

Native Plant Conservation Campaign

c/o California Native Plant Society 1722 J. St., Suite 17 Sacramento CA 95814 Ph: 415 970 0394 e mail: EMILYR@cnps.org

April 11, 2003

Plant

Society

Water Docket Environmental Protection Agency Mailcode 4101T, 1200 Pennsylvania Ave., NW Washington DC 20460

Attention: Docket ID No. OW-2002-0050

To Whom It May Concern:

The following are the comments of the Native Plant Conservation Campaign (NPCC) on the Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States" (Advance Notice) (Federal Register 68: 1991 et seq., January 15, 2003).

The Native Plant Conservation Campaign (NPCC) is project of the Center for Biological Diversity and the California Native Plant Society. It is a network of 28 affiliate native plant science and conservation organizations, representing more than 57,000 laypersons and professional botanists in 28 states (see Appendix). The mission of the NPCC is to promote appreciation and conservation of native plant species and communities through collaboration, education, law, policy, land use and management. NPCC affiliate organizations and their members work closely with state and federal agencies to manage and conserve the native plants and ecosystems of the United States. We also extensively use wetlands for research, education, and recreation.

INTRODUCTION

We are extremely concerned by the policy proposals in the Advance Notice and the policy changes in the accompanying Guidance (Advance Notice Appendix A). The proposals are poorly based in law, science and logic. They are also fiscally imprudent.

The purpose of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. Section 1251(a)). Healthy, intact, and well distributed wetlands are essential to this mission. The regulatory changes discussed in the Advance Notice will destroy the ability of the law to fulfill that purpose.

We recommend that this rulemaking be abandoned and that the accompanying Guidance be withdrawn.

ECOLOGICAL AND HYDROLOGICAL IMPORTANCE OF WETLANDS

The term "isolated wetlands" is not defined in the Advance Notice. This omission makes it difficult for the public fully to understand the potential impacts of the proposed rule and which wetlands, streams or other riparian areas may be affected. Thus, for the purposes of these comments the term "wetlands" will be defined to include (i) isolated wetlands (those not permanently connected by surface waters to navigable waters) (ii) non-navigable tributaries of larger rivers, lakes and streams, and (iii) ephemeral streams and wetlands, including vernal pools. All of these classes of wetlands may be excluded from CWA jurisdiction under the Advance Notice (see Advance Notice Appendix A).

Wetlands are among the most ecological and economically important of all ecosystems. On a per area basis, wetlands provide habitat for more plants and animals than any other habitat type. In the United States, over 35,000 rare plants and animals are associated with wetlands (NatureServe, 2003). Indeed Congress recognized the value of wetlands as habitat for wildlife, plants and wildlife-associated commerce and recreation:

"it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983" (Clean Water Act §1251 (a)(2))

As noted above, thousands of rare and state and federally listed species depend on wetlands for habitat and survival. Salmon, trout, numerous wetland plants, bird species such as eagles and willow flycatchers are only a few examples. Decreased CWA protection for wetlands will inevitably lead to reduction in the quantity and quality of habitat for these species. This in turn will increase the costs to taxpayers and landowners as the number of species requiring listing as threatened or endangered increases and as implementation of state and federal Endangered Species Acts becomes more difficult.

Wetlands are also critical to the functioning of human society. Wetlands purify and store water. Wetlands, including "isolated wetlands", have been repeatedly shown to be connected to groundwater and to shallow subsurface flows of water through watersheds, which are essential for recharge and purification of groundwater supplies

(e.g. Kaplan 2001, U.S. Fish and Wildlife Service, 2002; Cook, 2001). This function is extremely important in places where people rely on groundwater for drinking and irrigation. This is true in many parts of California (California Groundwater Association, 2003) and elsewhere. For example, 70% of Indiana citizens use groundwater for drinking (Kaplan, 2001).

Wetlands are also important in flood control as they store floodwaters during high flow events (see below).

A 2002 Fish and Wildlife Service report provides a useful table summarizing some of the hydrological and ecological functions of isolated wetlands (Tiner et al., 2002):

MAJOR WETLAND FUNCTIONS AND SOME OF THEIR VALUES.

(Source: Tiner 1998)

Water storage Flood- and storm-damage protection, water source during dry seasons, groundwater recharge, fish and shellfish habitat, water source for fish and wildlife, recreational boating, fishing, shellfishing, waterfowl hunting, livestock watering, ice skating, nature photography, and aesthetic appreciation

Slow water release Flood-damage protection, maintenance of stream flows, maintenance of fresh and saltwater balance in estuaries, linkages with watersheds for wildlife and water-based processes, nutrient transport, and recreational boating

Nutrient retention and cycling Water-quality renovation, peat deposits, increases in plant productivity and aquatic productivity, decreases in eutrophication, pollutant abatement, global cycling of nitrogen, sulfur, methane, and carbon dioxide, reduction of harmful sulfates, production of methane to maintain Earth's protective ozone layer, and mining (peat and limestone)

Sediment retention Water-quality renovation, reduction of sedimentation of waterways, and pollution abatement (retention of contaminants)

Substrate for plants and animals Shoreline stabilization, reduction of flood crests and water's erosive potential, plant-biomass productivity, peat deposits, organic export, fish and wildlife habitats (specialized animals, including rare and endangered species), aquatic productivity, trapping, hunting, fishing, nature observation, production of timber and other natural commodities, livestock grazing, scientific study, environmental education, nature photography, and aesthetic appreciation

Wetlands, including isolated wetlands, are also particularly important in coastal states like California because the groundwater recharge and water storage functions help resist intrusion from saltwater along the San Francisco Bay Delta and throughout the State (U.S. Geological Survey, 2003).

Finally, as the Advance Notice points out, the primary jurisdictional scope of the CWA is navigable waters. However, it is a basic fact of hydrology that navigable waters are made up of the waters that flow into them, both above and below ground. The quality of navigable waters is a direct function of the non-navigable waters that flow into them above and belowground. Thus it is impossible to implement the CWA's mandate to "prevent, reduce and eliminate pollution" (CWA 33 USC 1251(b)) in navigable waters without protecting the upstream wetlands and waters, navigable or not, ephemeral or not, that flow into and compose navigable waters. Current CWA regulations recognize and reflect this hydrologic reality. The Advance Notice ignores it. If the proposals in the Advance Notice are adopted, and pollution and filling of numerous classes of waters are deregulated, downstream navigable waters will unavoidably be polluted and otherwise damaged as well.

Thus, if we are to fulfill the goals explicitly stated in the Clean Water Act, continued, indeed enhanced, protection of wetlands, including isolated wetlands, ephemeral streams, and non navigable waters, is essential. The proposals in the Advance Notice would directly undercut the purposes and functions of the Clean Water Act itself.

ECONOMIC VALUES OF WETLANDS

In addition their ecological and societal values, healthy functioning well distributed wetlands contribute significantly to local, state and national economies. An increasing number or researchers are studying the economic value of so called "ecosystem services" - the valuable commodities and processes produced and performed by healthy native wildland ecosystems. Numerous studies have calculated values for various wetland ecosystem services.

For example, one study found that the marshes of Louisiana alone produced over \$200 million in annual commercial fish and shellfish harvest (U.S. Environmental Protection Agency, 2003). Marshes are generally at least partially non-navigable and so may be excluded from CWA jurisdiction under the Advance Notice.

Purification of water by wetlands is also tremendously valuable. Wetlands remove excess nutrients, sediment, and other anthropogenic pollutants as waters percolate through them. Many studies have examined the replacement value for wetlands in local communities. The replacement value is the cost to a local government to construct a plant to provide similar water purification services. One example, for the Congaree Bottomland Hardwood Swamp in South Carolina, found a minimum cost of \$5 million in initial capital investment would be required to replace the wetland services of the swamp. Annual maintenance of such a plant would require additional ongoing expenditures of local tax dollars (U.S. Environmental Protection Agency, 2003).

Wetlands control floods by capturing and storing high water flows and releasing them slowly into streams and rivers over time. As we fill or otherwise destroy wetlands, flood costs to society and taxpayers increase. The Environmental Protection Agency explains these costs (U.S. Environmental Protection Agency, 1995):

"Wetlands function as natural sponges that trap and slowly release surface water, rain, snowmelt, groundwater and flood waters. Trees, root mats, and other wetland vegetation also slow the speed of flood waters and distribute them more slowly over the floodplain. This combined water storage an braking action lowers flood heights and reduces erosion. Wetlands within and downstream of urban areas are particularly valuable, counteracting the greatly increased rate and volume of surface- water runoff from pavement and buildings. The holding capacity of wetlands helps control floods and prevents water logging of crops. Preserving and restoring wetlands, together with other water retention, can often provide the level of flood control otherwise provided by expensive dredge operations and levees. The bottomland hardwood- riparian wetlands along the Mississippi River once stored at least 60 days of floodwater. Now they store only 12 days because most have been filled or drained."

In another example, the Minnesota Department of Natural Resources has computed an average cost of \$300 to replace one acre-foot of wetland floodwater storage. The cost to replace the 5,000 acres of wetlands lost annually in Minnesota under current CWA regulation would be \$1.5 million (1991 dollars) (U.S. Environmental Protection Agency, 2003). The U.S. Army Corps of Engineers has found that loss of wetlands in the Charles River watershed in Massachusetts would result in \$17 million in annual flood damage (U.S. Army Corps of Engineers, 1971, 1976). Clearly, reduced CWA protection would lead to increased wetlands loss, increased flood damage and associated costs in pain and suffering and tax dollars.

In summary, if the policy direction in the Advance Notice is adopted, numerous negative ecological and economic consequences will result, including but not limited to:

- 1. Decreased floodwater storage and increased flood damage and costs at the local, state and national level,
- 2. Reduced water quality and increased costs for water purification and treatment of water borne diseases,
- 3. Reduced groundwater recharge and supply,
- 4. Reduced habitat for fish, wildlife and plants, including rare and listed species, and increased need for species listings and costs for species conservation,
- 5. Reduced opportunities for wetland associated recreation and reductions in revenues to local communities from these activities, and
- 6. Reduced opportunities for sustainable commercial harvest of wetland associated species and decreased revenues from these activities.

Consequently, if the proposal in the Advance Notice is adopted, and wetland protection is dramatically reduced, the resulting acceleration in wetland loss will have considerable effects on local, regional and national economies through increased flood losses, increased need for construction and maintenance of water treatment plants, and loss of revenue associated with fishing, tourism and recreation. We request that, if the Army Corps is unwise enough to proceed with this rulemaking, that supplementary information for the proposed rule include an analysis of the costs to taxpayers at the local, state, and federal level, that would accompany such a regulatory change.

FLAWS IN LEGAL REASONING FOR ADVANCE NOTICE

The Advance Notice is theoretically a response to a decision of the U.S. Supreme Court in the case *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) (Advance Notice Summary p. 1991). However, the proposals in the Advance Notice massively and unjustifiably expand the very narrow scope of the SWANCC decision.

The Advance Notice proposes possible exclusion of numerous waters including isolated wetlands (undefined in the Advance Notice), ephemeral streams and nonnavigable tributaries of navigable waters from CWA jurisdiction (Advance Notice Appendix A; 68 Fed. Reg. 1995). However in SWANCC, the Court explicitly limited the applicability of its decision to the single isolated wetland in question: "an abandoned gravel pit in northern Illinois", an anthropogenic artificial pond. SWANCC was an "as applied" decision: the Court made it clear that the decision applies only to the circumstances and to the pond in question and does not change larger CWA policy. SWANCC does not apply to any natural isolated or other wetlands, much less ephemeral streams, non-navigable tributaries of navigable waters or other waters or wetlands that bear no resemblance to the man-made gravel pit in SWANCC. As one legal analysis explained before the Advance Notice was released,

"... the Corps' and EPA's narrow interpretation of SWANCC is consistent with the "as applied" nature of the Court's decision. In SWANCC, the Corps initially concluded the abandoned sand and gravel pit was not a jurisdictional wetland because it contained no vegetation adapted for saturated soil conditions. But later the Corps determined that the site was subject to Corps jurisdiction only because migratory birds used the area. In the opening paragraph of SWANCC, the Court states that it is deciding whether the CWA may be fairly extended to "confer jurisdiction over an abandoned sand and gravel pit in northern Illinois which provides habitat for migratory birds." SWANCC, 531 U.S. at 162. In closing, the Court concludes, "We hold that [the Corps' regulation], as clarified and applied to petitioners [dump] site pursuant to the 'Migratory Bird Rule,'... exceeds the authority granted to respondents under [the CWA]." <u>Id</u>. at 174 (emphasis added)." (Wagner, 2002) The language of the Court's decision cited in this analysis makes it clear that the SWANCC decision applies only to the specific northern Illinois man-made gravel pit in question, not to other waters.

Even if we were to ignore the fact that SWANCC was an "as applied" decision and accept that SWANCC may change CWA jurisdiction for non-anthropogenic waters, the case would still fail to justify the sweeping changes proposed in the Advance Notice. The only possible basis for CWA coverage for the abandoned gravel pit in the SWANCC case was the Migratory Bird Rule (see SWANCC decision). Thus, at its broadest possible interpretation, SWANCC cannot affect CWA jurisdiction of the other classes of waters covered in current CWA Section 404 regulations, including:

- all...waters such as intrastate lakes, rivers, streams (*including intermittent streams*), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use degradation or destruction of which could affect interstate or foreign commerce, including any such waters (i) which are or could be used by .. travelers for recreational or other purposes, (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- Tributaries of waters used for interstate or foreign commerce, including wetlands

Thus, SWANCC provides no legal basis for the regulatory changes proposed in the Advance Notice and implemented in the Guidance.

CONCLUSION

We recommend that the Army Corps withdraw the Guidance and abandon this proposed rulemaking. Thank you for the opportunity to present these comments.

Sincerely,

Engil

Emily B. Roberson, Ph.D. Director

References

California Groundwater Association. 2003. Factsheet on wells drilled 1974-1997. <u>http://www.groundh2o.org/index.html</u>; http://www.groundh2o.org/Information/How Many Wells /how many wells .html

Cook, B.J. 2001. Temporary hydrologic connections make "isolated" wetlands function at the landscape scale. Ph.D. dissertation. Division of Biological Sciences, The University of Montana. Missoula, MT. 70 pp. http://nris.state.mt.us/wis/wetlands/pubs/bjcook dissertation.prn.pdf

Kaplan, L. 2001. Indiana will protect wetlands despite new court ruling. May 20, 2001. <u>http://www.in.gov/idem/ie/summer2001/protect_wetlands.html</u>

NatureServe Explorer 2003. Database Search. NatureServe, Arlington, VA.

Tiner, R.W. H. C. Bergquist, G. P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Selected Areas of the United States U.S. Fish and Wildlife Service, Washington DC http://wetlands.fws.gov/Pubs_Reports/isolated/report.htm

U.S. Army Corps of Engineers (ACOE). 1971. *Charles River Massachusetts, Main Report & Attachments*, New England Division.

U.S. Army Corps of Engineers (ACOE). 1976. *Water Resources Development Plan, Charles River Watershed, Massachusetts*, New England Division.

U.S. Environmental Protection Agency. 2003. Economic Benefits of Wetlands. Website Fact Sheet <u>http://www.epa.gov/owow/wetlands/facts/fact4.html</u>

U.S. Environmental Protection Agency. 1995. America's wetlands: Our vital link between land and water. Office of Water, Office of Wetlands, Oceans and Watersheds. EPA843-K-95-001.

U.S. Geological Survey. 2003. National Water Summary on Wetland Resources United States Geological Survey Water Supply Paper 2425 http://water.usgs.gov/nwsum/WSP2425/exec_summary.html

Wagner, K. 2002. Federal Regulation of Isolated Wetlands: *SWANCC*'s Shrinking Effect Over Time. American Bar Association Endangered Species Committee Newsletter Water Quality and Wetlands Committee Newsletter. May 2002. p. 8-10

APPENDIX Native Plant Conservation Campaign Affiliate and Cooperating Organizations

NPCC Affiliates	NPCC Cooperators
Arizona-Sonora Desert Museum California Native Plant society Center for Biological Diversity Colorado Native Plant Society Florida Native Plant Society Grand Prarie Friends of Illinois Herb Society of America Idaho Native Plant Society Iowa Native Plant Society Kauai Native Plant Society Lady Bird Johnson Wildflower Center Maryland Native Plant Society Minnesota Native Plant Society Missouri Native Plant Society Montana Native Plant Society New England Wild Flower Society (6 states) New Mexico Rare Plant Technical Council North Carolina Wild Flower Preservation Society North Carolina Botanical Garden Native Plant Society of New Mexico Native Plant Society of Northeastern Ohio Native Plant Society of Oregon South Carolina Native Plants Society Ticonderoga Arboretum and Botanical Gardens, VA Utah Native Plant Society Washington Native Plant Society West Virginia Native Plant Society	Botresearch USA CalFlora Database California Trout Center for Native Ecosystems Defenders of Wildlife Endangered Species Coalition Forest Service Employees for Environmental Ethics Pacific Rivers Council PlantaEuropa PlantLife, UK Public Employees for Environmental Responsibility T&E Inc. Xerces Society