waters. However, a careful reading of the Court’s rationale rebuts this suggestion.

⁹ As explained in II. B., *infra*, SWANCC’s holding that certain “isolated” waters were not within the Act’s scope is inapposite given the facts presented here.

The threshold question in *Riverside Bayview* was whether the EPA and Corps regulations defining “waters of the United States” to include wetlands was a reasonable interpretation of the statute.¹⁰ The regulations in existence at the time covered the entire tributary system of navigable waters, including “primary, secondary and tertiary” tributaries and wetlands adjacent thereto.¹¹ Significantly, the Court acknowledged that the regulations “include not only 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.” 474 U.S. at 123 (emphasis added). Moreover, the Court took note of the fact that Congress had rejected proposals in 1977 to overturn these regulations by restricting the scope of section 404 to “waters navigable in fact and their adjacent wetlands.” 474 U.S. at 137 (emphasis original). Instead, Congress “acquiesced in the Corps’ definition of waters as including adjacent wetlands.” *Id.* at 138. Finally, the Court stated “we therefore conclude that a definition of ‘waters of the United States’ encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.” *Id.* at 135 (emphasis added).

In sum, the *Riverside Bayview* decision cannot fairly be read as establishing a categorical rule that wetlands must “immediately abut” a traditional navigable water. To the contrary, the Court issued a broad ruling that the Corps had authority to regulate adjacent wetlands as a special jurisdictional class of “waters of the United States.” *Id.* at 139 (“The regulation in which the Corps has embodied this interpretation by its terms includes the wetlands on respondent’s property within the class of waters that may not be filled without a permit.”) (emphasis added).

Second, Carabell stretches too far in suggesting that the *Riverside Bayview* Court conditioned its holding on proof of a hydrological connection between the adjacent wetland and a navigable water body. Contrary to Carabell’s assertion (Carabell Br., 25 n.3), the District Court in *Riverside* did not find a direct hydrological connection between the wetland and Lake St. Clair. At most, according to the Sixth Circuit opinion, the record showed that there was “periodic” flooding of the wetland.¹² More significantly, the *Riverside Bayview* Court specifically rejected the argument, on which the Sixth Circuit had relied, that a wetland must be “frequently flooded” by a navigable water in order to be considered a “water of the United States.” 474 U.S. at 129. Indeed, the Court said that “wetlands that are not flooded by adjacent waters may still tend to drain into those waters.” *Id.* Moreover, the Court noted that Congress singled out wetlands for special protection because of the important functions they perform including filtering pollutants, slowing runoff, controlling flooding, and providing feeding, spawning, rearing and

¹⁰ As the Court noted: “On a purely linguistic level, it may appear unreasonable to classify ‘lands,’ wet or otherwise, as ‘waters’. Such a simplistic response, however, does justice neither to the problem faced by the Corps in defining the scope of its authority under § 404 nor to the realities of the problem of water pollution that the Clean Water Act was intended to combat.” 474 U.S. at 132.

¹¹ See 33 C.F.R. § 209.120(e)(2)(c); 40 Fed. Reg. 31,320 (July 25, 1975) (since recodified at 33 C.F.R. § 328.3).

¹² *United States v. Riverside Bayview Homes, Inc.*, 729 F.2d 321, 396-97 (6th Cir. 1984).

resting areas for aquatic species. *Id.* at 134. As discussed in III. B., *infra*, these functions do not depend on whether there is a “physical connection” between the wetland and the adjacent water body.

Finally, petitioners misread the *Riverside Bayview* Court by suggesting that its use of the term “open waters” implied “traditional navigable waters.” (Rapanos Br., 13; Carabell Br., 25-26) Petitioners cite a footnote in which the Court reserved the question of “the authority of the Corps to regulate discharges of fill material into wetlands that are not adjacent to bodies of open water.” 474 U.S. at 131 n.8. However, as the Solicitor General has pointed out, “when that footnote is read in context it is clear that the Court in *Riverside Bayview* was reserving the question of jurisdiction over wetlands that are isolated from, rather than adjacent to, any other regulated waters, without regard to those waters’ navigability.” See Brief for the United States in Opposition to the Petition for Certiorari, 15. Moreover, petitioners’ argument that “open waters” is synonymous with “navigable waters” conflicts with *Riverside Bayview*’s clear holding that “a definition of waters of the United States encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.” *Id.* at 135. More plausibly, the Court used “open waters” as shorthand for “rivers, streams, and other hydrographic features more conventionally identified as ‘waters’,” to distinguish them from wetlands areas such as “shallows, marshes, mudflats, swamps and bogs.” 474 U.S. at 131-32.

B. SWANCC REAFFIRMED RIVERSIDE BAYVIEW

Just as *Riverside Bayview* recognized the breadth of the Act’s geographic scope, *SWANCC* noted its limits. In *SWANCC* the Corps asserted jurisdiction over an abandoned sand and gravel pit on the sole basis that it had become habitat for migratory birds. 531 U.S. at 171-72. Noting that the pit was a “nonnavigable, intrastate, isolated” body of water, the *SWANCC* Court rejected this construction of the statute, reasoning that if use by migratory birds was all it took to turn an isolated pond into a water of the United States, then the word “navigable” in the statute would be rendered superfluous. *Id.* at 172. While acknowledging *Riverside Bayview*’s observation that the word “navigable” was “of limited import,” the *SWANCC* Court said, “it is one thing to give a word limited effect and quite another to give it no effect whatever.” *Id.* The Court clearly differentiated the case before it from *Riverside Bayview*: “We thus decline respondents’ invitation to take what they see as the next ineluctable step after *Riverside Bayview Homes*: holding that isolated ponds, some only seasonal, wholly located within two Illinois counties, fall under § 404(a)’s definition of ‘navigable waters’ because they serve as habitat for migratory birds.” *Id.* at 171-72.

SWANCC did not, as petitioners seem to suggest, implicitly overrule *Riverside Bayview* by making navigability rather than protection of aquatic ecosystems the touchstone for determining Clean Water Act jurisdiction. The ruling in *SWANCC* was quite narrow: “We hold that 33 CFR § 328.3(a)(3) (1999), as clarified and applied to petitioner’s balefill site pursuant to the ‘Migratory Bird Rule,’ exceeds the authority granted to respondents under § 404(a) of the CWA.” *Id.* at 174 (citation omitted). Thus, *SWANCC* invalidated the Corps’ application of its regulations to isolated ponds based

exclusively on migratory bird use.¹³ The Court did not invalidate the regulations themselves, nor did it make any ruling on the adjacency issues presented here.

The cases at bar are easily distinguished from *SWANCC*. First, these cases deal with wetlands adjacent to nonnavigable tributaries, not isolated, artificial ponds with no connection of any kind to any other body of water. Second, unlike gravel pits, these wetlands provide the specific functions that help maintain the chemical, physical, and biological integrity of the adjoining waters as well as the larger aquatic ecosystems.¹⁴ Third, the Corps based its jurisdictional determinations on the hydrological and ecological relationships of these wetlands to the adjoining water bodies and the downstream navigable waters, not simply on migratory bird habitat.¹⁵ With regard to the Rapanos property, it is undisputed that the wetlands are hydrologically connected to the adjacent tributaries, which ultimately flow into Lake Huron.¹⁶ In Carabell, the record shows that the wetland is not “isolated” despite the existence of a manmade “berm” separating it from a ditch that connects to a tributary that flows into Lake St. Clair.¹⁷ In

¹³ The “Migratory Bird Rule” was not a published rule; it refers to language in the preamble to the 1986 revision of the Corps’ regulations meant to “clarify” the reach of jurisdiction over intrastate waters used by migratory birds. *See SWANCC*, 531 U.S. at 164.

¹⁴ These functions include flood peak diminution and water quality enhancement through sediment trapping and nutrient recycling. JA Vol. II at 684-86 (testimony of Dr. Willard). They also support the larger aquatic ecosystem, including carp spawning ground, *Id.* at 516-17 (testimony of Dr. Harrington), and other vegetation and wildlife habitat. *Id.* at 557-58 (testimony of Dr. Goff).

¹⁵ The Corps’ determinations in this case rested on the general adverse effects on the aquatic ecosystem and downstream waters, including major, long term, negative impacts on water quality, as well as impacts upon the ecological balance and integrity of forested wetland cover areas and floodplains, in addition to the impacts upon a migratory bird stopover and foraging point. JA Vol. 1 at 111, 116, 126 (Dept. of the Army Permit Evaluation, File No. 99-250-002-1).

¹⁶ The wetlands at the Salzburg site are connected by a drain to Hoppler Creek which flows into the Kawkawlin River, which flows into Saginaw Bay in Lake Huron. JA Vol. I at 249 (testimony of Drs. Willard and Goff). The Hines site has a surface water connection to the Rose Drain which is connected to the Tittabiwassee River which empties into Saginaw Bay. *Id.* The Pine River site is connected by surface water flow to the nearby Pine River which flows into Lake Huron. JA Vol. I at 271.

¹⁷ Carabell’s property is in the shape of a right triangle, which is bordered by an unnamed ditch. JA Vol. 1, at 37 (Carabell Permit Application). The record indicates that this ditch was created to drain the wetland on petitioner’s property. JA Vol. 3 at 571-72 (Administrative Appeal Decision). When the ditch was excavated from the wetland, the excavated spoil was placed alongside the ditch to create an artificial berm. *Id.* Army Corps regulations provide that the existence of a man-made spoil berm does not eliminate the adjacency between this wetland and the navigable waters beyond. 33 C.F.R. § 328.3(c); JA Vol. 3 at 570. Though the berm limits surface water flow to the ditch, JA Vol. 1 at 110 (Dept. of the Army Permit Eval.), it cannot eliminate sub-surface flow. Water also flows from the wetland via drainage cuts in the ditch. JA Vol. 3 at 639: 16-23 (Wetland Application Hearing, Testimony of Timothy Stoeper). Water that enters the unnamed ditch flows into the Sutherland-Oemig Drain and eventually the Auvase Creek and Lake St. Clair. JA Vol. 1 at 107 (Dept. of the Army Permit Eval.); JA Vol. 3 at 571-72 (Admin. Appeal Decision).

both cases the wetlands are “inseparably bound up” with tributaries that affect the chemical, physical, and biological integrity of traditional navigable waters. *See United States v. Deaton*, 332 F.3d 698, 712 (4th Cir. 2003), *cert. denied*, 541 U.S. 972 (2004) (“discharges into nonnavigable tributaries and adjacent wetlands have a substantial effect on water quality in navigable waters.”) (Deaton); *accord, United States v. Gerke Excavating Inc.*, 412 F.3d 804, 807 (7th Cir. 2005) (Gerke); *Headwaters, Inc. v. Talent Irrigation Dist.*, 243 F.3d 526, 533-34 (9th Cir. 2001) (Headwaters).

Contrary to Rapanos’ contention, *SWANCC* does not categorically prohibit federal regulation of wetlands that do not immediately abut a traditional navigable water. Nor is it reasonable to infer such a rigid rule from the *SWANCC* Court’s reference to what it called the “significant nexus” test employed in *Riverside Bayview*. Indeed, the *Riverside Bayview* Court made it clear that a broad, ecological test for the Act’s jurisdiction was more appropriate than one based strictly on navigability. 474 U.S. at 134 (“water moves in hydrologic cycles,” and pollution of waters that do not themselves meet traditional tests of navigability “will affect the quality of the other waters within that aquatic system.”).

Similarly, Carabell is incorrect in asserting that *SWANCC* “repudiated the proposition that federal jurisdiction could be based solely on an ecological connection between a wetland and a navigable water.” (Carabell Br., 28). The question in *SWANCC* was whether migratory bird habitat by itself was a sufficient basis on which to regulate an isolated, artificial pond. The question here is whether the Corps made a reasonable determination, based on the best available information, that the wetlands on Carabell’s property are hydrologically and ecologically connected, via surface and groundwater, to Lake St. Clair. The record shows that the Corps’ decision was not arbitrary and it should therefore be upheld. *See City of Shoreacres v. Watterworth*, 420 F.3d 440, 446 (5th Cir. 2005) (“The Corps generally has broad discretion to decide whether a sufficient hydrological nexus exists to bring wetlands under regulatory control.”).

III. THE AGENCIES’ INTERPRETATION OF “WATERS OF THE UNITED STATES” IS BASED ON SOUND SCIENCE AND POLICY CONSIDERATIONS

A. Jurisdictional Determinations Must Be Made Within a Watershed Context That Takes Account of the Vital Role of Headwaters and Associated Wetlands

A watershed is composed of rivers, streams, lakes, wetlands and estuaries in a treelike pattern with the leaves and twigs (first and second order streams, ditches, and wetlands) at the top of the tree forming the headwaters of a watershed linked by branches (tributaries of ever-increasing size) that reach to the trunk of the tree (mainstem) and extend to the roots (estuary). Like a tree, each part of the watershed performs specific roles or functions that cannot be performed by other parts of the tree. Eliminating and altering small streams, ditches, and wetlands have impacts similar to stripping the outermost leaves and twigs from a tree. Small alterations have little impact, but many alterations in aggregate severely impair the overall health of the tree. Over the past 200

years half the wetlands in the United States have been drained or filled, and millions of miles of streams and rivers have been straightened and altered.¹⁸

Headwaters serve as a key transitional area between land and water resources because they collect water, sediment, energy, and chemicals from the surrounding landscape and deliver them to the larger streams, rivers, lakes, estuaries, and oceans downstream, linking the terrestrial habitats in the upper watershed with the aquatic habitats in the lower watershed.¹⁹ This happens because water moves slowly through these areas allowing these chemical processes to work. Headwaters also regulate salinity and fertility of estuaries and coastal areas.²⁰ Consequently, a close connection exists between the water quality of the headwater streams and the water quality of downstream water bodies.²¹

B. Headwaters and Adjacent Wetlands Provide Irreplaceable Ecosystem Services That Support Many Beneficial Uses of Navigable Waters

Headwater streams and associated wetlands affect hydrology, geomorphology, and biological conditions in downstream reaches, including navigable waters.²² Functions of headwater streams include but are not limited to: regulation of sediment export, retention of nutrients, maintenance of water quality characteristics, processing of terrestrial organic matter, and maintenance of natural discharge patterns.²³ The following list further summarizes the functions and values of headwater streams.

Sediment Control Headwaters and associated wetlands reduce the amount of sediment delivered to downstream waters by stabilizing stream banks to reduce bank erosion and filtering sediment from water and runoff.²⁴ This overall reduction in sediment

¹⁸ See Thomas E. Dahl, *Status and Trends of Wetlands in the Conterminous United States 1986 to 1997*, 9 (U.S. Fish & Wildlife Service 2000).

¹⁹ Morrice, J.A., H.M. Valett, C.N. Dahm and M.E. Campana. 1997. *Alluvial characteristics groundwater-surface water exchange and hydrological retention in headwater streams*. Hydrological Processes 11:253-267; Wipfli, M.S. and D.P. Gregovich. 2002. *Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska: Implications for downstream salmonid production*. Freshwater Biology 47(5):957-969(13).

²⁰ National Research Council. 1995. *Wetlands: Characteristics and Boundaries*. National Academy Press, Washington, D.C., p. 287.

²¹ State of Ohio Environmental Protection Agency. 2003. *Nonpoint source impacts on primary headwater streams, at* http://www.epa.state.oh.us/dsw/wqs/headwaters/HWH_nonpoint_jan2003.pdf (accessed Jan. 5, 2006) (hereafter, Ohio EPA 2003).

²² Gomi, T., R. C. Sidle and J. S. Richardson. 2002. *Understanding processes and downstream linkages of headwater systems*. BioScience 52:905-916.

²³ Lowe, W. H. and G. E. Likens. 2005. *Moving headwater streams to the head of the class*. BioScience 55:196-197, p. 196.

²⁴ Dieterich, M. and N.H. Anderson. 1998. *Dynamics of abiotic parameters, solute removal and sediment retention in summer-dry headwater stream of Western Oregon*. Hydrobiologia 379:1-15.

decreases the need for and cost of dredging in downstream waterways while lowering flood frequency, water treatment costs, and deposition in downstream habitats.²⁵ Each year the Corps of Engineers and contractors spend more than \$500 million annually on maintenance dredging of navigable waters.²⁶

Pollutant Control The smallest streams are responsible for most nutrient removal.²⁷ Headwaters and associated riparian buffers reduce the amount of nutrients and other pollutants delivered to downstream waters by filtering them from water and runoff.²⁸ Nutrients are removed from streams by biotic and abiotic (e.g. physical or chemical) processes; headwaters are more efficient at nutrient transformation and removal, which reduces nutrient loading in downstream ecosystems and improves water quality.²⁹ This overall reduction in pollutants decreases the cost of water treatment, the degradation of downstream water quality, and the risks to human health and aquatic life while improving recreational opportunities such as fishing.³⁰

Filtering Capacity Because of the filtering capacity of headwaters and associated wetlands and buffers, headwater streams are essential for the maintenance of many of the fish species in the United States, including the commercially important species of trout and salmon. These sensitive fish species rely upon the filtering capacity of wetlands and headwaters to maintain a high level of water quality in receiving streams.³¹

Fish and Wildlife Habitat Headwaters and associated riparian buffers provide habitat and protection for wildlife, fish, and other organisms living in and near the stream. They also serve as migratory corridors for birds and fish. These areas can improve or maintain biological integrity, stabilize stream banks, and control water temperatures in the downstream system. They also provide recreational hunting and

²⁵ Ohio EPA 2003.

²⁶ National Academy of Sciences, “Sedimentation Control to Reduce Maintenance Dredging of Navigational Facilities in Estuaries” (1987).

²⁷ Meyer, J.L. and J.B. Wallace. 2001. *Lost linkages in lotic ecology: Rediscovering small streams*. Ecology: Achievement and Challenge (M.C. Press, N.J. Huntly and S. Levin eds., Blackwell Science), at 310.

²⁸ Hall, K.J., and B.C. Anderson. 1988. *The toxicity and chemical composition of urban stormwater runoff*. Canadian Journal of Civil Engineering 15:98-106; Lieb, D.A., and R.F. Carline. 2000. *Effects of urban runoff from a detention pond on water quality, temperature and caged Gammarus minus (Say) (Amphipoda) in a headwater stream*. Hydrobiologia 441 (1/3):107-116; Alexander, R.B., R.A. Smith and G.E. Schwarz. 2000. *Effect of stream channel size on the delivery of nitrogen to the Gulf of Mexico*. Nature 403:758-761.

²⁹ Meyer and Wallace 2001, at 309.

³⁰ Ohio EPA 2003.

³¹ For example, the State of Alaska has identified 16,000 streams, rivers or lakes as being important for the spawning, rearing or migration of anadromous fish. Johnson, J.E., E. Weiss and S. Maclean. 2004. “Catalog of waters important for spawning, rearing, or migration of anadromous fishes - Interior Region, Effective Jan. 15, 2005.” Alaska Dep’t. of Fish and Game, Special Publication No. 04-04, available at <http://www.sf.adfg.state.ak.us/FedAidPDFs/sp04-04.pdf> (accessed Jan. 5, 2006).

fishing opportunities and aesthetic enjoyment and may increase property values.³² Degradation of headwater streams reduces biological diversity and threatens the survival and recovery of endangered species.³³

Water Supply Headwaters serve as a source of water for downstream water bodies, helping to maintain base flow in the larger streams and rivers in times of drought. They also may be sources of high quality drinking water in some areas.³⁴ Over 185 million people are served by over 14,000 public water systems using streams, rivers, lakes, tributaries and surface-water storage impoundments.³⁵ Discharge of agricultural, industrial, sanitary or other waste into any surface water poses a public health risk downstream: excessive upstream discharge may overwhelm a public water system filtration unit, allowing microbial pathogens into the drinking water system.³⁶ Disease outbreaks attributed to drinking water treatment plant failures have been documented.³⁷ EPA's Science Advisory Board cited drinking water contamination by pathogens as one of the most important environmental risks.³⁸ Drinking water treatment to address microbial pathogens has little effect on many toxic chemicals, metals and pesticides discharged into drainage ditches, canals or other surface waters.³⁹

Flood Control Headwaters are closely connected with groundwater, wetlands, and subsurface water flows, and are important in regulating the flow of water into downstream water bodies. A healthy network of headwater streams can regulate baseflow of downstream water bodies, thereby reducing local and downstream flooding, mitigating low flow and high flow extremes, and preventing excess erosion caused by flooding.⁴⁰ The destruction of small streams, such as headwaters and intermittent or ephemeral waters, can increase the flood frequency in the watershed and change water flow patterns.⁴¹ Increases in flood frequency results in increases in bank erosion, channel widening, and channel incision.⁴²

³² Ohio EPA 2003.

³³ Meyer and Wallace 2001, at 310.

³⁴ Ohio EPA 2003.

³⁵ U.S. Environmental Protection Agency. 2005. FACTOIDS: Drinking Water and Ground Water Statistics for 2004. Safe Drinking Water Information System (SDWIS), at http://www.epa.gov/safewater/data/pdfs/data_factoids_2004.pdf (accessed Jan. 5, 2006).

³⁶ Novotny, V. 2002. *Water Quality: Diffuse Pollution and Watershed Management* (2nd Ed.). John Wiley & Sons, Inc., New York, NY.

³⁷ Craun, G.F., F.S. Hauchman and D.E. Robinson (eds.). 2001. *Microbial Pathogens and Disinfection By-Products in Drinking Water: Health Effects and Management of Risks*. ILSI Press, Washington, DC.

³⁸ 68 Fed. Reg. 47,646. (Aug. 11, 2003).

³⁹ Novotny 2002.

⁴⁰ Ohio EPA 2003.

⁴¹ Meyer and Wallace 2001, at 307.

⁴² *Id.*

C. Over Forty Percent of the Wastewater Discharges Authorized Under the Act, Excluding Alaska, Are Located in Headwaters.

According to a recent EPA estimate, over forty percent of the discharges authorized under section 402 of the Act, outside of Alaska, are into headwater streams including intermittent and ephemeral streams. *See* Appendix A, at 2.⁴³ Of these discharges, approximately 28% are from municipal sewage treatment systems. The other 72% include an array of discharges from over 500 industrial categories, ranging from elementary and secondary schools to petroleum refining to industrial organic chemical facilities. *Id.*

Limiting the jurisdiction of the Act to traditional navigable waters and adjacent wetlands would exclude a substantial number of discharges from its coverage.

D. Over Ninety Percent of the Surface Water Intakes for Public Drinking Water Systems Are Located in Headwaters.

EPA also estimates that over ninety percent of the identified source water protection areas, where the surface water intakes for public water supply systems are located, contain intermittent, ephemeral, or headwater streams. *See* Appendix A, at 2. EPA estimates that the public systems that use these intakes (as well as other sources) provide drinking water to over 110 million people. *Id.*

Limiting the jurisdiction of the Act to traditional navigable waters and adjacent wetlands could jeopardize these vital public drinking water supplies.

IV. LIMITING THE GEOGRAPHIC SCOPE OF THE ACT TO TRADITIONAL NAVIGABLE WATERS AND ADJACENT WETLANDS WILL UNDERMINE EFFORTS AT ALL LEVELS OF GOVERNMENT TO PROTECT AND RESTORE AQUATIC ECOSYSTEMS OF NATIONAL SIGNIFICANCE

A. The Cooperative Federalism Model in Action: The Mississippi River and the Gulf of Mexico “Dead Zone”

Within the Act’s comprehensive framework, federal, state, tribal and local governments have initiated a variety of cooperative, intergovernmental efforts to protect

⁴³ This is a conservative estimate that may actually understate the number of discharges to nonnavigable waters. According to one reputable study, approximately 73% of the nation’s waters are nonnavigable. Luna B. Leopold, M. Gordon Wolman, J.P. Miller, *Fluvial Processes in Geomorphology*. W.H. Freeman and Company San Francisco 1964. The EPA estimate uses data on intermittent and ephemeral streams as proxies for nonnavigable tributaries. The EPA relies on such data because it can be correlated with data on discharge permits and water intake structures, resulting in a conservative approximation of the number of discharges and intake structures that would be found in nonnavigable tributaries. *See* <http://aswm.org/swp/headwaters.htm> (accessed Jan. 10, 2006).

and restore ecosystems of national significance. These include the Great Lakes,⁴⁴ Chesapeake Bay,⁴⁵ and Long Island Sound.⁴⁶ While states have played important roles in each of these efforts, the regulatory jurisdiction of EPA and the Corps of Engineers over tributaries and wetlands has been crucial to pollution control and restoration efforts.

The phenomenon of the “dead zone” in the Gulf of Mexico illustrates how the degradation of headwaters streams and wetlands can have dramatic negative effects on navigable waters hundreds or thousands of miles away. The “dead zone” refers to a condition known as hypoxia where oxygen levels are too low to support aquatic life. The source of the dead zone is the polluted water of the Mississippi River. The dead zone in the Gulf of Mexico is the world’s second largest oxygen-depleted coastal water.⁴⁷ It varies in size from year to year but has covered an area equal to Massachusetts and New Jersey. Scientists have linked this condition to wetland destruction throughout the Mississippi River watershed.⁴⁸

The Upper Mississippi River system includes the Upper Mississippi, Illinois, Minnesota, St. Croix, Black and Kaskaskia Rivers. These rivers drain an area of 190,000 square miles in Minnesota, Wisconsin, Iowa, Illinois, Iowa, and Missouri and a small portion of Indiana and South Dakota. Only about 1300 miles – less than 1% of the entire hydrologic system – are navigable. The rest of the system consists of nonnavigable tributaries, ditches and wetlands. These tributaries, ditches, and wetlands contribute to the base flows of the navigable portions of the system. The tributaries and ditches carry large amounts of nutrients and sediment – particularly nitrogen – into the navigable waters which create the dead zone.

Wetlands and headwaters in the upper Mississippi watershed serve as nutrient “sinks.” The filling of these wetlands therefore results in rapid transmission of

⁴⁴ 33 U.S.C. § 1268(a) (creating the Great Lakes program and directing EPA to “take the lead” in the effort to meet water quality goals “working with other Federal agencies and State and local authorities.”). A description of the Great Lakes Program is available at <http://www.epa.gov/glnpo/> (accessed Jan. 5, 2006).

⁴⁵ 33 U.S.C. § 1267(a) (establishing the Chesapeake Bay Program with a goal of “restoring and protecting the Chesapeake Bay ecosystem and the living resources.”). A description of the Chesapeake Bay Program is available at <http://www.chesapeakebay.net/> (accessed Jan. 5, 2006).

⁴⁶ 33 U.S.C. § 1369 (establishing the Management Conference of the Long Island Sound Study). The Long Island Sound Study was formed in 1985 by EPA, New York, and Connecticut, as a bi-state partnership consisting of federal and state agencies, user groups, concerned organizations, and individuals dedicated to restoring and protecting the Sound. Information available at <http://www.epa.gov/region01/eco/lis/epane.html> (accessed Jan. 5, 2006).

⁴⁷ Larsen, J. 2004. *Dead Zones Increasing in World's Coastal Waters*. Eco-Economy Update (June 16, 2004), available at <http://www.earth-policy.org/Updates/Update41.htm> (accessed Jan. 5, 2006).

⁴⁸ Mitsch, W.J., J.W. Day Jr., J.W. Gilliam, P. Groffman, D.L. Hey, G.W. Randall and N. Wang. 2001. *Reducing nitrogen loading to the Gulf of Mexico from the Mississippi River basin: Strategies to counter a persistent ecological problem*. BioScience 51:373-388.

agricultural fertilizers in storm runoff into the mainstem of the Mississippi system: the loss of 80% of riparian wetlands in the Midwest has increased the amount of nitrogen entering the Gulf by threefold over the past 40 years.⁴⁹ Eight-five percent of nitrogen arriving at the hypoxic zone in the Gulf originates in the upper Mississippi (north of Cairo, Illinois).⁵⁰ At the mouth of the Mississippi, pulses of nitrogen and phosphorus originating in northern Minnesota, western Montana, and eastern Ohio (from as far as 1,700 linear miles away) converge to feed massive algal blooms which consume all available oxygen.⁵¹ This phenomenon has resulted in the devastation of commercial and recreational fisheries in the northern Gulf of Mexico.⁵²

B. The Act Must Have a Broad Geographic Scope for the Cooperative Federalism Model to Be Effective

There are several reasons why a strong, comprehensive Clean Water Act is necessary to support and complement the efforts of states, tribes and local governments to achieve water quality goals in conjunction with economic development and other social needs. First, the combination of national, regional, and local expertise leads to improved resource protection. For example the New England states in cooperation with the Corps and EPA have developed a regional method for evaluating wetland mitigation projects that both expedites permitting and reduces impacts.⁵³

Second, the Act facilitates more effective allocation of federal and state agency resources. For example, there are 20 states that have independent permitting authority for wetlands.⁵⁴ Seventeen of these states have joint permitting with the Corps, regional/state programmatic permits with the Corps and/or have assumed section 404. This allows states to handle routine permits while freeing up the Corps to focus on major projects with potential interstate impacts.

⁴⁹ *Id.*; Rabalais, N.N., R.E. Turner and D. Scavia. 2002. *Beyond science into policy: Gulf of Mexico hypoxia and the Mississippi River*. BioScience 52(2):129-142.

⁵⁰ Goolsby, D.A., W.A. Battaglin, G.B. Lawrence, R.S. Artz, B.T. Aulenbach, R.P. Hooper, D.R. Keeney and G.J. Stensland. 1999. *Flux and Sources of Nutrients in the Mississippi-Atchafalaya River Basin: Topic 3 Report for the Integrated Assessment on Hypoxia in the Gulf of Mexico*. NOAA Coastal Ocean Program Decision Analysis Series No. 17. NOAA Coastal Ocean Program, Silver Spring, MD, available at http://www.nos.noaa.gov/Products/hypox_t3final.pdf (accessed Jan. 5, 2006).

⁵¹ CENR. 2000. "Integrated Assessment of Hypoxia in the Northern Gulf of Mexico." National Science and Technology Council Committee on Environment and Natural Resources, Washington, D.C.

⁵² *Id.*

⁵³ U.S. Army Corps of Engineers. 1995. The Highway Methodology Workbook Supplement; Wetlands Functions and Values, A Descriptive Approach. NEDEP-360-1-30a; New England Division, available at <http://www.nae.usace.army.mil/reg/hwsplmnt.pdf> (accessed Jan. 5, 2006).

⁵⁴ Association of State Wetland Managers, State Wetland Programs, at <http://www.aswm.org/swp/statemainpage9.htm> (accessed Jan. 5, 2006).

Third, the Act supports integration of water quality and water quantity concerns such as point and nonpoint pollution, hazardous spills, flooding, drinking water supply, drought, and stormwater runoff. For example, a condition in a discharge permit designed to protect instream flow requirements for fish in one state may also benefit a drinking water supply downstream in another state. A riparian buffer along a headwater stream required as a “Best Management Practice” to control nitrogen runoff could also stabilize streambanks to prevent erosion during a flood.

V. THE AGENCIES’ INTERPRETATION OF “WATERS OF THE UNITED STATES” AS INCLUDING WETLANDS ADJACENT TO TRIBUTARIES IS ENTITLED TO *CHEVRON* DEFERENCE

A. The Interpretation Is Well Within the Limits of the Commerce Clause

Regulation of these wetlands under the Act is clearly authorized by the Commerce Clause, either as regulation of the “channels of interstate commerce” or as regulation of a class of activities that substantially affects interstate commerce. *Gonzalez v. Raich*, 125 S.Ct. 2195, 2205 (2005); *Wickard v. Filburn*, 317 U.S. 111, 118-29 (1942).⁵⁵

The Court’s task in reviewing the petitioners’ Commerce Clause challenge is modest, as federal legislation is accorded a “presumption of constitutionality.” *United States v. Morrison*, 529 U.S. 598, 607 (2000). The Court “need not determine whether [petitioners’] activities, taken in the aggregate, substantially affect interstate commerce, but only whether a ‘rational basis’ exists for so concluding.” *Gonzalez*, 125 S.Ct. at 2197 (citing *United States v. Lopez*, 514 U.S. 549, 557 (1995)). That test is easily satisfied here.

Although petitioners focus their constitutional argument on section 404(a) of the Act, the appropriate question to ask is whether the activities regulated by section 301 of the Act,⁵⁶ point source discharges of pollutants into navigable waters, substantially affect interstate commerce. While section 404(a) authorizes the issuance of permits for discharges of dredged and fill material into navigable waters, it is section 301 that prohibits those discharges as well as discharges of pollutants in general. When viewed in its proper context, the question is an easy one.

This case does not involve the regulation of noneconomic, criminal conduct, like the activities in *Lopez*, 514 U.S. at 561, or *Morrison*, 529 U.S. at 613. The discharges of pollutants into navigable waters are caused primarily by industrial and commercial operations.⁵⁷ Indeed, one of the policies that motivated passage of the Act in 1972 was

⁵⁵ The “channels of interstate commerce” argument is addressed in the Respondent’s brief and will not be repeated here.

⁵⁶ 33 U.S.C. § 1311.

⁵⁷ Indeed, the activities of the petitioners were clearly economic activities.

Congress' desire to end the use of the nation's rivers, lakes, streams, and oceans as "waste treatment systems."⁵⁸

Unlike the *Lopez* and *Morrison* cases, there is a clear and direct connection between point source discharges of pollutants into navigable waters and interstate commerce. Surface waters provide drinking water for approximately half of the country⁵⁹ and about 9 trillion gallons of fresh water are used each year to manufacture goods.⁶⁰ Americans spend about 44 billion dollars each year on trips to coastal areas; the American fishing industry produces more than 10 billion pounds of fish and shellfish each year; and farmers, who produce food and fiber products worth 197 billion dollars per year, rely heavily on irrigation.⁶¹ Point source discharges contribute to surface water pollution and reduce opportunities to use those waters as drinking water sources or for recreational purposes; harm many plants and animals that may be articles of commerce; increase flooding, which impedes navigation and can have other clear effects on interstate commerce; and destroy the habitat of endangered and threatened plant and animal species.⁶²

Although there may be individual instances in which discharges of pollutants, including dredged material, into navigable waters, do not substantially affect interstate commerce, this Court has held that "[w]here a general regulatory scheme bears a substantial relation to commerce, the *de minimis* character of individual instances arising under that statute is of no consequence." *Lopez*, 514 U.S. at 558 (citation omitted). Regulation of those intrastate activities is appropriate when the activity is "an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated." *Id.* at 561; *see also Hodel v. Indiana*, 452 U.S. 314, 329 n.17 (1981).⁶³

⁵⁸ S. Rep. No. 92-414 (Oct. 28, 1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674.

⁵⁹ U.S. EPA. 1996. *Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy*. EPA-800-R-96-002. Office of Water (4101), United States Environmental Protection Agency, Washington, D.C., at 10.

⁶⁰ U.S. EPA. 2000. *Liquid Assets 2000: America's Water Resources at a Turning Point*. EPA-840-B-00-001. Office of Water (4101), United States Environmental Protection Agency, Washington, D.C., at 2, available at <http://www.epa.gov/water/liquidassets/assets.pdf> (accessed Jan. 5, 2006).

⁶¹ *Id.* at 6-7.

⁶² *See* U.S. EPA, *A Benefits Assessment of Water Pollution Control Programs Since 1972: Part 1, The Benefits of Point Source Controls for Conventional Pollutants in Rivers and Streams* (January 2000), available at <http://www.epa.gov/ost/economics/assessment.pdf> (accessed Jan. 5, 2006).

⁶³ While this Court has identified a "jurisdictional limit" as one factor to consider in determining whether a statute falls within Congress' Commerce Clause power, the Court has never required Congress to include such a provision in a statute. Indeed, just last term, the Court upheld, against a Commerce Clause challenge, the application of the federal Controlled Substances Act (CSA), without identifying a jurisdictional limit in the CSA. *Gonzales, supra*.

As described in Section III.B., *supra*, regulation of discharges of dredged or fill material into wetlands that are adjacent to nonnavigable tributaries of traditionally navigable waters is an essential part of Clean Water Act section 301 regulation, as the wetlands provide irreplaceable ecosystem services that support beneficial uses of navigable waters.⁶⁴

Furthermore, this case does not upset a balance between the state and federal governments regarding the regulation of land and water uses. As this Court has noted, the Act “involves [a] complex statutory and regulatory scheme . . . that implicates both federal and state administrative responsibilities.” *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*, 511 U.S. 700, 704 (1994). Further, this Court has long recognized that “the power conferred by the Commerce Clause [is] broad enough to permit congressional regulation of activities causing air or water pollution, or other environmental hazard.” *Hodel v. Virginia Surface Mining & Reclamation Ass’n, Inc.*, 452 U.S. 264, 282 (1981).⁶⁵

Since point source discharges of pollutants into navigable waters have a substantial effect on interstate commerce and regulation of the wetlands in these cases is an essential part of the regulation of that class of activities, the regulation is clearly authorized under the Commerce Clause.

B. The Weight of Authority Supports the Agencies’ Interpretation

From the earliest cases interpreting the Act, courts have recognized the logic of including tributaries within its geographic scope. As the Sixth Circuit stated in one of the first enforcement cases:

It would, of course, make a mockery of those 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.

United States v. Ashland Oil & Transp. Co., 504 F.2d 1317, 1326 (6th Cir. 1974).

The courts have also consistently rejected petitioners’ argument that ditches, many of which were once natural streams, should not be treated as tributaries. As the Eleventh Circuit noted:

⁶⁴ Even if it were not an essential part of the section 301 program, regulation of discharges of dredged or fill material into wetlands that are adjacent to nonnavigable tributaries of traditionally navigable waters could be justified as regulation of a class of activities that, in the aggregate, substantially affects interstate commerce.

⁶⁵ See also *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 204 (1999) (State authority over land use control “is shared with the federal government when [it] exercises one of its enumerated powers.”).

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. Eidson, 108 F.3d 1336, 1342 (11th Cir. 1997), *cert. denied*, 522 U.S. 899 (1997) (citation omitted).

This trend has continued since the *SWANCC* decision. Five Circuit Courts have ruled on jurisdictional questions similar to those presented here. With the exception of the Fifth Circuit,⁶⁶ all have concluded that the Act reaches the kinds of tributaries and adjacent wetlands at issue.⁶⁷ The *Deaton* and *Gerke* decisions are particularly informative.

In *Deaton*, the Fourth Circuit held that a wetland adjacent to a roadside ditch that followed a “winding, thirty-two-mile path to the Chesapeake Bay” was subject to the Corps’ jurisdiction. The court rejected Deaton’s claim that the Corps’ interpretation was not entitled to deference because it overran the limits of the Commerce Clause:

Congress passed the Clean Water Act ‘to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters and gave the Corps, along with the Environmental Protection Agency, the job of getting this done. 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.

Deaton, 332 F.3d at 707 (citation omitted).

In *Gerke*, the Seventh Circuit held that the Corps had jurisdiction over “wetlands . . . drained by a ditch that runs into a nonnavigable creek that runs into the nonnavigable Lemonweir River, which in turn runs into the Wisconsin River, which is navigable.” 412 F.3d at 805. In response to Gerke’s argument that a ditch is not tributary, the court observed:

A stream can be a tributary; why not a ditch? A ditch can carry as much water as a stream, or more; many streams are tiny. It wouldn’t make much sense to interpret the regulation as distinguishing between a stream and its man-made counterpart.

⁶⁶ *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir. 2001); *In Re Needham*, 354 F.3d 340 (5th Cir. 2003). As explained in Respondent’s brief these cases are distinguishable and not persuasive.

⁶⁷ In addition to the Fourth Circuit (*Deaton*) and the Seventh Circuit (*Gerke*), the Ninth Circuit (*Headwaters*) is in agreement with the Sixth Circuit decisions involved here.

Id. at 805-06.

Like petitioners, Gerke tried to argue that *SWANCC* prohibits regulation of wetlands that do not physically abut navigable water. The Seventh Circuit disagreed:

Gerke fastens on the sentence in the [*SWANCC*] opinion that states that the Clean Water Act does not extend ‘to ponds that are not adjacent to open water.’ It is dangerous, however, to take judicial language out of context; the case was about a pond that was completely isolated from any navigable waterway, tributary, etc. . . . ‘[A]djacent’ can just mean ‘connected,’ and ‘open water’ can just mean water that is part of the waters of the United States because it flows into navigable waterways.

Id. at 808 (emphasis in original) (citations omitted).

Judge Posner also made short work of the claim that the Corps’ interpretation raised serious constitutional issues:

Nothing in the Constitution forbids interpreting the Clean Water Act to cover any wetlands that are connected to navigable waters. 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.

Id. at 807.

The logic of *Deaton* and *Gerke* applies here as well. Petitioners’ wetlands are adjacent to streams and ditches that are tributaries of traditional navigable waters. The wetlands are integral components of aquatic ecosystems. The fact that these systems have been significantly modified by ditches and berms does not mean that they are no longer “waters of the United States.” Indeed, nearly all of the waterways in this country have undergone substantial alterations. If the national goal of restoring these systems is to be realized, it must start by saving the pieces that remain.

CONCLUSION

For the foregoing reasons, and in the interests of continuing the progress the nation has made in restoring and maintaining the integrity of its priceless aquatic ecosystems, Amici respectfully request that the decisions of the Sixth Circuit be affirmed.

Respectfully Submitted,

STEPHEN M. JOHNSON
MERCER UNIVERSITY
SCHOOL OF LAW
1021 Georgia Avenue

PATRICK PARENTEAU
ENVIRONMENTAL AND NATURAL
RESOURCES LAW CLINIC
VERMONT LAW SCHOOL

Macon, Georgia 31207
(478) 301-2192

PO Box 300
South Royalton, Vermont 05068
(802) 831-1305

*Counsel for Amici Curiae
Association of State Wetland
Managers, et. al.*

*Counsel of Record for Amici Curiae
Association of State Wetland
Managers, et. al.*

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