Wetland Law and Policy: Overview

95

C. Max Finlayson and Royal C. Gardner

Contents

Abstract

The term "wetland law and policy" refers to the legally related rules developed by governments that pertain to activities that affect wetlands. When used in a general sense, wetland law and policy encompasses a broad range of instruments, including "*. . .legislation, such as statutes, acts, decrees, and ordinances; regulations and other rules promulgated by agencies that have the force of law; and policies, which depending on the jurisdiction may also have the force of the law or may merely provide principles or rules that guide a decision-making process.*" It can also include judicial decisions that apply or interpret the legislation, regulations, and policies. Wetland law and policy may govern activities that have the potential to harm wetlands as well as activities that may benefit wetlands and the ecosystem services they provide.

C. M. Finlayson (✉)
Institute for Land, Water and Society, Charles Sturt University, Albury, New South Wales, Australia

UNESCO-IHE, Institute for Water Education, Delft, The Netherlands
e-mail: mfinlayson@csu.edu.au

R. C. Gardner (✉)
Institute for Biodiversity Law and Policy, Stetson University College of Law, Gulfport, FL, USA
e-mail: gardner@law.stetson.edu

C. M. Finlayson et al. (eds.), *The Wetland Book*,
https://doi.org/10.1007/978-90-481-9659-3_178

Keywords
Wetland law · Wetland policy · Legislation · Policies

Introduction

The term "wetland law and policy" refers to the legally related rules developed by governments that pertain to activities that affect wetlands. When used in a general sense, wetland law and policy encompasses a broad range of instruments, including "*. . .legislation, such as statutes, acts, decrees, and ordinances; regulations and other rules promulgated by agencies that have the force of law; and policies, which depending on the jurisdiction may also have the force of the law or may merely provide principles or rules that guide a decision-making process*" (Gardner et al. 2012). It can also include judicial decisions that apply or interpret the legislation, regulations, and policies. Wetland law and policy may govern activities that have the potential to harm wetlands as well as activities that may benefit wetlands and the ecosystem services they provide.

Law, Policy, and Wetlands

The United States experience with its legal definition of the term "wetland" provides an example of the differences between statutes, regulations, and guidance documents. As Fig. 1 indicates, the United States Congress (the national legislature) enacted the Clean Water Act, a statute that regulates activities in "waters of the United States." The agencies charged with implementing the Clean Water Act then issued a regulation defining "water of the United States" to include wetlands. Further, more detailed technical guidance was developed through wetland delineation manuals, which are used to determine the boundaries between a wetland and an upland. The statute and regulations are law in the sense that they are binding and have the "force of law." The delineation manuals, on the other hand, are more akin to policy or guidance documents, which do not have the force of law. Nevertheless, application of such guidance can have legal implications.

While wetland laws and policies can differ significantly from jurisdiction to jurisdiction, they can generally be categorized as regulatory or nonregulatory approaches (Gardner 2003).

- A regulatory approach suggests that government permission is needed before a proposed action that could affect wetlands moves forward. In some cases, violators may be subject to administrative, civil, or even criminal penalties.
- A nonregulatory approach establishes incentives (financial or otherwise) that encourage voluntary actions to conserve or protect wetlands.

Regulatory and nonregulatory wetland laws and policies can take many different forms. Many variations exist in different countries, shaped by their particular governance and legal systems, as well as local customs and practices. The

Statute Clean Water Act (enacted by Congress)	33 U.S.C. §1344	Section404: Corps of Engineers may issue permits for discharge of dredged or fill material into the "navigable waters"
	33 U.S.C. §1362	Section502: The term "navigable waters" is defined as "the waters of the United States, including the territorial seas"
	33 C.F.R. §328.3(a)(3)	Definition of "waters of the United States" includes"wetlands... the use, degradation or destruction of which could affect interstate or foreign commerce"
Regulations Corps of Engineers Regulatory Program (promulgated through notice-and-commen trule making and codified in the Code of Federal Regulations)	33 C.F.R. §328.3(a)(7)	Definition of "waters of the United States" includes"[w]etlands adjacent to [other] waters [of the United States]"
	33 C.F.R. §328.3(b)	"Wetlands" is defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support... a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."
Guidance Corps of Engineers Regulatory Program (may not be subjected to notice-and-comment rule making and is not codified in the Code of Federal Regulations)	Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station	Wetland Delineation Manual detailing indicators for wetland hydrology, hydrophytic vegetation, and hydric soils
	Regional Supplements	Regional supplements issued (or in process of being issued) for: Alaska; Arid West; Atlantic and Gulf Coast; Great Plains; Western Mountains; Mid-West; Caribbean Islands; and Northcentral and Northeast

Fig. 1 The interplay of statutes, regulations, and technical guidance in the United States (From *Lawyers, Swamps, and Money*, by Royal C. Gardner. Copyright © 2011 Royal C. Gardner. Reproduced by permission of Island Press, Washington, D.C.)

importance of the latter should not be underestimated, whether dealing with traditional access or property rights of local or indigenous communities or with more contemporary commercial enterprises.

Regulatory Approaches in Application of Wetland Law and Policy

In its simplest form, a regulatory approach involves a prohibition and a permit system. An activity, such as filling in a wetland, is prohibited unless the appropriate government agency or official grants permission for the activity to proceed. Often, an environmental impact assessment or study is required prior to the permit decision.

Ideally, an environmental impact assessment promotes informed decision-making. Such studies will typically consider the environmental impacts of the proposed activity, any feasible alternatives to the proposed activity, and the environmental impacts of those alternative courses of action. A "no action" or "status quo" (also known in the UK and elsewhere as "do nothing") option is usually included in the assessment, often serving as a counterfactual. In the wetland permit context, the "no action" alternative would be the denial of a permit, in which case the proposed activity could not legally proceed.

The use of environmental impact assessments became prevalent in the United States after the enactment of the National Environmental Policy Act (NEPA) in 1970. NEPA is a broad "stop and think" statute. It requires an environmental study prior to federal agencies taking certain actions. NEPA applies both to government projects that a federal agency itself performs (e.g., a dam construction project) and to private projects that require a federal permit (e.g., the construction of a housing project on privately owned wetlands). The use of environmental assessments is now a common tool throughout the world (Wood 2003) and a recommended practice by the Ramsar Convention on Wetlands that also encourages the adoption of Strategic Environmental Assessment to ensure a broader consideration of the multiplicity of activities that can impact adversely on wetlands (Ramsar Convention Conference of the Parties 2008).

It is important to note that laws and policies that require environmental impact assessments are frequently *process-focused*. In other words, the legal instrument dictates that a particular process must be followed to encourage informed decision-making. The resulting environmental study, while educating decision-makers about impacts and alternatives, does not necessarily dictate a result. A governmental agency or official may still choose an alternative that is harmful to the environment and wetlands. However, it needs to be a decision made with the awareness of the environmental and wider consequent socio-economic consequences. It is also important to note that although environmental impact assessment may be required by law, the recommendations and conclusions in these studies often have no legal effect by themselves. To be legally binding, the recommendations and conclusions should be incorporated into the terms and conditions of a permit authorizing an activity or project and potentially subject to compliance measures.

The requirement for permits for activities affecting wetlands may flow from a wetland-specific law or policy. For example, Uganda has a specific National Wetland Policy that encourages the avoidance of wetland impacts, stating that there will be "*. . .no drainage of wetlands unless more important environmental management requirements supersede*" and "*. . .only those uses that have been proved to be nondestructive to wetlands and their surroundings will be allowed and/or encouraged*." In other cases, permit requirements for wetland impacts are the result of broader water-related laws (such as the Clean Water Act in the United States or the Water Framework Directive in the European Union). Also common are permit requirements of general environment or conservation and biodiversity-related laws and policies that encompass wetlands, as well as those that are targeted

Table 1 The legal and policy framework for the alternatives analysis (From *Lawyers, Swamps, and Money*, by Royal C. Gardner. Copyright © 2011 Royal C. Gardner. Reproduced by permission of Island Press, Washington, D.C.)

Statute (enacted by Congress)	Clean Water Act Section 404(b)(1) The Corps will make permit decisions by applying guidelines developed by the EPA	
	⇓	
Regulations (promulgated by EPA through notice-and-comment process)	Section 404(b)(1) Guidelines for Specifications of Disposal Sites for Dredged or Fill Material 40 C.F.R. Part 230	
	⇓	⇓
Guidance (issued by EPA and Corps without public notice and comment)	1993 Memorandum to the Field: Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404 (b)(1) Guideline Alternatives Analysis	1995 Memorandum to the Field: Individual Permit Flexibility for Small Landowners

mainly at conserving resources such as fisheries or water. The importance of the latter should not be underestimated, as many wetlands are under private ownership and used by individuals or communities for commercial or subsistence purposes.

Many permit schemes call for regulatory agencies to use some type of avoid-mitigate-compensate framework. Under such a framework, a wetland law or policy may express a preference that adverse wetland impacts be avoided to the extent feasible. Table 1 provides an example of the sources of the "avoidance" step or alternative analysis in the United States, ranging from the general statutory authority to the more detailed regulations and policy documents.

If wetland impacts cannot be avoided, the impacts need to be mitigated or minimized. Any remaining impacts then should be compensated for, that is, offset by wetland restoration, enhancement, creation, or preservation projects. The importance of wetland restoration has been recognized and is now widely practiced in many countries whether through regulatory mechanisms associated with permits and compliance arrangements or through community effort, such as the considerable involvement of nongovernmental and community-based organizations in wetland restoration in northern America and parts of Europe.

Offset mechanisms in a permit context can take several different forms. The simplest approach is where the permittee itself does the offset project or hires an environmental consultant or engineer to carry out the project. Many studies have found that such "permittee-responsible" offsets have not achieved the desired ecological results (National Research Council 2001). Accordingly, some countries have turned to "wetland banking" or "wetland mitigation banking" to provide offsets to wetland impacts. As described in Ramsar Resolution XI.9 (2012), wetland banking occurs where "*. . . a site owner generates compensation credits through the restoration, enhancement, creation and/or preservation of wetlands. The amount of credits generated is based on the ecological improvements at the site. Credits are*

then sold to developers to offset adverse wetland impacts to the same type of habitat elsewhere." Wetland banking requires a well-developed legal system, relying on legal rules related to "*. . . property rights (e.g., conservation easements), enforcement authority, and commercial and financial law (e.g., letters of credit, performance bonds, endowment accounts)*" (Gardner et al., in press). A third offset mechanism is called "fee mitigation" or "in-lieu fee mitigation" where a permittee would pay money into a fund which would then finance offset projects.

Many regulatory schemes contain enforcement provisions. If a developer fills a wetland without obtaining the necessary permit, it could be subject to administrative or judicial fines and penalties and even be ordered to restore the site. In rare cases, violators have been subjected to criminal prosecution (Gardner 2011). Permittees may also be subject to enforcement actions if they do not comply with the conditions of the permit. An enforcement action is typically initiated by a government agency or ministry. In some countries, such as the United States, individuals or NGOs may bring a "citizen suit" and sue an alleged violator directly if the government has failed to do so.

The denial of a wetland permit also has legal consequences and may affect property or use rights. In countries where wetlands can be privately owned, a property owner that has been denied a permit may claim that its property rights have been interfered with to such an extent that the government should provide financial compensation. In such cases, the property owner would file an administrative or judicial action to seek such payments.

Nonregulatory Approaches

In addition to the regulatory approaches outlined above, wetland laws and policies may take a nonregulatory approach. Sometimes these approaches are formally reflected in national policies, such as those enacted by Australia and Canada. These are based on a willingness to support common targets or activities, at times with substantive incentives, such as the provision of funding for management and restoration activities or capacity building. The abovementioned national policies are examples of nonregulatory approaches in response to the recommendations from the Ramsar Convention on Wetlands for Contracting Parties (countries) to develop and implement policies for the wise use of wetlands. The success of such measures is debatable as, for example, only 47% of the 160 Contracting Parties to the Convention had reported that they had taken steps to develop National Wetland Policies and incorporate wetlands into a national strategy for sustainable development (Finlayson 2012).

Finlayson (2012) further reported that fewer than half of the Contracting Parties reported activities in response to many of the goals and strategies contained in the Convention's Strategic Plan. As many of the decisions taken by the Convention are not binding, this may not be a surprising outcome. However, it does beg a question about the extent to which such nonregulatory approaches are effective. Finlayson et al. (2011) also considered whether nonregulatory approaches at an international level could be effective and concluded that "*Initial findings indicate that those countries that report better implementation are also reporting that their*

wetlands are in a relatively better state. In particular, this appears to be the case for countries that have established national policy/legislative frameworks and that are undertaking a wide range of implementation activities both nationally and on-the-ground."

Canada, the United States, and the countries in the European Union have many nonregulatory programs that encourage wetland restoration (Gardner 2003). In some cases, farmers are paid to convert agricultural lands back to wetlands. For example, in the United States, the Wetlands Reserve Program, administered by the Department of Agriculture offers farmers to voluntarily protect and restore wetlands. The level of cost-sharing payments depends on the duration of the protective measures. More than 11,000 landowners have participated in the Wetlands Reserve Program, covering more than 930,000 hectares of land (US Department of Agriculture 2011).

Another nonregulatory approach involves tax incentives. In Canada, the province of Ontario has a Conservation Land Tax Incentive Program that encourages the protection of provincially important wetlands. Property enrolled in the program can be exempt from property taxes.

In recent years, there has been wider recognition of the importance of traditional access and customs of indigenous peoples, such as in northern Australia where land rights and traditional ecological knowledge have supported both regulatory and nonregulatory approaches for managing wetlands (Finlayson et al. 1998). The importance of local customs and practices has also been formally recognized through the global Strategic Plan for Biodiversity 2011–2020 and the Aichi Targets (Convention on Biological Diversity Conference of the Parties 2010) which includes a target whereby "*By 2020, the traditional knowledge, innovations and practices of Indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, as respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of Indigenous and local communities, at all relevant levels.*" This is an important target but, like the 2010 Biodiversity target that was not met (Armenteras and Finlayson 2012), is also nonbinding and dependent on nonbinding responses by national governments.

The nonbinding nature of approaches to encourage the effective management of wetlands may allow flexibility and encourage sectors and individuals to collaborate and seek joint solutions. This is particularly important when resources for implementing policies are not available or where [potential] policies may be seen as intrusive, inflexible, or practically unenforceable. The importance of community-based or nongovernmental organizations in supporting the delivery of nonregulatory approaches is widely recognized and, in some instances, has provided the basis for bringing governments and others together to explore and develop joint outcomes. At an international level, the development of the Ramsar Convention is an explicit example whereby the development of an intergovernmental treaty was spearheaded by nongovernmental organizations. Such organizations continue to play an important role in developing policy and responding to recommendations made by governments through the Convention processes.

The Influence of International Law on Domestic Wetland Law and Policy

Although wetland laws and policies are primarily domestic-based (i.e., nationally or locally based), international legal instruments, primarily through conventions and other agreements among countries, can influence these laws and policies. However, in practice, the legal effect of a convention within a particular country varies widely. The extent to which a convention or treaty applies directly in a country depends in part on whether that country subscribes to a monist or dualist approach to international law (Bruch 2006).

A monist approach generally means that "international law is part of the domestic law of the country" (Bruch 2006). This means, in some countries, that an international convention is viewed as controlling or overriding domestic or national law. In other monist countries, an international convention has the same authority as a statute or legislative decree, while in other countries domestic laws trump conventions. Despite these variations within monist countries, an important distinction is when such a country joins a convention that agreement "is directly applicable" if its provisions are sufficiently clear.

In contrast, countries that have a dualist approach to international law consider international law to be separate from domestic law. Consequently, an international legal instrument, such as the Ramsar Convention, does not immediately affect a dualist country's domestic legislation. In order for the convention to apply within that jurisdiction, the dualist country would have to enact implementing legislation, also known as the "act of transformation" (Bruch 2006).

In very broad terms, civil law countries follow the monist approach, while common law countries use the dualist approach. Some countries, such as the United States and New Zealand, follow a mixed approach (Shelton 2011).

Challenges

It is important to note that legal regimes, whether regulatory or voluntary, do not necessarily translate to wetland conservation on the ground. Wetland law and policy is often only effective if there is effective enforcement, which requires appropriate investment in administrative entities empowered to protect wetlands.

It is also important to recognize that wetland laws and policies need to be suited to specific socio-economic contexts. For example, an approach that works in urban areas in the United States may not be appropriate for rural KwaZulu-Natal where different (often informal) governance systems operate.

Finally, a mix of regulatory and nonregulatory approaches is required for effective wetland conservation. Sometimes, a nonregulatory approach is more effective than a regulatory approach, especially if the stakeholders (e.g., farmers in the United States) are particularly resistant to or suspicious of traditional regulatory mechanisms. Laws and policies should be developed as part of a coherent broader policy

toolkit serving as "societal levers" (sensu Everard et al. 2014), shaping local decisions and actions, including *inter alia*: top-down statutory regulation and levies, bottom-up initiatives including quality assurance networks or community-based partnerships, formal incentives, common law, voluntary market-based schemes such as "payments for ecosystem services," offsetting, and informal agreements and protocols.

References

Armenteras D, Finlayson CM. Biodiversity. In: UNEP, editor. Keeping track of our changing environment: from Rio to Rio+20 (1992–2012). Nairobi: Division of Early Warning and Assessment (DEWA), United Nations Environment Programme (UNEP); 2012.

Bruch C. Is international environmental law really "Law"?: an analysis of application in domestic courts. Pace Environ Law Rev. 2006;23:423–64.

Convention on Biological Diversity Conference of the Parties. Strategic plan for biodiversity 2011–2020: Decision X/2. Nagoya; 2010.

Everard M, Dick J, Kendall H, Smith RI, Slee RW, Couldrick L, Scott M, MacDonald C. Improving coherence of ecosystem service provision between scales. Ecosys Ser. 2014. doi:10.1016/j.ecoser.2014.04.006.

Finlayson CM, Thurtell L, Storrs MJ, Applegate R, Barrow P, Wellings P. Local communities and wetland management in the Australian wet-dry tropics. In: W.D. W, editor. Wetlands in a dry land: Understanding for management. Canberra: Environment Australia/Biodiversity Group; 1998. p. 299–311.

Finlayson CM. Forty years of wetland conservation and wise use. Aquat Conserv Mar Freshwat Ecosyst. 2012;22:139–43.

Finlayson CM, Davidson N, Pritchard D, Milton GR, MacKay H. The Ramsar Convention and ecosystem-based approaches to the wise use and sustainable development of wetlands. J Int Wildl Law Pol. 2011;14:176–98.

Gardner RC, Bonells M, Okuno E, Zarama JM. Avoiding, mitigating, and compensating for loss and degradation of wetlands in national laws and policies. Ramsar Scientific and Technical Briefing Note no. 3. Gland: Ramsar Convention Secretariat; 2012.

Gardner RC, Calabrese S, Knudsen G, Pasheilich G. Legal brief on legal preparedness for achieving the Aichi Biodiversity Targets: United States of America, Wetland and Stream Mitigation Banking. Rome: IDLO; in press.

Gardner RC. Lawyers, swamps, and money: U.S, Wetland law, policy, and politics. Washington, DC: Island Press; 2011. 255pp.

Gardner RC. Rehabilitating nature: A comparative review of legal mechanisms that encourage wetland restoration efforts. Catholic Univ Law Rev. 2003;52(3):573–620.

National Research Council. Compensating for wetland losses under the Clean Water Act. Washington, DC: National Academy Press; 2001.

Ramsar Convention Conference of the Parties. Resolution X.17, Environmental impact assessment and strategic environmental assessment: updated scientific and technical guidance. Changwon; 2008.

Ramsar Convention Conference of the Parties. Resolution XI.9, An integrated framework and guidelines for avoiding, mitigating and compensating for wetland losses. Bucharest; 2012.

Shelton D. Introduction. In: International law and domestic legal systems: incorporation, transformation, and persuasion. Oxford: Oxford University Press; 2011. p. 1–22.

United States Department of Agriculture. Restoring America's wetlands: a private lands conservation success story. Washington, DC: Wetlands Reserve Program; 2011. 16pp.

Wood C. Environmental impact assessment: a comparative review. 2nd ed, New York, NY: Pearson/Prentice Hall; 2003. 405pp.