



**American Planning Association**

*Making Great Communities Happen*

## Policy Guide on Wetlands

Adopted by Chapter Delegate Assembly, April 14, 2002  
Ratified by Board of Directors, April 15, 2002  
Chicago, IL

### Introduction and Findings

Wetlands are found throughout the United States and can be classified into two main groups: coastal or tidal wetlands and inland or nontidal wetlands. Tidal wetlands are largely comprised of coastal salt and brackish marshes, mudflats, mangrove (tropical maritime trees or shrubs) and other swamps subjected to periodic tidal influence. Nontidal wetlands principally include freshwater marshes, ponds, shrub and wooded swamps, bogs, and bottomland hardwood forests. Nontidal wetlands represent a complex assemblage of inland wet environments.

Many of these wet environments are universally perceived as "wetlands," while others can be recognized and delineated only by trained experts. For classification purposes, wetlands are subdivided into five primary systems: marine, estuarine, riverine, lacustrine (lakes and ponds) and palustrine (swamps and marshes).

Wetlands in their natural state perform ecological functions, which are vitally important to the environment and economic health of the nation and impossible or costly to replace. Wetlands protect the quality of surface waters by retarding the erosive forces of moving water. They provide a natural means of flood control providing damage protection by reducing flood peaks, thereby protecting against the loss of life and property. Wetlands improve water quality by intercepting and filtering out waterborne sediments, excess nutrients, heavy metals and other pollutants.

Wetlands are also sources of food, shelter, essential breeding, spawning, nesting and wintering habitats for fish and wildlife. These include migratory birds, endangered species and commercially and recreationally important species. Wetlands need to be recognized as part of a complex, interrelated, hydrologic system.

At the time of the nation's settlement, wetlands represented approximately 221 million acres (89.5 million ha) of the land area in the lower 48 states (Dahl 2000). By 1997, only 105.5 million acres (42.7 million ha) remained, leaving just 47.7 percent of the original wetland acreage (Dahl 2000). Wetlands now occupy about 5.5 percent of the land surface of the lower 48 states. Three-fourths of the remaining wetlands in the continental United States are privately owned and only about 0.5 percent of these are under some form of conservation protection (Tiner, 1984).

Wetland losses have varied over time. Between the mid-1950s and the mid-1970s, about 11 million acres of wetland were lost, while 2 million acres of new wetlands were created. Thus, in that 20-year interval, the nation experienced a net loss of 9 million acres of wetland, an area about twice the size of New Jersey. This represents an annual loss of approximately 458,000 acres (185,400 ha). Agricultural development was responsible for 87 percent of the national losses while urban development and other development caused 8 percent and 5 percent of the losses, respectively.

During the period of 1986 and 1997, the estimated total net loss of wetlands was 644,000 acres (260,700 ha), representing an annual loss of 58,500 acres (23,700 ha) (USFWS 2000). This is a significant decline in the rate of loss as compared to the period of 1950-1970. Ninety-eight percent of all wetland losses during 1986-1997 were freshwater wetlands (USFWS 2000).

Between 1986-1997, urban development accounted for an estimated 30 percent of all losses, with agriculture responsible for 26 percent, silvicultural activities 23 percent, and 21 percent attributed to rural development ((USFWS 2000). The rate of loss to agricultural activities declined markedly during this period, with only 198,000 acres (80,200 ha) attributed to agricultural conversion as compared to one million acres (404,900 ha) between the mid-1970s and 1984 (USFWS 2000). This decline is attributed to "Swampbuster" provisions of the 1985 Food Security Act and agricultural set-aside programs

In recent decades, a number of federal, state and local government programs have been developed for preserving wetlands. Although the rate of loss has slowed markedly, both conservation and regulatory approaches typically have not been effective in preventing continued, large and small-scale losses. Most programs have addressed only limited aspects of the wetlands protection problem and have been adopted in a piecemeal manner. The result is a patchwork of federal, state and local government programs, which are often duplicative and confusing, allowing certain wetland conversions to proceed without adequate review, creating significant delays and added costs to achieving legitimate, permitted uses. Coordination and reform of the existing piecemeal regulatory environment could ensure adequate and meaningful review of important natural resource issues, while reducing the time and expense required for such reviews.

Regulations prohibiting or restricting wetland dredging and filling often produce land use controversy. Wetland permitting decisions made at the federal level under the U.S. Army Corps of Engineers, Section 404 program can significantly affect local planning objectives. Citizens and local, state and federal officials are frequently involved in conflicts over proposed wetland conversions and the management of surrounding land uses which threaten to degrade or destroy nearby wetlands.

Similarly, landowners may perceive few personal benefits of protecting wetlands on their property, and when prevented from converting wetlands, may strongly resist regulatory efforts. Community and watershed-based planning and other non-regulatory approaches are important in protecting wetlands and other sensitive natural resources.

Supreme Court rulings have affected wetland regulation either directly or indirectly. One with the most significant affect is the opinion issued on January 9, 2001, in the case of Solid Waste Agency of Northern Cook County v. Army Corps of Engineers, No. 99-1178, 531 U.S. 159, 2001 WL 15333 (2001) ("SWANCC"). The Court ruled 5-4 against the Army Corps and EPA, overturning the Army Corps' attempt to demand a Clean Water Act § 404 permit under the Corps' and EPA's "Migratory Bird Rule" for construction of a landfill involving the fill of isolated ponds at a former gravel mining site. Four Justices joined in a lengthy dissent. The primary effect of the decision is that the Migratory Bird Rule, under which the Corps has asserted jurisdiction over isolated, non-navigable and completely intrastate waters based solely on the presence or potential presence of migratory birds, is no longer valid. Isolated wetlands, therefore, are not afforded protection under Section 404 of the Clean Water Act, based solely on the Migratory Bird Rule.

The Tulloch Rule resulted from a Supreme Court ruling challenging the Corps of Engineers' interpretation that their authority allowed them to regulate the drainage of wetlands. The Court ruled that incidental fallback from dredging is not considered placement of dredged or fill material within a regulated wetland and therefore no Section 404 permit is required. This also limited protection for wetlands by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

Because the planning community is responsible for furthering the public interest, planners can and should protect valuable wetland functions during development review procedures. Problems associated with wetlands management, however, require that all levels of government, private industry and citizens cooperate in finding solutions. This can be accomplished through the development of comprehensive resource protection plans as part of a watershed-based planning effort. The best way to protect wetland resources is to identify them in plans and develop mechanisms to avoid adverse impacts.

## General Policy

The American Planning Association and its Chapters support legislation and other actions to achieve the goal of no overall net loss of the nation's remaining wetland's resource base, as defined by acreage, volume, location, type, and function. In order to achieve the no net loss goal, APA and its Chapters support legislation and other actions to enhance, restore and create wetlands where feasible, in order to increase the quality and quantity of the nation's wetland resource base in conjunction with other natural resource protection policies. However, replacement of existing wetlands should be considered only after avoidance and minimization and only where the wetland function in-kind can be replaced within the same sub-watershed.

*Reasons to support general policy:*

1. To add APA support to achieving a clearly defined goal for wetland preservation;
2. To indicate APA recognition of the importance of wetlands;
3. To promote the inclusion of wetlands in the overall planning, which must recognize the hierarchy of protection techniques: avoidance and minimization of wetland impacts are considered before mitigation;
4. Large, public sector capital projects often result in significant adverse impacts to wetlands. A no net loss policy and adherence to avoid, minimize, compensate approach when planning such projects will lead to greater protection of the Nation's wetlands.

**POLICY 1.** The American Planning Association and its Chapters support a sound compensatory mitigation policy based on science, which includes:

a) Utilizing a watershed approach in determining the location and design characteristics of the restoration or replacement of wetlands as a first priority; the watershed approach requires extensive watershed information, particularly related to climate, hydrology, historic wetland distribution, habitat for fish and wildlife, cultural, commercial and recreational importance, current landownership, and existing environmental stressors;

b) Where sufficient information regarding the watershed is not available, the replacement ratios shall be based on four factors:

- 1) The degree of disturbance,
- 2) The complexity and likelihood of successful mitigation of the damaged wetland,
- 3) The time necessary for the replacing wetland to achieve full functionality
- 4) The location of the replacement wetland (on-site, off-site but in the same watershed, or out of the watershed where the loss or damage occurred), rather than a fixed ratio applied to all losses.

c) Enforcement of permit conditions, and monitoring of mitigation requirements for a minimum of two years to ensure projects are implemented as designed and serve to offset the loss of functional value of the damaged wetland;

d) Utilizing in-lieu-fee mitigation under Section 404 of the Clean Water Act only after strict criteria are established by the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers to ensure such mitigation truly compensates for the loss of functional value, is properly implemented and monitored for long-term success, and responsibility for the mitigation's success is determined.

*Reasons to support policy:*

1. The U.S. General Accounting Office (GAO) completed a report on May 30, 2001 that concluded that "while in-lieu-fee mitigation could be an effective tool, it is uncertain whether the practice is working." This report, *Wetlands Protection: Assessments Needed to Determine the Effectiveness of In-Lieu-Fee Mitigation*, analyzed the U.S. Army Corps of Engineers' implementation of their use of in-lieu-fee mitigation arrangements and concluded that there was no data to determine whether these sites were actually mitigating wetland losses. In many Corps offices, for example, it was not known if the mitigation even was performed. Some Corps offices considered in-lieu-fee mitigation to be

a success as soon as the fee had been paid even if no mitigation had been performed. There is also lack of agreement on who is responsible for completing the mitigation once the fee is paid — the developer or the Corps. If mitigation is to be successful, it is critical that these issues be addressed;

2. Other experts cite a poor record for compensatory mitigation overall, often resulting from the failure to meet ecological performance criteria (Zedler and Shabman 2001). Mitigation requirements are often unclear and efforts are not made to ensure compliance. Enforcement of existing regulations is therefore a critical component of a wetland protection program;
3. Wetland professionals have also recommended using a watershed approach in determining mitigation requirements (Scodari and Shabman 2001). Decisions regarding mitigation — type, location, and ratios - should be based on a reasoning process that encompasses the needs of the watershed and not from an automatic requirement imposed through regulation, however, sufficient information about the watershed must be available to make these decisions. If not, the record of success of the more flexible approaches to mitigation such as in-lieu-fee, suggests that definitive requirements should be in place. These requirements should be based on a scientific assessment of the complexity of the wetlands being damaged or destroyed. Ratios should be determined on the basis of the degree of damage (temporary disturbance versus total loss) and the location of the replacement wetland. Efforts must be made to avoid destroying irreplaceable wetland types (e.g., fens, bogs), convert complex wetlands to more simple palustrine emergent vegetation (e.g., cattails), or to locate wetlands based on land value;

**POLICY 2.** The American Planning Association and its Chapters support public-private partnerships to improved wetlands management, which incorporates private stewardship and federal, state and local cooperation. Such partnerships should also include the formation of land trusts and use conservation easements and the purchase of development rights.

*Reasons to support policy:*

1. Such a partnership approach to wetlands management can be more flexible in achieving goals than just through reliance on governmental agencies;
2. Partnership arrangements have the potential for developing a broad base of citizen support for wetland management;
3. A partnership approach provides the broad perspective needed to achieve wetland planning goals as part of comprehensive regional planning activities;
4. By adopting zoning and/or development performance standards for wetlands and adjacent lands, local governments can achieve comprehensive wetlands that, in many cases, may obviate the need for federal or state permits.

**POLICY 3.** The American Planning Association and its Chapters support Congress amending Section 404 of the Clean Water Act and enact additional legislation as necessary to:

Address the protection of isolated wetlands by recognizing the national interest in isolated wetlands independent of the definition of public waters;

- Encourage a watershed approach to both the permitting process and mitigation requirements by promoting the development of comprehensive wetland management plans by federal, state, and local agencies. These plans must ensure intergovernmental coordination and achieve the no net-loss goal, with an emphasis on the avoidance of wetland impacts.
- Allow and encourage states and regional and local government entities to assume responsibility for specific portions of the Section 404 program, and other future legislated programs, so long as they develop and demonstrate the capacity to further the national goal of no-net loss, and adopt approved state wetlands management plans;
- Provide for more direct participation by local governments in both the regulation and management of wetlands based upon a clearly defined wetlands inventory and classification system;

- Provide state, regional and local governments with financial and technical assistance to develop, enforce, and administer wetlands management programs;
- Establish a comprehensive program that provides tax-based and other financial incentives to encourage landowners, land trusts, the federal government, states, and local governments to protect wetlands, and to provide funds for public and semipublic acquisition, in full or in part, where appropriate;
- Encourage and allow states to develop other innovative land use incentives to accomplish preservation of wetlands to the maximum extent possible, such as cluster zoning and transfer of development rights;
- Strengthen the biological component of the permitting process to recognize the value of wetlands for wildlife habitat. This can be accomplished by elevating the role of the U.S. Fish and Wildlife Service in the review of Section 404 permit to ensure consistent protection for critical resource waters, habitat for threatened and endangered species.

*Reasons to support policy:*

1. Because wetlands have important functional values, it is important that all wetlands are protected and all functional values be considered in a protection program. This requires that protection be granted to isolated wetlands and that wildlife habitat be recognized in protection programs;
2. The Clean Water Act gives certain authorities to the U.S. Environmental Protection Agency (USEPA) in implementing the Section 404 program. These authorities often involve state environmental protection agencies, which are limited to water quality issues. As a result, the habitat component of wetlands is often overlooked or minimized. Placing the U.S. Fish & Wildlife Service (USFWS) on par with the USEPA in implementation of the USCOE's program would provide more holistic protection for wetlands;
3. Local government's role in the federal permit decision-making process needs to be legitimized;
4. Federal funding for highways flood control, water development projects and wastewater facilities can substantially affect wetlands management at the state level. To achieve intergovernmental coordination, this funding should be consistent with approved state management plans;

Both Michigan and New Jersey have assumed the 404 program, while a few others are attempting to initiate such a program. New legislative initiatives must recognize this lack of participation, and should provide more productive and workable alternatives to increase state and local participation;

5. Since most wetlands are privately owned, private incentive programs are essential. The Food Security Act of 1985 contains a number of incentive programs that foster wetland conservation; these programs have been highly successful in protecting wetlands and could be readily expanded with the reauthorization of the 1990 Farm Bill.

**POLICY 4.** The American Planning Association and its Chapters support funding and authorizing legislation at all levels of government to establish wetland information clearinghouses, which are integrated with and/or based on the model of the National Spatial Data Infrastructure, for the purposes of:

- Establishing standards for defining, classifying, and mapping existing and disturbed wetlands;
- Researching wetlands and their functions;
- Supporting public/public and public/private partnerships to overcome jurisdictional barriers that limit effective wetland management and utilization;
- Encouraging cooperative information sharing and wetland management across watersheds so that damage to wetlands can be avoided or minimized;
- Establishing and perfecting regionally adjusted restoration and mitigation procedures to offset such damage to wetlands as may occur;

- Facilitating the long-term monitoring of restoration and mitigation efforts, and wetland functions; and
- Supporting community, regional, and other planning efforts through the collection and dissemination of accurate information.

*Reasons to support policy:*

1. The first step in addressing any problem is to adequately identify the scope of the problem and the resource it is connected to. There is a lack of adequate information on wetland locations, function and size, and critical species value, although the U.S. Fish & Wildlife Service's National Wetlands Inventory does contain valuable information. Funding needs to be provided to complete and maintain this data set.

Data gathering and inventory is commonly fragmented across different geographic jurisdictional boundaries and agency responsibilities that have little relationship to the resource being evaluated or managed. Clear and definitive wetland classification and mapping procedures are essential for the identification and protection of existing wetlands. Advances in computer networks, data manipulation software, and opportunities for data sharing utilizing the World Wide Web and other means have substantial potential to overcome traditional boundaries and barriers if the various parties can establish the means to cooperate. Any cooperative effort requires a common set of standards. Such standards must allow for both uniform and customized elements of data so that individual parties can share information and still meet their own unique needs. The National Spatial Data Infrastructure project is a good model of multiple-agency and multiple-jurisdiction cooperation to facilitate the exchange of information;

2. Wetlands are affected by decisions and policies established by private parties and all levels of government. It is not uncommon to have multiple agencies or governmental bodies involved in reviewing land use decisions that will impact wetlands. The establishment of common definitions and standards, cooperative data sharing, and improved mapping and understanding of wetlands would facilitate the review of proposed actions, reduce damage to wetlands, eliminate costly duplications of effort, and create a more consistent and effective means of protecting wetlands and their functions;
3. Many different levels of government and private parties conduct efforts to plan for the future. The ability to access accurate information regarding wetlands enhances the ability of these planning efforts to respond to community priorities, direct actions so that damage to wetlands is avoided, and encourage efficiency and effectiveness in government. Access to accurate information will also reduce conflicts that arise through misunderstanding, increase the probability of successful cooperation in wetland protections and utilization, and has the potential to reduce the incidence of wetland related litigation.

**POLICY 5.** The American Planning Association and its Chapters support state and federal legislation to provide funding to state and local governments, and regional planning agencies, where appropriate, to research, classify, and map wetlands and their functions, and perfect restoration and mitigation procedures.

*Reasons to support policy:*

1. A national wetland symposium held a number of years ago demonstrated that there are serious gaps in the scientific knowledge available to restore or create wetland systems. More recent reports question the effectiveness of wetlands restored for regulatory compliance. The implications are clear that mitigation frequently is an uncertain process. Wetland mitigation and restoration, however, has proven successful for certain types of systems, such as estuarine and dune systems and emergent freshwater marshes. In order to meet the national goal of no net loss and to increase the quality and quantity of the nation's wetlands resource base, additional research is essential to define wetlands, their functions and successful mitigation techniques, particularly with respect to regional variations. This research must be done on a regional basis to ensure all wetland types are included. Funding for this research must be provided to state and local units of government and regional planning agencies.

Wetlands mitigation generally involves construction of wetlands or restoration and/or enhancement of degraded systems as compensation for wetlands where losses cannot be avoided. It is not uncommon, however, for mitigation to be accepted as a substitute for efforts to initially avoid and minimize losses. Experts have recommended that governments adopt and enforce mitigation procedures that allow compensation as a last resort, as long as regulators have sufficient flexibility to select options that best protect the most valuable functions of the wetlands. Mitigation for wetlands impacts should be viewed as a sequential process that starts by avoiding and minimizing impacts and ends with compensation for unavoidable losses.

**POLICY 6.** The American Planning Association and its Chapters support research and demonstration projects in the utilization of created wetlands as solutions to non-point source water quality problems, including but not limited to stormwater management.

*Reasons to support policy:*

1. The limited research done to this point indicates that the buffering/filtering/cleansing properties of wetlands may be a cost effective solution to many water quality issues although there have been few demonstration projects implemented to support an expansion this effort. It is important that this research be conducted and that demonstration projects be designed and implemented;
2. Use of wetlands to address non-point source water quality problems can also provide additional space for passive recreational opportunities;
3. Bioretention use of landscape areas expands upon their utility, function and diversity.

**POLICY 7.** The American Planning Association and its Chapters support efforts to conduct and sponsor educational and technical assistance programs, for both planning professionals and the general public, on the values of wetlands, and management strategies to protect and enhance wetlands. This would include, but not be limited to, wetlands protection in comprehensive land use planning, zoning, development review processes and performance standards.

*Reasons to support policy:*

1. Sponsored events can serve as valuable points of public engagement and media coverage.
2. Education of both planning professionals and the public is necessary towards meeting the national goal.
3. Education fosters greater awareness of wetland issues in both the professional and public arenas

**POLICY 8.** The American Planning Association and its Chapters support augmenting the protection provided by Section 404 of the Clean Water Act by enacting state legislation or local ordinances as appropriate to:

- Regulate human-controlled activities which cause adverse impacts to wetlands;
- Provide protection for isolated wetlands;
- Strengthen the biological component of the permitting process by recognizing the value of wetlands for wildlife habitat; and
- Provide incentives to encourage landowners to protect existing wetlands.

*Reasons to support policy:*

The Clean Water Act's primary mission is to make the nation's waters fishable, swimmable and drinkable. Section 404 relates to the deposition of fill material. These factors alone limit the protection of wetlands to issues related to water quality, making it difficult to protect wetlands for all of their functional values. Because of these limitations, there has been reliance on the courts to define the wetland protection program. Recent rulings, however, have placed limitations on the U.S.

Army Corps of Engineers (USCOE) ability to protect wetlands, such as the Tulloch rule and the isolated wetland case.

1. Isolated wetlands have important functional values that warrant protection, such as for stormwater management, water quality improvement, and wildlife habitat. Removing isolated wetlands from the Section 404 program will result in the loss of critical wetlands across the country;
2. Local government's role in the federal permit decision-making process needs to be legitimized and federal law should provide the option for local protection to exceed that which is required by federal statutes.

**POLICY 9.** The American Planning Association and its Chapters support farm policy legislation that contains provisions that encourage private landowners to protect, conserve, enhance and restore wetlands; and are consistent with APA policy goals for wetland protection.

*Reasons to support policy:*

1) Changes were made in farm policy after 1990 resulting in less focus on the protection of wetlands. Future legislation should consider the overall effect on the loss of wetlands especially those due to exclusions, program definitions and prescribed remedies;

2) The federal "Farm Bill", the nation's rural development, farm commodity support, and rural land conservation legislation, can be a valuable tool in working to achieve the "no net loss" goal for wetlands on agricultural lands. Natural resource protection goals can be achieved by providing options and incentives to landowners that allow for the prudent use of productive agricultural land. One example is the Wetland Reserve Program (WRP). This is a voluntary program that allows a landowner to enroll in a 30-year or permanent easement to restore and protect wetlands. The program has been successful and has reached its limit of enrollment. Additional funding is needed to expand this program;

3) Previous "Farm Bill" legislation created a list of agricultural activities that are exempt from wetland protection laws. The exemption of this broad range of activities allows conversion of wetlands without mitigation. Wetlands converted under these exemptions contribute to 'net loss'. Reauthorization of the "Farm Bill" should provide for mitigation of all wetlands converted.

## References and Resources

Burke, David, Eric Meyers, Ralph Tiner, Jr. and Hazel Groman, 1988. *Protecting Non-Tidal Wetlands*. Chicago: APA, Planning Advisory Service, Report Number 412/413.

Conservation Foundation, 1988. *Protecting America's Wetlands: An Action Agenda*. Washington, the Foundation.

Conservation Foundation, 1990. *Issues in Wetlands Protection: Background Papers Prepared for the National Wetlands Policy Forum*. Washington, the Foundation.

Dahl, T.E. 2000. *Status and Trends of Wetlands in the Conterminous United States 1986 to 1997*. U.S. Department of the Interior, Fish & Wildlife Service, Washington, D.C. 82pp.

Gaddie, Ronald and James Regens, 2000. *Regulating Wetlands Protection: Environmental Federalism and the States*. Albany: SUNY Press.

Scodari, Paul and Leonard Shabman, 2001. "Rethinking Compensatory Mitigation Strategy". *National Wetlands Newsletter*, Volume 23, Number 1, January-February 2001.

United States General Accounting Office (GAO), May 2001. *Wetlands Protection: Assessment Needed to Determine Effectiveness of In-Lieu-Fee Mitigation*. GAO Report 01-325.

World Wildlife Fund, 1992. *Statewide Wetlands Strategies: A Guide to Protecting and Managing the Resource*. Washington, the Island Press.

Zedler, Joy and Lenoard Shabman, 2001. Compensatory Mitigation Needs Improvement, Panel Says. *National Wetlands Newsletter*, Volume 23, Number 4, July-August 2001.