

National Wetland Policy: USA

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Kim Smaczniak

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Abstract

United States wetland policy has developed over the past four decades. Prior to the 1970s, government policy largely reflected the view of wetlands as unproductive swampland that posed a nuisance to human health, promoting drainage and repurposing for agriculture. Concern about wetland loss emerged only after its negative impacts to fish and waterfowl became apparent. Lack of restriction on wetland conversion leads to the loss of more than 50% of total wetland acreage in the contiguous United States over a 200-year period ending in 1980. In 1972, the US Congress passed the Clean Water Act, amending an existing law to create what remains the lynchpin of federal wetlands policy. As understanding of the importance of wetlands grew, a broad range of other federal legislation and programs advancing wetlands protection emerged. By 1987, the

Environment and Natural Resources Division, United States Department of Justice, Washington, DC, USA

e-mail: kim.smaczniak@usdoj.gov

K. Smaczniak (⋈)

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NGO Conservation Foundation convened a cross-sectoral forum leading to recommendation that national policy be guided by the goal of "no net loss" that was partially successful in reducing the rate of wetland loss but which did not account for regional differences and impacts on wetland functionality.

Keywords

 $US \cdot Jurisdiction \cdot Supreme \ court \cdot Federal \ authority \cdot No \ net \ loss \cdot Mitigation \cdot Army \ Corps \ of Engineers$

Introduction

United States wetland policy has developed over the past four decades. Prior to the 1970s, government policy largely reflected the view of wetlands as unproductive swampland that posed a nuisance to human health. The Swamp Lands Acts of 1849, 1850, and 1860, for example, provided states with control over large wetland areas in order to promote their drainage and repurposing for use in agriculture. Concern about wetland loss emerged only after its negative impacts to fish and waterfowl became apparent, in part due to federal laws such as the Fish and Wildlife Coordination Act of 1934 and the US Fish and Wildlife Wetlands Inventories of 1954 and 1973 (National Research Council 1992). This policy of promoting or not restricting wetland conversion lead to the loss of more than 50% of total wetland acreage in the contiguous United States over a 200-year period ending in 1980 (Dahl 1990).

In 1972, the US Congress passed the Clean Water Act, amending an existing law to create what remains the lynchpin of federal wetlands policy. Under the Clean Water Act, two federal agencies, the Environmental Protection Agency (the EPA) and the Army Corps of Engineers, are jointly charged with administering a permitting program that prohibits the conversion of protected wetlands unless certain conditions are met. As understanding of the importance of wetlands grew, a broad range of other federal legislation and programs advancing wetlands protection emerged. By 1987, as the rate of wetland loss had slowed but not halted, the EPA requested a nongovernment organization, Conservation Foundation, to convene a forum of government, business, academic, and NGO stakeholders to address how the nation should protect and manage its wetlands. The forum issued as its key recommendation that national policy be guided by the goal of "no net loss" of remaining wetlands, and this policy has become the defining feature of US wetland management. President George HW Bush adopted the no net loss policy in 1989, and subsequent administrations have each endorsed the goal.

Despite adoption of a clear "no net loss" objective, US wetlands management policy has had mixed results. From an average loss of 458,000 acres of wetland per year during the 1950s–1970s, annual losses dropped to 290,000 acres from the mid-1970s to mid-1980s, and more dramatically to 58,500 acres from 1986 to 1997 (Dahl 2006). From 1998 to 2004, wetland acreage *increased* an average 32,000 acres per year. This net growth, however, reversed from 2004 to 2009,

with wetland conversion again slightly outpacing wetland creation and restoration for a net loss of an estimated 62,300 acres during the 5-year period. These figures do not capture regional trends in wetland loss, changes in wetlands quality or functionality, or shifts in wetland types, which are also important indicators of the success of wetland policy (Dahl 2011).

Key Features of U.S. Wetland Policy

Limits on Federal Jurisdiction

Federal authority to regulate wetlands is limited because the US Constitution provides only certain enumerated powers to the federal government and retains the balance of authority to State governments. Federal authority to manage wetlands stems from its power to regulate interstate commerce. While the law is somewhat in flux, in general, the federal government may assert jurisdiction over wetlands if those wetlands, alone or in combination with similarly situated wetlands, significantly affect a waterway traditionally subject to federal jurisdiction (i.e., navigable waters that historically served as conduits for interstate commerce). The US Supreme Court established the operable test for federal jurisdiction over wetlands in a 2006 decision (Rapanos v. United States). Because the current test does not provide clear, categorical guidance as to which wetlands are jurisdictional, dispute has arisen surrounding federal agencies' assertion of regulatory authority over isolated or ephemeral hydrological features like ponds, intermittent streams and remote wetlands. The EPA and the Army Corps of Engineers recently proposed a regulation that is expected to clarify the limits of federal jurisdiction.

Under the US federal system of government, states retain an important role in wetlands management. States often exercise regulatory authorities that can critically impact wetlands, including potentially authority over isolated wetlands outside of federal jurisdiction. State agencies frequently implement wetlands management programs, while federal programs provide support for such activities through grants or information-sharing. States also play a direct role in the federal permitting program, by certifying a proposed permit will comply with state water quality standards and establishing coastal zone management programs with which federal actions, including permits, must be consistent.

Federal Agencies

There is no single federal agency responsible for US wetland policy. Instead, a large variety of agencies have regulatory authority over or implement programs affecting different aspects of wetland policy.

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The Clean Water Act

The Clean Water Act is the most important federal tool to advance national wetland policy. The Act's purpose is broadly "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters", Section 404 of the Act establishes a permitting regime to regulate the filling of US waters, including wetlands under federal jurisdiction. In order to receive a permit, an applicant must demonstrate to the Army Corps of Engineers that its proposed discharge (i.e., the activity resulting from the drainage or filling of a wetland) complies with what are known as the "404(b) (1) Guidelines". Assuming these guidelines are met, the Army Corps of Engineers will grant the permit unless it finds the permit to be contrary to public interest.

The 404(b)(1) guidelines aim at prohibiting a discharge unless it is demonstrated that it will not have unacceptable impacts on the aquatic ecosystem. A permit applicant must show that its proposed discharge is the least environmentally damaging practicable alternative to achieve the purpose of a project. (For example, a highway scheme may be required to result in the destruction of the smallest number of wetlands to provide desired public transit, given economic and technical constraints.) If a project does not depend on being sited within wetlands or in proximity to water, the Army Corps of Engineers assumes that such a practicable alternative is available unless a permit applicant clearly demonstrates otherwise. A permit will not be granted if the discharge has certain adverse effects, such as contributing to a violation of water quality standards or threatening an endangered species. Even if these conditions are met, a permit will not be granted unless the project takes practicable steps to minimize the harm it causes to the aquatic environment. In addition to the direct impacts of the discharge on wetlands, the agency must consider the cumulative impacts of other discharges on the ecosystem (for example, whether filling only a small quantity of wetland nonetheless impacts the quality of the water environment because it has already been severely impacted) and the secondary impacts of the project (such as the indirect impacts caused by building a road due to increased access to the environment) before issuing a permit.

Once all practicable steps to avoid adverse impact have been incorporated into the proposed activity, the Army Corps of Engineers requires mitigation for unavoidable impacts. Such compensatory mitigation may include restoration, creation, enhancement, and preservation of aquatic resources through a number of means. In 2008, the Army Corps of Engineers adopted new regulation intended to improve the success of compensatory mitigation by promoting a focus on the watershed and encouraging the use of ecological performance measures.

Federal Funding

In addition to direct regulation, a large number of federal laws provide funds or withhold federal benefits in order to promote the protection or restoration of wetlands. Other federal laws designate wetlands for particular protection.

National Measures to Protect an Estuary Protection Act	Department of the	Authorized the study and inventory
(P.L. 90-454) (1968)	Interior (DOI)	of estuaries and the Great Lakes, and provided for management of designated estuaries between the DOI and the states
Estuary Restoration Act of 2000 (P.L. 106-457) (2000)	EPA, NOAA, USACE, FWS, USDA	Promotes the restoration of estuary habitat, develops a national estuary habitat restoration strategy, provides federal assistance and promotes efficient financing of such projects, and enhances monitoring and research capabilities
Executive Order 11990, Protection of Wetlands (1977)	Federal agencies	Requires federal agencies to minimize impacts of federal activities on wetlands
Executive Order 11988, Protection of Floodplains (1977)	Federal agencies	Requires federal agencies to minimize impacts of federal activities on floodplains
Federal Aid in Wildlife Coordination Act of 1956	DOI	Authorizes the development and distribution of fish and wildlife information and the development of policies and procedures relating to fish and wildlife
Food, Agriculture, Conservation, and Trade Act of 1990 (P.L. 101-624)	USDA National Resource Conservation Service	Water Resources Development Act of Wetland Reserve Program purchases perpetual nondevelopment easements on farmed wetlands. Subsidizes restoration of croplands to wetlands
Food Security Act of 1985 (Swampbuster) (P.L. 99-198)	USDA Farm Service Agency, Fish and Wildlife Service (FWS)	"Swampbuster" program suspends agricultural subsidies for farmers who convert wetlands to agriculture. Conservation Easements program allows FmHA FSA to eliminate some farm debts in exchange for long-term easements that protect wetlands and other areas
Migratory Bird Hunting and Conservation Stamps (1934) (Ch. 71, 48 Stat. 452)	FWS	Acquires wetland easements using revenues from fees paid by hunters for duck stamps
National Environmental Policy Act of 1969 (P.L. 91-190)	Federal Agencies	Requires the preparation of an environmental impact statement for all major federal actions significantly affecting the environment
North American Waterfowl Management Plan (1986)	FWS	Establishes a plan for managing waterfowl resources by various methods, such as acquiring wetlands

(continued)

National Measures to Protect a	nd Restore Wetlands. Source	ee: EPA 2005
North American Wetlands Conservation Act (1989) (P.L. 101-233)	FWS	Encourages public/private partnerships by providing matching grants to organizations for protecting, restoring, or enhancing wetlands
Rivers and Harbors Act of 1938 (52 Stat. 802)	US Army Corps of Engineers (USACE)	Provides that "due regard" be given to wildlife conservation in planning federal water projects
U.S. Tax Code Tax Reform Act of 1986 (P.L. 99-514)	Internal Revenue Service	Provides deductions for donors of wetlands and to some nonprofit organizations
Water Bank Act (1970) (P.L. 91-559)	USDA Farm Service Agency	Leases wetlands and adjacent uplands from farmers for waterfowl habitat for 10-year periods.
Water Resources Development Act of 2000 (P.L. 106-541)	USACE	States that future mitigation plans for federal water projects should include "in kind" mitigation for bottomland hardwood forests
Wetlands Loan Act (1961) (P.L. 87-383	FWS	Provides interest-free loans for wetland acquisition and easements.
Wild and Scenic Rivers Act (P.L. 90-542) (1968)	DOI, USDA	Protects designated river segments from alterations without a permit

Future Challenges

The proposed EPA/Army Corps of Engineers rule may improve clarity over the scope of federal jurisdiction; however its effects are uncertain until the rule is finalized. The process to finalize the rule and then observe whether it survives legal challenge in court is likely to span several years, during which the legal uncertainty surrounding the limits of federal authority will remain a barrier to federal enforcement efforts.

Due to the limits on federal authority to regulate certain wetlands, the patchwork and divergent approach of state regulators remains a continued challenge to wetlands protection. Many states lack strong legislation to protect wetlands or fail to enforce laws already in place.

Controls over stormwater runoff, which may adversely impact wetlands due to pollutant loads, remain an evolving area of the law. Certain areas of the USA. are exploring novel methods to control runoff, but attaining widespread implementation of such controls remains a challenge.

Finally, failed mitigation represents a serious challenge to attainment of national wetlands policy. Despite federal efforts to reform wetland mitigation requirements to ensure that there is no net loss of wetland functionality due to approved projects, there remains concern that mitigation requirements are imperfectly designed and inadequately monitored, and that full compliance is not being attained.

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