
**In The
Supreme Court of the United States**

—◆—
JOHN A. RAPANOS, ET AL.,

Petitioners,

v.

UNITED STATES,

Respondent,

—◆—
JUNE CARABELL, ET AL.,

Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, ET AL.,

Respondents.

—◆—
**On Writs Of Certiorari To The United States
Court Of Appeals For The Sixth Circuit**
—◆—

**BRIEF OF AMICI CURIAE DUCKS UNLIMITED, INC.,
NATIONAL WILDLIFE FEDERATION, AMERICAN
FISHERIES SOCIETY, AMERICAN SPORTFISHING
ASSOCIATION, BASS PRO SHOPS, BOONE &
CROCKETT CLUB, IZAAK WALTON LEAGUE OF
AMERICA, MICHIGAN UNITED CONSERVATION CLUBS,
THE ORVIS COMPANY, INC., PHEASANTS FOREVER,
THEODORE ROOSEVELT CONSERVATION
PARTNERSHIP, TROUT UNLIMITED, WILDLIFE
MANAGEMENT INSTITUTE, AND THE WILDLIFE
SOCIETY IN SUPPORT OF RESPONDENTS**

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OTHER AUTHORITIES	
Alexander, R.B. et al., <i>Effect of stream channel size on the delivery of nitrogen to the Gulf of Mexico</i> , 403 <i>Nature</i> 758-761 (2000), available at http://water.usgs.gov/nawqa/sparrow/nature/nature_alexetal-2.pdf	12
BELLROSE, F. AND D. HOLM, <i>ECOLOGY AND MANAGEMENT OF THE WOOD DUCK</i> (Stackpole Books, Mechanicsburg, PA 1994)	16
Bettelheim, M., State of California Dep't of Fish and Game, <i>An Evaluation of Big Chico Creek, Lindo Channel, and Mud Creek as Salmonid Nonnatal Rearing Habitats</i> (Aug. 2001), available at http://www.atlantismagazine.com/bettelheim/bigchico.pdf	13
FREDRICKSON, L. AND D. BATEMA, <i>GREENTREE RESERVOIR MANAGEMENT HANDBOOK</i> (Univ. of Missouri-Columbia 1992).....	16
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Great Lakes Regional Collaboration, <i>Great Lakes Regional Collaboration Strategy: To Restore and Protect the Great Lakes</i> (Dec. 2005), available at http://www.glrc.us/documents/GLRC_Strategy.pdf	9

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Maxwell, B., <i>Management of Montana’s Amphibians: A Review of Factors that may Present a Risk to Population Viability and Accounts on the Identification, Distribution, Taxonomy, Habitat Use, Natural History and the Status and Conservation of Individual Species</i> , Report No. 43-0343-0-2224 to the USDA Forest Service (Sept. 2000), available at http://www.isu.edu/~petechar/iparc/Maxwell_Mgmt.pdf	14
Meyer, J. L. et al., <i>Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands</i> , American Rivers and Sierra Club, publishers (Sept. 2003), available at http://www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182 <i>passim</i>	
Michigan Dep’t of Natural Resources, <i>Landowner’s Guide: Waterfowl</i> , available at http://www.michigandnr.com/publications/pdfs/huntingwildlifehabit/Landowners_Guide/Species_Mgmt/Waterfowl.htm . (last revised Dec. 12, 1999) (last visited Jan. 4, 2006).....	16
National Research Council, Committee on Restoration of Aquatic Ecosystems, <i>Restoration of Aquatic Ecosystems: Science, Technology, and Public Policy</i> , National Academy Press (1992)	8
Ohio Environmental Protection Agency, <i>Technical Report: Ohio’s Primary Headwater Streams – Fish and Amphibian Assemblages</i> (Sept. 2002), available at http://www.epa.state.oh.us/dsw/wqs/headwaters/TechRep_FishAmphibian_2002.pdf	8, 14

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Peterson, B.J. et al., <i>Control of Nitrogen export from watersheds by headwater streams</i> , 292 <i>Science</i> 86-90 (2001), available at http://www.k-state.edu/doddsrab/journalarts/peterson%20et%20al.%20science%202001.pdf	11
Richkus, K. et al., U.S. Fish and Wildlife Service, <i>Migratory Bird Harvest Information, 2004, Preliminary Estimates</i> (2005), available at http://www.fws.gov/migratorybirds/reports/whs/Migratory%20Bird%20Harvest%20Information,%202004%20Preliminary%20Estimates.pdf	16
Samet, M., <i>The Clean Water Act: Commerce Has Everything to Do With It</i> , NAT'L WETLANDS NEWSLETTER, Mar.-Apr. 2004	27
Shellberg, J., Center for Watershed Studies, University of Washington, <i>Fact Sheet: Bull Trout in western Washington</i> (Jan. 2002), available at http://depts.washington.edu/cwws/Outreach/FactSheets/bulltrout.pdf	10, 13
Smith, B., U.S. Dep't of Agriculture, Forest Service, <i>Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest South Dakota and Wyoming</i> (April 2003), available at http://maps.wildrockies.org/ecosystem_defense/Science_Documents/Smith_2003.pdf	14
TINER, R.W., <i>IN SEARCH OF SWAMPLAND: A WETLAND SOURCEBOOK AND FIELD GUIDE</i> (Rutgers U. Press, New Brunswick, NJ, and London 2005).....	<i>passim</i>
U.S. Army Corps of Engineers, <i>Digest of Water Resources, Policies, and Authorities</i> , EP, 1165-2-1 (July 30, 1999), available at http://www.wbdg.org/ccb/ARMYCOE/COEPAM/1165_2_1.pdf	8

TABLE OF AUTHORITIES – Continued

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U.S. Environmental Protection Agency, <i>Aquatic Biodiversity</i> , available at http://www.epa.gov/bioindicators/aquatic/sediment.html (last visited Jan. 6, 2006)	11
U.S. Fish and Wildlife Service, <i>2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation</i> (2002), available at http://www.census.gov/prod/2003pubs/fhw01-us.pdf	17
U.S. Fish and Wildlife Service 2005, <i>Economic Impact of Waterfowl Hunting in the United States: Addendum to the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation</i> (July 2005), available at http://library.fws.gov/nat_survey2001_waterfowlhunting.pdf	17, 18
U.S. Fish and Wildlife Service, <i>Waterfowl: Population Status, 2005</i> (July 2005), available at http://www.fws.gov/migratorybirds/reports/status05/final_status_05.pdf	15
U.S. Geological Survey, <i>Northeast Amphibian Research and Monitoring Initiative</i> , available at http://pwrc.usgs.gov/nearmi/species/ (last modified Aug. 5, 2005) (last visited Jan. 6, 2006)	14
Wipfli, M.S, and D.P. Gregovich, <i>Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska: implication for downstream salmonid production</i> , 47 <i>Freshwater Biology</i> 957-69 (2002), available at http://www.troutnut.com/pdfarchive/wipfli.pdf	15

STATEMENT OF INTEREST

Amici are organizations that represent members who comprise a substantial number of America's anglers, hunters, and conservationists; businesses that rely on hunters and anglers as customers; organizations that represent professionals who manage fisheries, wildlife and water resources; and organizations that represent wildlife and fisheries scientists.¹ All of amici have a strong and demonstrated interest in continued water resources' protection. Some amici have developed expertise on the Clean Water Act through education and conservation efforts to protect water resources and wildlife dependent on water resources dating back to the Act's passage in 1972; others rely on healthy water resources to support their angling and hunting related businesses; others are concerned with water and wetland restoration and preservation efforts; still others represent a broad diversity of professionals devoted to fish and wildlife conservation.

SUMMARY OF THE ARGUMENT

Protecting fish, shellfish, wildlife and recreational opportunities is a central goal of the Clean Water Act (CWA or Act). The Court has recognized that in passing the Act Congress explicitly intended to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" by ensuring that pollution is controlled at its source and by protecting the important ecological habitat functions of aquatic systems. To achieve its goal, Congress recognized the necessity of broadly applying the Act's comprehensive protections to "waters of the United States."

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 in part, and (3) no person or entity other than above-named amici curiae and their counsel made a monetary contribution to the preparation or submission of this brief.

These cases concern water resources essential for fish and wildlife to thrive throughout the interconnected waters of aquatic systems: tributaries, such as headwater streams that include the ditch tributaries at issue in these cases, and wetlands adjacent to tributaries. Tributaries and adjacent wetlands are inseparably bound to navigable-in-fact waters² like trees are to their roots. If the roots of a tree are poisoned and destroyed, the tree dies. Similarly, if tributaries and adjacent wetlands are poisoned and destroyed, connected navigable-in-fact waters are made lifeless and polluted.

This brief will demonstrate the importance of tributaries and adjacent wetlands to the maintenance and protection of “the biological integrity of the nation’s Waters,” *i.e.*, the wildlife and aquatic life throughout aquatic systems. Not only is the protection of such resources reasonable under the Act, but necessary and intended by Congress. This brief will further show that the multi-billion dollar a year economic activity generated by hunting, fishing and wildlife-related activity depends on the protection of these resources and would be substantially affected by their degradation and destruction. Consequently, the protection of such waters was a valid exercise of Congress’s commerce clause power.

In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (*SWANCC*), the Court held that the Migratory Bird Rule cannot be the sole basis for asserting jurisdiction over ponds that had formed in abandoned sand and gravel pits. In these cases, Petitioners attempt to contort the Court’s narrow holding in *SWANCC* to mean that the significant

² 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. 557, 563 (1870).

ecological and hydrological connections between tributaries and adjacent wetlands and navigable-in-fact waters also cannot serve as a basis for asserting jurisdiction over such waters. Petitioners would have the Court rewrite the Act to allow for not only the unregulated fill of these waters, and the resulting loss of their essential life-giving functions, but also the discharge of all other pollutants into countless tributaries and adjacent wetlands, many of which flow directly into navigable-in-fact waters. Such a ruling would be contrary to the Act and the Court's precedent.

Only a generation ago, our nation faced a crisis of unrestrained pollution that left many of our waters dead or degraded, poisoning the habitat upon which our fish and wildlife depend. Understanding the need to broadly restore and maintain the health of these aquatic systems, Congress acted by adopting the Clean Water Act. *See United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985); *see also, Int'l Paper v. Ouelette*, 479 U.S. 481, 492, 486 n.6 (1987) (where the Court held that the Act was designed to establish "an all-encompassing program of water pollution regulation" and "applies to all point sources and virtually all bodies of water," and that "navigable waters" has been construed "expansively") (citations omitted). The Court should follow the precedent it set in *Riverside Bayview* by re-affirming that the Act provides broad protection and rejecting the Petitioners' attempt to undo the law Congress designed to restore and maintain America's most precious natural resource, its water.

ARGUMENT

Despite its many complexities, the heart of the Act is quite simple. Section 301(a) prohibits the discharge of pollutants, including dredged and fill material, into "navigable waters" defined broadly as "waters of the United States." 33 U.S.C. §§ 1311(a) and 1362(7). Regulatory definitions for "waters of the United States" include

tributaries of navigable waters, *see* 33 C.F.R. § 328.3(5), and wetlands adjacent³ to other jurisdictional waters, including tributaries. *See id.* § 328.3(7). The Act, however, allows for certain discharges to be authorized subject to permits. 33 U.S.C. §§ 1311(a), 1342 and 1344. The discharge of most pollutants, such as sewage waste, toxic materials, and industrial waste into jurisdictional waters is governed under Section 402. *Id.* § 1342. The discharge of dredged and fill material into jurisdictional waters is governed under Section 404. *Id.* § 1344. Section 301 established no jurisdictional distinction between an activity involving a discharge of fill and an activity involving a discharge of other pollutants. This principle of the Act must be borne in mind in resolving the jurisdictional question posed by these cases.

Congress passed the Act to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). One of its goals is to protect and propagate fish, shellfish, wildlife and water-related recreation. *See id.* § 1251(a)(2). The Court has previously concluded that:

Protection of aquatic ecosystems, Congress recognized, demanded broad federal authority to control pollution, for “[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.”

Riverside Bayview, 474 U.S. at 132-33 (quoting S. Rep. No. 92-414, at 77 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742).

³ The regulations define “adjacent” as “bordering, contiguous, or neighboring.” 33 C.F.R. § 328.3(c). Moreover, the regulations state that adjacent wetlands include “[w]etlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like.” *Id.*

In *Riverside Bayview*, the Court addressed the question whether the Corps' regulation of "wetlands adjacent to but not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as 'waters'" was reasonable under the Act. *Id.* at 131. The Court found that "the Corps has concluded that wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment" and held that the regulation of such wetlands was therefore permissible. *Id.* at 131-35.⁴ The Court noted wetlands' ability to "filter and purify water draining into adjacent bodies of water, . . . to slow the flow of surface runoff into lakes, rivers, and streams and thus prevent flooding and erosion," and to "serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic . . . species" as reasons for upholding protection of adjacent wetlands under the Act. *Id.* at 134-35 (citations omitted). Moreover, the Court did not require each adjacent wetland to be hydrologically linked to its neighboring water, instead finding that the Corps' assertion of jurisdiction was reasonable over this class of waters that "*tend[s] to drain*" into abutting jurisdictional waters. *See id.* at 134 (emphasis supplied).⁵

⁴ Petitioners and Amici in support of Petitioners argue that the Court only intended the holding in *Riverside Bayview* to extend to wetlands directly abutting navigable-in-fact waters and rely heavily on the Court's occasional use of the term "open water" to support that argument. *See, e.g.*, Pet. Rapanos et al. Br. at 14. However, the Court instead announced that its ruling applied more broadly to wetlands adjacent to "streams" and "other bodies of waters" that are otherwise jurisdictional under the Act. *See Riverside Bayview*, 474 U.S. at 135. It was only the regulation of non-adjacent wetlands that the Court did not address in *Riverside Bayview*. *See id.* at 131 n.8.

⁵ In fact, Justice Stevens, who took part in the 9-0 decision in *Riverside Bayview*, stated that the wetland at issue in that case was not "hydrologically connected to navigable water." SWANCC, 531 U.S. at

(Continued on following page)

The same factors present in *Riverside Bayview*, and the same rationale the Court applied in rendering that decision, are present and apply here, providing ample bases for the Court to uphold the Corps' assertion of jurisdiction over all the adjacent wetlands at issue in these cases.

Tributaries and adjacent wetlands are inseparably bound to navigable-in-fact waters. First, most of them drain or tend to drain into navigable-in-fact waters, meaning that they are capable of carrying pollutants downstream and poisoning navigable-in-fact waters. Additionally, tributaries and adjacent wetlands maintain and protect the integrity of navigable-in-fact waters because they control flooding, cleanse and retain pollutants, regulate flow, and provide habitat for species, including many fish and amphibian species that depend for their survival on movement between navigable-in-fact waters and smaller connected streams and wetlands.

Consequently, the protection of tributaries and adjacent waters is no less essential for maintaining the integrity of navigable-in-fact waters than the protection of navigable-in-fact waters themselves. Absent such protection, fish and other wildlife populations will inevitably decline. Such a decline will substantially harm wildlife-dependent economic activities, such as hunting and fishing. The regulation of activities affecting tributaries and adjacent wetlands does not pose a significant constitutional question, in part, because unfettered economic and other activities that would destroy these resources would have a substantial adverse effect on the multi-billion dollar interstate commercial activities of hunting and fishing.

175-76 (Stevens, J., dissenting (discussing the facts of *Riverside Bayview*)).

I. PROTECTION OF TRIBUTARIES AND ADJACENT WETLANDS IS ESSENTIAL TO THE INTEGRITY OF OUR NATION'S WATERS, AND TO THE VITALITY OF HUNTING AND FISHING IN THE UNITED STATES.

A. The Health of Aquatic Life and Other Wildlife, Including Many Game Species, Requires Protection of Tributaries and Adjacent Wetlands.

Overview of Tributaries and Adjacent Wetlands.

Often located miles from navigable-in-fact waters, tributaries and adjacent wetlands provide much of the habitat needed by fish and wildlife, and are the source of most of the water that flows through the Nation's waterways. Small headwater streams (known as first, second, or low order streams),⁶ represent about three-fourths of the total length of all streams in the United States.⁷ Moreover, tributaries include many higher order streams that may not themselves be navigable. In addition, many low order streams flow directly into larger waters without first joining any other tributaries.⁸

Wetlands adjacent to tributaries are usually hydrologically and ecologically linked to their nearby tributaries. These adjacent wetlands perform immensely important water quality functions for navigable-in-fact

⁶ Higher order streams are formed by the confluence of lower order streams. Navigable-in-fact streams tend to be higher order streams. See Meyer, J. L. et al., *Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands*, American Rivers and Sierra Club, publishers, 6 (Sept. 2003), available at <http://www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182> (*Where Rivers Are Born*).

⁷ *Id.*

⁸ *See id.*

waters. For instance, in four Vermont watersheds, headwater wetlands comprise forty-five percent of the wetlands that improve water quality in larger downstream waters.⁹ Wetlands associated with first order streams alone account for ninety percent of phosphorous removal for eight northeastern watersheds.¹⁰ Absent these wetlands, much of this retained pollution would reach navigable-in-fact waters.

Many tributaries can be characterized as “ditches,” because they are either channelized natural streams, or channels dug through wetlands to increase their drainage to other waters.¹¹ In addition, wetlands and abutting waters are often connected to navigable-in-fact waters via seepage through a berm, subsurface flow under a berm, or berm failures arising from erosion, cuts or overtopping.¹²

⁹ *Id.* at 14.

¹⁰ *Id.*

¹¹ See TINER, R.W., IN SEARCH OF SWAMPLAND: A WETLAND SOURCE-BOOK AND FIELD GUIDE 118 (Rutgers U. Press, New Brunswick, NJ, and London 2005) (IN SEARCH OF SWAMPLAND) (channelization of most streams designed to increase drainage and resulting levees can alter adjacent wetland hydrology); Ohio Environmental Protection Agency, *Technical Report: Ohio's Primary Headwater Streams – Fish and Amphibian Assemblages*, 3 (Sept. 2002), available at http://www.epa.state.oh.us/dsw/wqs/headwaters/TechRep_FishAmphibian_2002.pdf (*Ohio's Primary Headwater Streams*) (stating that a growing percentage of headwaters streams in Ohio have been modified by channelization, drainage and other alterations); National Research Council, Committee on Restoration of Aquatic Ecosystems, *Restoration of Aquatic Ecosystems: Science, Technology, and Public Policy*, National Academy Press, 33 (1992) (citing a Council of Environmental Quality finding that forty-one percent of perennial streams are affected by siltation, bank erosion, and channelization).

¹² See, e.g., U.S. Army Corps of Engineers, *Digest of Water Resources, Policies, and Authorities*, EP, 1165-2-1, 13-12 (July 30, 1999), available at http://www.wbdg.org/ccb/ARMYCOE/COEPAM/1165_2_1.pdf (stating that levees fail due to overtopping, surface erosion, internal erosion, underseepage and slides within the levee embankment or foundation soils).

Thus, most ditches, levees and berms are simply man-made alterations of natural features with a historic connectivity between waters. This is particularly true in the Midwest, where vast numbers of streams and wetlands have been “ditched,” otherwise altered or destroyed.¹³ Similar to natural streams, ditches can provide significant hydrological and ecological connections to navigable-in-fact waters that affect the integrity of those waters.

In *Riverside Bayview*, the Court stated that “wetlands may ‘serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic . . . species.’” *Riverside*, 474 U.S. at 134-35 (citing 33 C.F.R § 320.4(b)(2)(i)). The scientific evidence supports the Court, showing that adjacent wetlands, along with tributaries, are essential for the health and survival of myriad species dependent on and associated with aquatic systems.

1. Storing Water and Maintaining Stream and River Flows.

Tributaries and adjacent wetlands, including those without direct or continuous surface flow into other waters, ensure proper and healthy flow in all waters by temporarily storing much of the water that enters aquatic systems. By retaining water during rain and snow melt events, these tributaries and adjacent wetlands ensure

¹³ See, e.g., Great Lakes Regional Collaboration, *Great Lakes Regional Collaboration Strategy: To Restore and Protect the Great Lakes*, 11 (Dec. 2005), available at http://www.glrc.us/documents/GLRC_Strategy.pdf (tributaries essential to fish survival in the Great Lakes negatively altered); IN SEARCH OF SWAMPLAND, at 110, 113 tbl.8.3, 118 (describing wetlands losses in the Midwest due to drainage and other activities and stating that Michigan lost approximately 5.6 million acres of its wetlands from the 1700s to the 1980s).

that water more evenly and slowly flows into downstream waters.¹⁴ This prevents washouts, maintaining the structural nooks and crannies important to the reproduction of certain fish.¹⁵

Streams dry up and often warm during low flow periods.¹⁶ Tributaries and adjacent wetlands recharge groundwater, maintaining the healthy downstream flows and temperatures that fish and other wildlife depend on during these dry periods. For instance, fens – wetlands that occur where groundwater continuously seeps upward through the root zone of vegetation – provide colder subsurface flow that maintains trout streams by allowing sufficiently cool flows in warmer months.¹⁷ Forested wetlands also provide both water and cooling shade for adjacent streams.¹⁸ By contrast, when streams and wetlands are destroyed, streams throughout the aquatic system experience increased flooding due to the loss of water retention upstream.¹⁹

¹⁴ See, e.g., IN SEARCH OF SWAMPLAND at 93 tbl.7.1, 95-6; *Where Rivers Are Born* at 10.

¹⁵ See, e.g., Shellberg, J., Center for Watershed Studies, University of Washington, *Fact Sheet: Bull Trout in western Washington* (Jan. 2002), available at <http://depts.washington.edu/cwss/Outreach/FactSheets/bulltrout.pdf> (*Fact Sheet: Bull Trout in western Washington*) (stating that bull trout fry “are highly associated with the substrate of streambeds and are known to utilize interstitial spaces as cover” and “bull trout eggs pockets [are] highly susceptible to . . . flood events”).

¹⁶ See, e.g., *Where Rivers Are Born* at 11; IN SEARCH OF SWAMPLAND at 124 (describing how water withdrawals from and adjacent to Ipswich River (MA) wetlands have caused the river to run dry during summer).

¹⁷ See *Where Rivers Are Born* at 20.

¹⁸ IN SEARCH OF SWAMPLAND at 94.

¹⁹ See, e.g., *Where Rivers Are Born* at 10-11.

2. Trapping Sediment.

Adjacent wetlands and tributaries trap enormous amounts of sediment. Where they are not destroyed or degraded, these waters can trap most sediment before it reaches navigable-in-fact waters.²⁰ This provides important biological and water quality benefits, such as clearer water, which supports vegetation and fish reproduction.²¹ When sediment washes downstream, it can fill in habitat areas and smother the fry and eggs that live there.²² Excess sediment can also harm the reproduction and diversity of fish and other species, such as macroinvertebrates that serve as the foundation for the food chain of the entire aquatic habitat.²³

3. Storing and Recycling Nutrients; Providing Food and Oxygen.

Tributaries and adjacent wetlands store and beneficially recycle nutrients, preventing unnaturally high levels of nutrients (such as phosphorous and nitrogen) which exacerbate harmful plant and algal growth in downstream waters, a process called eutrophication.²⁴ Eutrophication

²⁰ See *id.* at 12-13 (describing sediment retention functions of wetlands); IN SEARCH OF SWAMPLAND at 95 (same); see also Gomi, T. et al., *Understanding Processes and Downstream Linkages of Headwater Systems*, 52 *BioScience* 905-916, 906 (2002), available at [http://www.scs.dpri.kyoto-u.ac.jp/users/sidle/papersPDF/02_Article_Gomi_\(SP63\).pdf](http://www.scs.dpri.kyoto-u.ac.jp/users/sidle/papersPDF/02_Article_Gomi_(SP63).pdf) (stating that large substrate and woody debris in small headwater streams provide sediment storage sites).

²¹ See *Where Rivers Are Born* at 12.

²² See, e.g., *id.*

²³ See *id.*; U.S. Environmental Protection Agency, *Aquatic Biodiversity*, available at <http://www.epa.gov/bioindicators/aquatic/sediment.html> (last visited Jan. 6, 2006) (stating that sediment in waters can “cover[] important spawning habitats of fish and other organisms”).

²⁴ See Peterson, B.J. et al., *Control of Nitrogen Export from Watersheds by Headwater Streams*, 292 *Science* 86-90, 88 (2001), available at <http://www.k-state.edu/dodds/lab/journalarts/peterson%20et%20al.%20science%202001.pdf>

(Continued on following page)

causes algal blooms, which clouds water bodies, removes oxygen vital to fish, and often results in fish kills.²⁵

In one study, 64% of inorganic nitrogen entering a small stream is retained or transformed within 1000 yards.²⁶ In another telling example, a wetland receiving discharges of treated sewage each day removes 4.9 tons of phosphorous, 4.3 tons of ammonia, and 138 pounds of nitrate, while adding 20 tons of life-providing oxygen to water that would otherwise carry these pollutants into a tributary of the Delaware River, and, likely, the river itself, seriously harming both water quality and wildlife in downstream waters.²⁷ Additionally, streamside wetlands in southern New England have been found to remove more than eighty percent of the nitrate from water, and forested wetlands have been shown to be particularly effective at maintaining and restoring water quality, with their trees storing heavy metals that would otherwise likely drain into nearby waters.²⁸

Tributaries and adjacent wetlands also facilitate the processing of nutrients in ways that maintain wildlife. Detritus and other biological materials are processed by these waters into compounds edible by macroinvertebrates

(finding smaller streams may be the “most important in regulating water chemistry in large drainages because their large surface-to-volume ratios favor rapid [nitrogen] uptake and processing”); Alexander, R.B. et al., *Effect of stream channel size on the delivery of nitrogen to the Gulf of Mexico*, 403 *Nature* 758-761 (2000), available at http://water.usgs.gov/nawqa/sparrow/nature/nature_alexetal-2.pdf (concluding that nitrogen-loss rates decline rapidly with stream channel size, and declines of nitrogen removal in small streams are an important contributor to eutrophication in the Gulf of Mexico).

²⁵ *Where Rivers Are Born* at 13.

²⁶ *Id.* at 14.

²⁷ See IN SEARCH OF SWAMPLAND at 94-5. Vegetation in wetlands provides life-giving oxygen to waters. *Id.* at 85.

²⁸ See *id.* at 93-94.

which are, in turn, important food sources for fish, frogs, and other wildlife.²⁹

4. Allowing Completion of Life Cycles.

Many aquatic and semi-aquatic species begin their lives and return to spawn or breed in tributaries and adjacent wetlands. Species of salmon and trout use tributaries both to spawn and during their juvenile life stages.³⁰ Several Great Lakes species, such as chain pickerel, largemouth bass, smallmouth bass, carp, northern pike, and muskellunge, rely on inland wetlands for spawning and juvenile life stages.³¹ Moreover, wetlands are vital to three-fourths of America's commercial fish production, which is worth about \$111 billion.³² Thus, tributaries and adjacent wetlands serve as nurseries where fry are able to feed and grow with shelter from predators until they are mature enough to survive in larger waters. The impacts of degraded water quality, hydrologic alteration, thermal modification, and loss of stream and wetland habitat on fish species are self-evident and well supported by the scientific literature.

Additionally, given their unique breeding, feeding and wintering requirements, many amphibians depend on

²⁹ See *Where Rivers Are Born* at 14-15; IN SEARCH OF SWAMPLAND at 97.

³⁰ See, e.g., Bettelheim, M., State of California Dep't of Fish and Game, *An Evaluation of Big Chico Creek, Lindo Channel, and Mud Creek as Salmonid Nonnatal Rearing Habitats*, 7-8, 12 (Aug. 2001), available at <http://www.atlantismagazine.com/bettelheim/bigchico.pdf> (describing salmonid breeding habitat and stating that "Chinook [salmon] and steelhead [trout] regularly utilize tributaries within the Big Chico Creek watershed"); *Fact Sheet: Bull Trout in western Washington* (spawning and early rearing of bull trout occurs in coldwater streams, with migration to mainstem rivers, lakes, and saltwater).

³¹ See IN SEARCH OF SWAMPLAND at 85, 86 fig.6.3.

³² *Id.* at 101.

movement from wetlands to nearby streams, lakes and rivers.³³ For amphibians, successful breeding and survival is oftentimes dependent on the *lack* of a direct surface connection between nearby waters. For instance, many amphibians, such as the Northern Leopard Frog which is native to the Great Lakes, find particularly successful breeding opportunities in wetlands where predacious fish are prevented access from adjacent waters.³⁴ Later, many of these amphibians move to nearby tributaries and other waters to feed and overwinter in deeper waters that will

³³ See, e.g., Smith, B., U.S. Dep't of Agriculture, Forest Service, *Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest South Dakota and Wyoming*, 6-12, 13 (April 2003), available at http://maps.wildrockies.org/ecosystem_defense/Science_Documents/Smith_2003.pdf (*Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest*) (describing movement pattern of northern leopard frogs from breeding wetland areas to nearby lakes, rivers and streams for feeding and overwintering); *Ohio's Primary Headwater Streams*, at 17-19 tbl.5 (listing salamander species that use small headwater streams, some directly associated with wetlands, for breeding. Also shows that certain salamander species migrate from such waters to higher order streams); Maxwell, B., *Management of Montana's Amphibians: A Review of Factors that may Present a Risk to Population Viability and Accounts on the Identification, Distribution, Taxonomy, Habitat Use, Natural History and the Status and Conservation of Individual Species*, Report No. 43-0343-0-2224 to the USDA Forest Service, 9 (Sept. 2000), available at http://www.isu.edu/~petechar/iparc/Maxell_Mgmnt.pdf (*Management of Montana's Amphibians*) (describing amphibians need for a complex set of connected habitats for breeding, foraging and overwintering).

³⁴ See, e.g., *Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest* at 36 (waters that do not have direct connections with waters containing predacious fish are "excellent sites in which to promote the growth of vigorous populations of northern leopard frogs"); U. S. Geological Survey, *Northeast Amphibian Research and Monitoring Initiative*, available at <http://pwr.usgs.gov/nearmi/species/> (last modified Aug. 5, 2005) (last visited Jan. 6, 2006) (some frogs and toads "require fishless temporary ponds" for successful reproduction).

not freeze.³⁵ Due in large part to their movement between nearby waters, amphibians are an important link in the ecosystem's food chain and serve as a food source for fish and other aquatic wildlife.³⁶

Moreover, invertebrates such as stoneflies and mayflies, which many game fish rely on for food, often originate in fishless upstream waters and drift downstream.³⁷ A recent report found that forested, fishless headwaters in Alaska provide abundant food sources for downstream salmon.³⁸

Waterfowl also depend on tributaries and adjacent wetlands, such as Michigan's valuable duck population. An average of approximately 819,000 breeding ducks has been counted in Michigan annually since 1992, including about 415,000 mallards.³⁹ This also includes blue-winged teal,

³⁵ See, e.g., *Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest* at 11-12; *Management of Montana's Amphibians* at 9.

³⁶ See, e.g., *Conservation Assessment for the Northern Leopard Frog in the Black Hills National Forest* at 11-12, 19-21 (stating that northern leopard frogs are a food source for a variety of fish and other wildlife); *Management of Montana's Amphibians* at 8 (amphibians are key links in the aquatic and terrestrial food webs).

³⁷ See *Where Rivers Are Born* at 15; Wipfli, M.S, and D.P. Gregovich, *Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska: implication for downstream salmonid production*, 47 *Freshwater Biology* 957-69 (2002), available at <http://www.troutnut.com/pdfarchive/wipfli.pdf> (*Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska*) (finding that forested headwaters provide a year round source of invertebrates and detritus for downstream habitats).

³⁸ See *Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska*.

³⁹ See U.S. Fish and Wildlife Service, *Waterfowl: Population Status, 2005*, 52 (July 2005), available at http://www.fws.gov/migratorybirds/reports/status05/final_status_05.pdf.

green-winged teal, hooded mergansers, black ducks, ring-necked ducks and several other species of ducks which are dependent upon the state's waters and wetlands.⁴⁰

Two of the most economically-important ducks in the U.S. are the mallard and wood duck, comprising 36.8% and 9%, respectively, of the nation's 2004 harvest.⁴¹ These two species are highly adapted to forested wetlands, such as the type at issue in the Carabell case. The wood duck's habitat requirements restrict its primary distribution to wooded wetlands.⁴² A leading study stated that "in general, wood ducks use the wetlands associated with streams and rivers more than any other habitat type," and explicitly included "sluggish ditches" within the description of wood duck habitats.⁴³ The study further noted that ponds and wetlands near, but separate from, channels had added value to the species, particularly as breeding habitat.⁴⁴ Thus, wetlands and tributaries precisely like the ones in question in these two cases are critical to maintaining this important species.

To sum up, tributaries and adjacent wetlands are of enormous importance to the chemical, physical, and biological integrity of navigable-in-fact waters, and "inseparably bound up" with them in numerous and significant ways. As

⁴⁰ Michigan Dep't of Natural Resources, *Landowner's Guide: Waterfowl*, available at http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/Species_Mgmt/Waterfowl.htm (last revised Dec. 12, 1999) (last visited Jan. 4, 2006).

⁴¹ Richkus, K. et al., U.S. Fish and Wildlife Service, *Migratory Bird Harvest Information, 2004, Preliminary Estimates*, 27 (2005), available at <http://www.fws.gov/migratorybirds/reports/whs/Migratory%20Bird%20Harvest%20Information,%202004%20Preliminary%20Estimates.pdf>.

⁴² FREDRICKSON, L. AND D. BATEMA, *GREENTREE RESERVOIR MANAGEMENT HANDBOOK* 68 (Univ. of Missouri-Columbia 1992).

⁴³ BELLROSE, F. AND D. HOLM, *ECOLOGY AND MANAGEMENT OF THE WOOD DUCK* 41 (Stackpole Books, Mechanicsburg, PA 1994).

⁴⁴ *See id.*

such, the Clean Water Act must necessarily continue to be interpreted to protect such waters.

B. Hunting and Fishing are Substantial Recreational and Economic Activities that are Dependent on the Protection and Maintenance of the Integrity of Our Nation's Waters.

Hunting, fishing and other wildlife-related activity account for substantial economic activity in the United States. In 2001, the country had about thirty-eight million sportspersons, including hunters (thirteen million) and anglers (thirty-four million, including twenty-eight million freshwater anglers) who spent \$70 billion on these activities.⁴⁵ In 2001, about 1.8 million waterfowl hunters, including just under 1.6 million duck hunters, expended approximately \$935 million for hunting-related goods and services, generating a total economic output of over \$2.3 billion.⁴⁶ Wildlife watching was also a tremendous source of economic activity in 2001: approximately 14.4 million Americans watched waterfowl and about 10.3 million Americans watched other water birds.⁴⁷

The 2001 U.S. Fish and Wildlife Survey documented that many of those who participated in wildlife-related economic activity crossed state lines to do so. For example,

⁴⁵ U.S. Fish and Wildlife Service, *2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 5 (2002), available at <http://www.census.gov/prod/2003pubs/fhw01-us.pdf> (2001 *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*).

⁴⁶ U.S. Fish and Wildlife Service 2005, *Economic Impact of Waterfowl Hunting in the United States: Addendum to the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 4 tbl.1 and 11 tbl.4 (July 2005), available at http://library.fws.gov/nat_survey2001_waterfowlhunting.pdf.

⁴⁷ *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* at 88 tbl.40.

thirty percent of those who watched waterfowl, and thirty-one percent of those who watched other water birds, traveled across state lines to do so.⁴⁸

The Great Lakes area and Michigan benefit greatly from hunting and fishing. In 2001, there were almost two million anglers in the Great Lakes area, nineteen percent of whom fished in states where they did not reside.⁴⁹ Twenty-six percent of the just under 1.4 million anglers in Michigan traveled from outside the state to fish there.⁵⁰ Lake St. Clair and the St. Clair River in Michigan were visited by approximately 96,000 anglers in 2001, who spent about 524,000 days fishing.⁵¹ The Carabell and Rapanos wetlands may directly impact the water quality of Lake St. Clair.

Key game species like trout and ducks would decline significantly if tributaries and wetlands were not protected by the Act. Hunting and fishing activity would also drop as the quantity and quality of game diminished, resulting in a decrease in associated economic activity. Other fish and wildlife-related activities, such as waterfowl watching, and their associated economic activity would face similar declines.

⁴⁸ *Id.* at 88 tbl.40.

⁴⁹ *Id.* at 80 tbl.27, 109 tbl.61.

⁵⁰ *Id.* at 103 tbl.55.

⁵¹ *Id.* at 80 tbl.27.

II. CONGRESS INTENDED TO BROADLY PROTECT THE ENTIRE AQUATIC SYSTEM, INCLUDING TRIBUTARIES AND THEIR ADJACENT WETLANDS, AND THE CORPS PROPERLY ASSERTED JURISDICTION OVER THE WATERS IN RAPANOS AND CARABELL.

In *Riverside Bayview*, this Court found that the legislative history and language of the 1972 Act and its 1977 amendments made clear that Congress intended the Act to reach wetlands adjacent to other waters subject to the Act's jurisdiction. 474 U.S. at 138. The Court did not disturb this holding in deciding *SWANCC*. Rather, the Court endorsed its decision in *Riverside Bayview*, stating that, "We found that Congress' concern for the protection of water quality *and* aquatic ecosystems indicated its intent to regulate wetlands 'inseparably bound up with the "waters" of the United States.'" *SWANCC*, 531 U.S. at 167 (emphasis supplied) (citation omitted). In *SWANCC*, the Court only found that Congress did not intend to regulate certain intrastate ponds that were not adjacent to any other waters and had no connection whatsoever to other waters other than their use by migratory birds. *Id.* at 168 (declining to find that "the jurisdiction of the [Act] extends to ponds that are *not* adjacent to open water") (emphasis in original). Thus, *Riverside Bayview's* recognition of the significant hydrological and ecological effects of adjacent wetlands on navigable-in-fact waters has continued vitality and applies with equal force to the types of tributaries and adjacent wetlands at issue in these cases.

A. Courts Have Overwhelmingly Affirmed that Congress Clearly Intended the Act to Regulate Non-Navigable Tributaries.

From the Act's passage in 1972, courts have recognized Congress's intent to protect the entire tributary system of navigable waters. In 1974, the Sixth Circuit held

that non-navigable tributaries are plainly covered, noting that, “Congress’ clear intention as revealed in the Act itself was to effect marked improvement in the quality of the total water resources of the United States, regardless of whether that water was at the point of pollution part of a navigable stream.” *United States v. Ashland Oil and Trans. Co.*, 504 F.2d 1317, 1323 (6th Cir. 1974).

Both before and after *SWANCC*, other courts have consistently concluded that even far-reaching tributaries of navigable waters are covered by the Act. In a case of recent vintage, Judges Michael, Wilkinson and Luttig of the Fourth Circuit held that because “discharges into nonnavigable tributaries and adjacent wetlands have a substantial effect on water quality in navigable waters,” the intended reach of the CWA encompasses the “entire tributary system” of navigable waters. *United States v. Deaton*, 332 F.3d 698, 710, 712 (4th Cir. 2003), *cert. denied*, 124 S.Ct. 1874 (2004).

Other Circuits have found the Act to cover tributaries other than navigable-in-fact waters, including a manmade ditch, *Deaton*, 332 F.3d at 712; *Treacy v. Newdunn*, 344 F.3d 407, 417 (4th Cir. 2003), *cert. denied*, 124 S.Ct. 1874 (2004), irrigation canals, *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 533 (9th Cir. 2001), and storm drains that led to the Tampa Bay. *United States v. Eidson*, 108 F.3d 1336, 1342-43 (11th Cir. 1997). In a case involving an extended tributary system that included a man-made ditch, Judge Posner recently noted:

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 [Corps’s] regulation as distinguishing between a stream and its man-made counterpart.

United States v. Gerke Excavating, 412 F.3d 804, 805-06 (7th Cir. 2005).

As the courts have recognized, tributaries can convey pollutants directly to navigable-in-fact waters, poisoning them for both human and wildlife use.⁵² The same holds true for adjacent wetlands that “tend to drain” into tributaries and are likely to be hydrologically linked to navigable-in-fact waters. However, as the Court has recognized in *Riverside Bayview*, and reaffirmed in *SWANCC*, other equally compelling ecological reasons support jurisdiction over the waters at issue in these cases.

B. The Corps Was Reasonable in Regulating the Wetlands At Issue as “Adjacent Wetlands.”

Riverside Bayview’s finding that wetlands “adjacent” to waters subject to the Act’s jurisdiction are themselves jurisdictional was based both on the tendency of adjacent waters to drain into other jurisdictional waters, and to the vital ecological functions these wetlands perform that maintain the integrity of navigable-in-fact waters. As the Court stated, “[T]he Corps’ ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act.” *Riverside Bayview*, 434 U.S. at 134.

⁵² Petitioners rely on two Fifth Circuit decisions, *In re: Needham*, 354 F.3d 340 (5th Cir. 2003) and *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir. 2001), *reh’g (en banc) denied*, 263 F.3d 167 (2001), for their position that the Act does not extend to the Rapanos and Carabell wetlands. *See, e.g.*, Pet. Carabell.Br. at 36-7. These cases involved the Oil Pollution Act (“OPA”), not the Clean Water Act. In *Needham*, the court ultimately found that the spill at issue was covered by the OPA. *Needham*, 354 F.3d at 344-47. In *Rice*, the Court held that the OPA does not apply to discharges of oil onto dry land that seeped through the ground into groundwater which, in turn, contaminated several intermittent streams 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. *Rice*, 250 F.3d at 265, 269-72.

In addition, the Court deemed the Corps reasonable in regulating adjacent wetlands even though “not every adjacent wetland is of great importance to the environment of adjoining bodies of water” and “the existence of such cases does not seriously undermine the Corps’ decision to define all adjacent wetlands as ‘waters.’” *Id.* at 135 n.9. The Court went on to state:

If it is reasonable for the Corps to conclude that in the majority of cases, adjacent wetlands have significant effects on water quality and the aquatic ecosystem, its definition can stand. That the definition may include some wetlands that are not significantly intertwined with the ecosystem of adjacent waterways is of little moment.

*Id.*⁵³ This conclusion is consistent with the Court’s jurisprudence regarding generalized rules regulating a class: “To generalize is to be imprecise. Virtually *every* legal (or other) rule has imperfect applications in particular circumstances.” *Barnhart v. Thomas*, 540 U.S. 20, 29 (2003) (emphasis in original).

The Court has therefore recognized that the class of wetlands adjacent to other jurisdictional water are “inseparably bound up” with navigable-in-fact waters and are enormously valuable to their integrity. No argument Petitioners put forth disputes this.

⁵³ The Court went on to state that for wetlands that are not significantly intertwined with other waters, the Act provides an answer: activities impacting such waters may be permitted. See *Riverside Bayview*, 434 U.S. at 135 n.9.

Moreover, while the Court noted in *SWANCC* that a “significant nexus” between adjacent wetlands and navigable waters informed its decision in *Riverside Bayview*, this characterization did not dismiss the above holding in *Riverside Bayview*. See *SWANCC*, 531 U.S. at 167. (“It was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the CWA in *Riverside Bayview Homes*.”).

All of the wetlands at issue in these cases are clearly adjacent to jurisdictional waters. The Rapanos wetlands easily satisfy the adjacency requirement because all three sites share hydrological surface water connections to “waters of the United States,” namely Lake Huron and Lake St. Clair. *See United States v. Rapanos*, 376 F.3d 629, 642-43 (6th Cir. 2004). Pollutants discharged into the wetlands could therefore have significant impacts on those navigable-in-fact waters as the water flows downstream. Similarly, the Carabell wetlands are adjacent to jurisdictional waters. As the court below found, the property containing the wetlands indisputably abuts an unnamed tributary that eventually connects to Lake St. Clair. *Carabell v. U.S. Army Corps of Engineers*, 391 F.3d 704, 705-06, 708 (6th Cir. 2004). The Corps was reasonable to believe that the wetlands are likely hydrologically connected to the tributary flowing into Lake St. Clair given the tendency of wetlands separated from other waters by a berm to drain into the abutting water by seepage through, cuts in or overtopping of the berm. Furthermore, the record provides strong indications that additional facts would show that cuts in the berm or overtopping results in hydrological connections between the Carabell wetland and the abutting tributary. *See Carabell J.A.* at 186a-187a (testimony describing cuts and low areas in the berm where water might flow from wetland into nearby tributary during storm events). The Corps also found that the wetlands perform valuable water quality and ecological functions, preventing floods, retaining sediments and other pollutants that would otherwise be free to flow directly into jurisdictional waters, and providing habitat to aquatic wildlife. *Carabell*, 391 F.3d at 706. These factors satisfy the adjacency requirements detailed in *Riverside Bayview* and distinguish the Carabell wetlands from the ponds in *SWANCC*, which possessed none of these properties.

III. CONGRESS CAN REGULATE TRIBUTARIES AND ADJACENT WETLANDS UNDER THE COMMERCE CLAUSE, GIVEN THE SUBSTANTIAL EFFECT THAT ECONOMIC ACTIVITIES THAT POLLUTE THESE WATERS HAVE ON FOREIGN AND INTERSTATE COMMERCIAL ACTIVITY, SUCH AS HUNTING AND FISHING.

The regulation of tributaries and adjacent wetlands is constitutional under the commerce clause because it is both (1) regulation of the “channels of commerce,” and (2) regulation of activities which, in the aggregate, have a substantial effect on interstate commerce. *Gonzales v. Raich*, 125 S.Ct. 2195, 2205 (2005).⁵⁴ In this brief, we focus on the constitutionality of the regulation under the latter theory. In the aggregate, the placement of fill in wetlands for the purposes of economic development reasonably could substantially affect interstate commerce by degrading resources depended upon by a multi-billion dollar recreation and sporting industry, as well as related businesses.

In upholding Congress’s broad prohibition on the manufacture, distribution or possession of marijuana under the Controlled Substances Act (“CSA”), this Court strongly affirmed Congress’s power to regulate a class of activity “even if [the individual activity] be local and though it may not be regarded as commerce, . . . if it exerts a substantial economic effect on interstate commerce.” *Raich*, 125 S.Ct. at 2205-06 (quoting from *Wickard v. Filburn*, 317 U.S. 111 (1942)). The Court has long endorsed this principle in many regulatory contexts.⁵⁵

⁵⁴ It is also possible that these waters may be regulated by Congress as “instrumentalities” of interstate commerce, or “things” in interstate commerce. *See Raich*, 125 S.Ct. at 2205.

⁵⁵ For instance, this Court has held that the prohibition on the shipment of goods produced in violation of wage and hour restrictions under the Fair Labor Standards Act was constitutional because “the total effect of the competition of many small producers may be great”,
(Continued on following page)

Thus, in the case of “adjacent wetlands” and “tributaries,” the analysis must focus on the substantial aggregate effect that destroying these resources may have on commerce. As the Seventh Circuit has stated:

Obviously, filling in a 5.8 acre tract . . . is not going to have a 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.

Gerke, 412 F.3d at 806. Further, the Court noted that it “need not determine whether respondents’ activities, taken in the aggregate, substantially affect interstate commerce in fact, but only whether a ‘rational basis’ exists for so concluding.” *Raich*, 125 S.Ct. at 2208 (citing *United States v. Lopez*, 514 U.S. 549, 557 (1995)).

Petitioners activities – development of a large condominium complex, *Carabell*, 391 F.3d at 706, and the filling of wetlands for development of a shopping center, *Rapanos*, 376 F.3d at 632 – are indisputably commercial in nature. As discussed above, the wetlands these economic activities affect belong to a class of waters that play a major role in sustaining a multi-billion dollar hunting and

United States v. Darby, 312 U.S. 100, 123 (1941), and that Congress was within its powers to protect “prime farmland” from mining impacts under the Surface Mining Control and Reclamation Act even though the likely impacts to total farmland from mining was small. *Hodel v. Indiana*, 452 U.S. 314, 321-30 (1981); *see also*, *Perez v. United States*, 402 U.S. 146, 153-4 (1971) (aggregate effects relied on to uphold “loan sharking” prohibition of Consumer Credit Protection Act); *Katzenbach v. McClung*, 379 U.S. 294, 301 (1964) (aggregate effects relied on to uphold prohibition of racial discrimination in restaurants under the Civil Rights Act of 1964).

fishing industry. Therefore, the Court has a rational basis for concluding that unregulated commercial development of such waters, in the aggregate, would have substantial impacts on interstate commerce and adversely affect America's long-standing hunting and fishing industries.

Raich dispels Petitioners' contention that Section 404 regulation should contain a "jurisdictional element" giving the Corps "a method for distinguishing between wetlands that would substantially affect interstate commerce and wetlands that would not." Pet. Carabell et al. Br. at 43. The Court found that, "[W]e have often reiterated that where the class of activities is regulated and that class is within the reach of federal power, the courts have no power to excise, as trivial, individual instances of the class." *Raich*, 125 S.Ct. at 2209 (citations and internal quotes omitted). Unless a "particular statute or provision [falls] outside Congress' commerce power in its entirety," the fact that the statute may apply in instances where the activity is not strictly commercial is not fatal to the exercise of commerce clause authority. *Id.* at 2209.

Regulation of tributaries and adjacent wetlands can easily be distinguished from the Court's holdings in *United States v. Lopez*, 514 U.S. 549 (1995), and *United States v. Morrison*, 529 U.S. 598 (2000), where the Court ruled that the Commerce Clause did not provide Congress power to regulate certain non-economic activities: intrastate possession of a gun near a school zone under the Gun-Free School Zone Act of 1990, and intrastate crimes involving violence against women under the Violence Against Women Act of 1994, respectively. Unlike the statute in *Lopez*, which was a "brief, single-subject statute making it a crime for an individual to possess a gun in a school zone," *Raich*, 125 S.Ct. at 2209, the Section 404 permitting system is an essential part of a large comprehensive regulatory scheme that extensively touches economic activities substantially affecting interstate commerce. See *City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304, 318 (1981) ("The 'major purpose'

of the [CWA] was ‘to establish a *comprehensive* long-range policy for the elimination of water pollution.’” (quoting S.Rep.No.92-414, at 95, 2 Leg.Hist. 1511) (emphasis in original as supplied by the Court).

Justice Scalia concurred that *Lopez* and *Morrison* “do not declare noneconomic intrastate activities to be categorically beyond the reach of the Federal Government. Neither case involved the power of Congress to exert control over intrastate activities in connection with a more comprehensive scheme of regulation.” *Raich*, 125 S.Ct. at 2218 (Scalia, J., concurring). This reasoning plainly applies here to uphold the constitutionality of the Corps’ “adjacency” and “tributary” regulations.

Moreover, despite Petitioner Carabell’s claim that Section 404 would regulate many activities that are not economic, most wetland fills involve economic activity at least as substantial as that in *Wickard*. In that case, the Court upheld the constitutionality of the Agricultural Adjustment Act, finding that wheat homegrown to supply the grower could have an economic effect on the market by removing a consumer from the market, thus influencing wheat prices. *See Wickard*, 317 U.S. at 127-29. The Court found that even though a farmer’s “own contribution to the demand for wheat may be trivial . . . his contribution, taken together with that of many others similarly situated, is far from trivial.” *Wickard v. Filburn*, 317 U.S. 111, 127-28 (1942).

Most wetland and tributary fills occur for economic activity, such as the type of residential and commercial development at issue in these cases⁵⁶ When the overall

⁵⁶ *See, e.g., Deaton*, 332 F.3d at 702 (fill placed in wetlands in effort to destroy wetlands for a residential subdivision); *Hoffman Homes, Inc. v. U.S. Environmental Protection Agency*, 999 F.2d 256, 257 (7th Cir. 1993) (wetlands filled by Hoffman Homes to construct a subdivision); *see also Samet, M., The Clean Water Act: Commerce Has Everything to*

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regulatory scheme of the Act as it applies to tributaries and adjacent wetlands is examined it becomes clear that it regulates economic commercial and residential development and other economic activities that substantially impact the multi-billion dollar sporting industry and other industries dependent on healthy water resources. Furthermore, these cases concern Congress's ability to regulate the placement of other pollutants generated by myriad industrial and other economic activities into tributaries and adjacent wetlands that flow directly into economically important navigable-in-fact waters, further supporting regulation under the commerce clause.⁵⁷

Similarly unpersuasive is Petitioner Carabell's argument that jurisdiction in this case violates the commerce clause because congressional findings concerning the CWA contain "no cogent rationale for permitting the extension of federal authority" over the Carabell wetlands. Pet. Carabell et al. Br. at 44. The Court has previously observed that it has "never required Congress to make particularized findings in order to legislate . . . absent a special concern such as the protection of free speech." *Raich*, 125 S.Ct. at 2208 (citation omitted). Further, "Congress cannot be expected (and certainly should not be required) to include specific findings on each and every

Do With It, NAT'L WETLANDS NEWSLETTER, Mar.-Apr. 2004, at 4 (stating that "the majority of acreage for which section 404 permits are sought is intended for commercial, industrial, or other economic uses") (citing, Albrecht, V. and B. Goode, *Wetland Regulation in the Real World*, Beveridge & Diamond (1994)). Moreover, even fills for purely "aesthetic" purposes, see Pet. Carabell et al. Br. at 43, on private land would likely affect the market value of that property and potentially nearby properties, as well as having potential market impacts through the purchase of fill or the hiring of labor.

⁵⁷ For instance, EPA regulations which cover discharges into waters – including those similar to the ones at issue in this case – for purposes of regulation under Section 402 have over 1,500 pages devoted to effluent guidelines for discharges caused by 73 different categories of industrial activity alone. See, e.g., 40 C.F.R. pts. 403-610.

substance contained [in the CSA].” *Raich*, 125 S.Ct. at 2208 n.32. This reasoning applies equally to the CWA.

In sum, there are numerous ways that economic activities causing the destruction of tributaries and adjacent wetlands could have a substantial aggregate effect on interstate commerce. As described above, these waters provide breeding grounds, habitat and food for various fish, game and other species. Additionally, they protect habitat in navigable-in-fact waters by filtering out nutrients and other pollutants, preventing erosion, ensuring healthy flows, and preventing flooding. They also possess the ability to transport poison and other discharged pollutants to downstream navigable-in-fact waters, harming their fish and wildlife populations. As a class, therefore, tributaries and adjacent wetlands are crucial to the viability of hunting, fishing, wildlife watching and other wildlife-related interstate commercial activity.

Moreover, given that these resources and the aquatic systems they support cross state lines, it is necessary to protect them at the federal level. If not protected, their aggregate loss or degradation will likely have severe deleterious effects upon the viability of fish, game, and other wildlife. As game, fish and other wildlife suffer, it reasonably follows that hunting, fishing and wildlife-related economic activity will also suffer. As numerous courts have found, there is no constitutional impediment to Congress regulating tributaries and adjacent wetlands linked to navigable-in-fact waters, and the protection of these national economic resources from harm is plainly within Congress’s authority to regulate commerce.

CONCLUSION

The judgments of the Court of Appeals should be affirmed.

Respectfully submitted,

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