State Wetland Protection

Status, Trends, & Model Approaches

A 50-state study by the
Environmental Law Institute

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Appendix: State Profiles
Florida

I. Overview

Historically, the State of Florida contained an estimated 20 million acres of diverse wetland types. However, by the mid-1970s, Florida’s wetlands had decreased to approximately 11 million acres, about 31 percent of the state’s surface area. Wetland losses were significantly reduced after the establishment of various state regulatory programs that governed dredging and filling of wetlands in the 1970s, the passage of the Clean Water Act, and the establishment of conservation land acquisition programs. Today, Florida has a comprehensive wetland protection strategy that addresses new construction affecting surface water flows, stormwater runoff, dredging and filling, and conservation land acquisition. The Florida Department of Environmental Protection (FLDEP) implements these wetland protection programs in partnership with the five regional Water Management Districts (WMDs), as well as with various delegated local government programs.

II. Regulatory Programs

Wetland definitions and delineation

Florida defines “water” or “waters in the state” as “any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground, as well as all coastal waters within the jurisdiction of the state.” Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, tidal marshes, mangrove swamps, and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.

Florida has adopted a unified wetlands delineation methodology that is binding to all state, regional, and local governments throughout the state. This methodology is specific to Florida and recognizes the unique vegetation, hydrology, and soil features that exist in the state. Although the Florida methodology differs from the U.S. Army Corps of Engineers’ (“Corps”) 1987 Wetland Delineation Manual, state and federal wetland delineation lines are often very close or identical.

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3 Id. § 373.019(25).
6 Florida Department of Environmental Protection, Florida Wetland Regulatory Program Demonstration Project 9 (undated) (on file at ELI).
FLDEP, WMD, and delegated local government staff delineate wetland boundaries as part of Florida’s permit review process and also perform formal and informal wetland delineations for specific properties. Formal determinations require an application and are binding to the petitioner and the relevant state agencies for a minimum period of five years. Informal delineations are provided as staff are available and are typically limited to single family parcels. FLDEP has published a number of publicly available manuals and documents to inform wetlands delineation for the state.

A number of map sources provide information on the statewide distribution of wetlands. Much of this information is also made available to state, regional, and local agency staff and the general public through geographic information systems (GIS).

**Wetland-related law and regulation**

*Environmental Resource and Wetland Resource Permits.* Florida has established a comprehensive regulatory program designed to achieve the programmatic and project-permitting goal of no net loss in wetland or other surface water functions. Two wetland regulatory programs exist at the state level: an environmental resource permit (ERP) program throughout most of the state, except the panhandle of Florida where a dredge and fill (wetland resource) permit program is in place. The wetland resource permit program is in the process of being phased out, and the ERP will be implemented statewide.

The ERP program, administered in the rest of the state, is authorized under the Florida Environmental Reorganization Act of 1993. Effective beginning in October 1995, the law represents the merger of the wetland resource permit program, which was originally implemented by the FLDEP, with the Management and Storage of Surface Waters (MSSW) program, which had been implemented by Florida’s five WMDs since the mid 1970s. The ERP program regulates the construction, alteration, operation, maintenance, abandonment, and removal of stormwater management systems, dams, impoundments, reservoirs, appurtenant work, and activities in all tidal and freshwater wetlands and other surface waters (whether

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7 *Id.*

8 *See Florida Department of Environmental Protection – Wetland Evaluation and Delineation Program, Delineation Program Publications, at http://www.dep.state.fl.us/water/wetlands/delineation/pubs.htm (last visited July 23, 2007).*


11 Generally, this includes the area within the Northwest Florida Water Management District, which extends from mid-Jefferson County westward to Alabama. *See Fla. Stat. Ann. § 373.4145.*

12 The ERP is being implemented in the Northwest WMD is two phases. The first phase is the ERP for stormwater management. This program should be in place by October 2007. The second phase will be the ERP program for isolated wetlands. Until this second phase is complete, the Northwest WMD will operate under the wetland resource permit program. Personal communication with Ann Lazar, Fla., Dep’t of Envtl. Prot. (Jun. 13, 2007); *Fla. Stat. Ann. § 373.4145.*


14 The MSSW program was authorized through *Fla. Stat. Ann. § 373, Part IV in 1972.*
connected or isolated), including dredging and filling. This effectively includes most alterations to the landscape, including activities in uplands, as well as stormwater treatment, attenuation, and flooding.\(^{15,16}\) Regulated activities include construction of single family residences in wetlands; construction and alteration of residential and commercial developments in uplands or wetlands; dredging of channels, canals, and ditches; construction of roads; and agricultural construction and alteration that impedes or diverts the flow of surface waters.\(^{17}\) Certain specified activities are exempt from the requirement to obtain an ERP according to state statutes and rules.\(^{18}\) The ERP program is implemented by the FLDEP, four of the five WMDs,\(^{19}\) and by delegated local governments\(^ {20}\) in accordance with Operating Agreements that divide activity-specific responsibilities between the agencies, including permit review, agency action, and compliance and enforcement activities.\(^ {21}\) Substantive ERP permitting rules of the FLDEP adopt by reference the rules of WMDs.\(^ {22}\)

The FLDEP and the WMDs use a step-by-step methodology to review ERPs and wetland resource permit applications.\(^ {23}\) A proposed project must demonstrate: avoidance and minimization of any potential adverse impacts; verification of compliance with surface and groundwater quality standards; consideration of direct, secondary, and cumulative impacts to water resources, and, for activities located in wetlands and other surface waters, confirmation that the project is not contrary to the public interest according to a prescribed multiple factor balancing test\(^ {24}\) (or confirmation that proposed activities located in an Outstanding Florida Water are clearly in the public interest).\(^ {25}\)

\(^{15}\) The basic ERP permit standard is that activities must not adversely impact water resources, including water quality, water quantity, and the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters. Florida Department of Environmental Protection, supra note 6, at 10.

\(^{16}\) Sweeley, supra note 9.

\(^{17}\) Florida Department of Environmental Protection, supra note 6, at 6.

\(^{18}\) Some examples of activities exempt from ERP requirements are: hunting and fishing; boating (unless the motor causes prop dredging); trimming of trees (other than mangroves) if the cut vegetation is removed; construction, repair, and replacement of certain private docking facilities below certain size thresholds; maintenance dredging of existing navigational channels and canals; construction and alteration of boat ramps within certain size limits; construction, repair, and replacement of seawalls and rip rap in artificial waters; and repair and replacement of structures. See Fla. Stat. Ann. § 403.813; Fla. Stat. Ann. § 373.406. Certain agricultural activities are also exempt, such as alteration of topography for purposes consistent with the practice of agriculture, silviculture, floriculture, or horticulture, provided the alteration is not for the sole or predominant purpose of impounding or obstructing surface waters. See Fla. Stat. Ann. § 403.927; Fla. Stat. Ann. § 373.406.

\(^{19}\) WMDs include the Suwannee River, St. Johns River, Southwest Florida, and South Florida water management districts. At this time, the Northwest Florida WMD is implementing a limited MSSW program for agriculture, silviculture, and dam safety activities.

\(^{20}\) The only delegated local government at this time is Broward County, although Miami-Dade County has a pending delegation petition before the FLDEP and the South Florida WMD.


\(^{23}\) Florida Department of Environmental Protection, supra note 6 at 11-12. Applicant handbooks and permit review basics may be accessed at: Florida Department of Environmental Protection, Environmental Resource Permitting (ERP) and Sovereign Submerged Lands (SSL) Rules, at www.dep.state.fl.us/water/wetlands/erp/rules/guide.htm (last updated July 2, 2007).

\(^{24}\) The balancing test for regulated activities is based on the following criteria: adverse effects to public health, safety, or welfare, or the property of others (based solely on environmental, not economic, considerations); adverse effects the conservation of fish and wildlife, including endangered and threatened species, or their habitats; adverse
The wetland resource permit program for the Florida panhandle is implemented by the FLDEP and regulates dredging and filling in waters of the state,\(^\text{26}\) which generally consist of waters connected to other “named” waters, including lakes of more than ten acres in size, but excluding isolated wetlands.\(^\text{27}\) However, the Northwest ERP rulemaking process was authorized through statutory amendments in the 2006 legislative session, requiring FLDEP to develop rules addressing stormwater quality and quantity by January 2007 and the remaining components of the comprehensive ERP program, including isolated wetlands, by January 2008.\(^\text{28}\) Until these rules are in place, the rules governing the wetland resource permits will remain in place.\(^\text{29}\)

**Proprietary authorizations.** In addition to obtaining a wetland resource permit or an ERP, activities that are located on state-owned (including “sovereignty”)\(^\text{30}\) submerged lands also require a proprietary authorization (PA) from the state.\(^\text{31}\) The authorization addresses issues such as riparian rights, impacts to submerged land resources, and preemption of other uses of the water by the public. The state’s rules regarding sovereignty submerged lands outline the authorization required for construction and uses of state-owned submerged lands,\(^\text{32}\) as well as special criteria that apply to construction and uses of state aquatic preserves.\(^\text{33}\) The PA program is implemented jointly by the FLDEP and four of the state’s five WMDs, which are authorized to act as staff of the Governor and Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund.\(^\text{34}\)

For activities located on state-owned submerged lands, the proprietary review is linked to the ERP review. In these areas, applicants must qualify for both authorizations, if applicable, in order to receive either authorization.\(^\text{35}\) This means that an application requiring both a state-owned submerged lands authorization and an ERP or wetland resource permit is not complete effects on navigation or the flow of water, or causing harmful erosion or shoaling; adverse effects on fishing or recreational values or marine productivity in the vicinity of the activity; temporal nature (whether the activity will be temporary or permanent); adverse effects on or enhancement of significant historical and archaeological resources; and the current condition and relative value of the functions being performed by areas affected by the proposed regulated activity.

\(^{23}\) FLA. ADMIN. CODE ANN. r. 40B-400.103 to .104, 40C-4.301 to .302, 40D-4.301 to .302, 40E-4.301 to .302. See also Florida Department of Environmental Protection, supra note 6 at 11.

\(^{26}\) See FLA. ADMIN. CODE ANN. r. 62-312.030.

\(^{27}\) It should be noted that a separate stormwater program also regulates construction of new sources of stormwater runoff throughout the panhandle. See FLA. ADMIN. CODE ANN. r. 62-25.

\(^{28}\) FLA. STAT. ANN § 373.4145 et seq.

\(^{29}\) FLA. STAT. ANN § 373.4145(1)(a)-(b).

\(^{30}\) “Sovereignty” submerged lands are those lands that were deeded to the State of Florida by the federal government at the time of statehood in 1845.

\(^{31}\) State sovereignty submerged lands generally extend waterward from the mean high water line of tidal waters out to the state’s territorial limit (which is three miles in the Atlantic Ocean and approximately ten miles in the Gulf of Mexico) or the ordinary high water line of navigable fresh waters. The state’s sovereignty submerged lands rules are authorized under FLA. STAT. ANN. § 253. Additional protection is given to state-owned submerged lands within aquatic preserves. See FLA. STAT. ANN. § 258.

\(^{32}\) FLA. ADMIN. CODE ANN. r. 18-21.005.

\(^{33}\) FLA. ADMIN. CODE ANN. r. 18-20.

\(^{34}\) FLA. ADMIN. CODE ANN. r. 18-21.0051.

\(^{35}\) FLA. STAT. ANN. §§ 253.77, 373.427. See also Florida Department of Environmental Protection, supra note 6 at 7.
until all the information required for both has been received. The ERP or wetland resource permit cannot be issued until all criteria for both the state-owned submerged lands program and the wetland resource permit or ERP program has been met.  

**Beach and shore preservation.** The Beach and Shore Preservation Act\(^{37}\) contains requirements related to wetland protection and coordinated review of coastal construction activities. FLDEP’s Bureau of Beaches and Coastal Systems conducts concurrent processing of applications for coastal construction permits, ERPs, wetland resource permits, and state-owned submerged lands authorizations. These permits and authorizations, which were previously issued separately and by different state agencies, have now been consolidated into a joint coastal permit (JCP).\(^{38}\) A JCP is required for activities that meet all of the following criteria: (1) are located on Florida’s natural sandy beaches facing the Atlantic Ocean, the Gulf of Mexico, the Straits of Florida or associated inlets; (2) extend seaward of the mean high water line; (3) extend into sovereign submerged lands; and (4) are likely to affect the distribution of sand along the beach.

**Mine reclamation.** An ERP, wetland resource permit, or state-owned land application for a mine is processed by FLDEP Bureau of Mine Reclamation\(^{39}\) or the applicable WMD. The WMD will process the application if the mine is a borrow pit and will not have on-site material grading or sorting facilities.

**Coastal zone management.** Florida’s Coastal Zone Protection Act\(^{40}\) contains requirements related to coastal zone management and wetland protection, including consistency and coordinated review of all pertinent coastal construction activities. For activities in coastal counties, issuance of the state wetland resource permit or ERP also constitutes a consistency concurrence or waiver thereto that the activities are in compliance with the state’s federally-approved coastal zone management program.

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\(^{36}\) See FLA. STAT. ANN. §§ 253, 258 (West 2007); FLA. ADMIN. CODE ANN. r. 18-14, 18-18, 18-20 to21.

\(^{37}\) FLA. STAT. ANN. §§ 161.52 to 161.58 (West 2007); FLA. ADMIN. CODE ANN. r. 62B-41, 62B-33, 62B-49.

\(^{38}\) See FLA. STAT. ANN. § 161; see also Florida Department of Environmental Protection, Beaches and Coastal Systems, at http://www.dep.state.fl.us/beaches/ (last updated July 19, 2007). The Bureau of Beaches and Coastal Systems also implements a coastal zone construction permitting program for activities within the coastal construction control line that has been established along the beaches of the Gulf of Mexico and the Atlantic Ocean. This permitting program is not an ERP, and those coastal construction activities that require a coastal zone permit and a wetland permit also need to obtain a coastal construction permits. FLA. STAT. ANN. § 161; Personal Communication with Douglas Fry, Fla. Dep’t of Envtl. Prot. (Jan. 27, 2006).

\(^{39}\) FLA. STAT. ANN. § 378.

\(^{40}\) FLDEP coordinates the review of certain coastal activities for the state’s federally-approved coastal zone management program. FLA. STAT. ANN. §§ 380.20 to .23(1).
Mangroves. Florida is a subtropical state that provides habitat to three species of mangrove trees. Because the waterfront growth of these trees tends to block the views of waterfront property owners, a large number of mangroves throughout Florida have been eliminated by dredging, filling, trimming, and alteration. The trimming and alteration of mangroves is not regulated by the wetland resource or environmental resource permitting programs when there is no associated dredging or filing. To protect mangrove resources, the Florida legislature has enacted a program that enables the FLDEP and delegated local governments to regulate the trimming or alteration of mangroves.

Organization of state agencies
Multiple agencies participate in cooperative and coordinated partnerships to implement both regulatory and non-regulatory wetland activities throughout the state. The FLDEP has six district offices and each of the five regional WMDs oversees its district offices. Consistent implementation of the program in those offices is coordinated through training, rulemaking, and programmatic guidance by FLDEP’s Office of Submerged Lands and Environmental Resources in Tallahassee. Both the FLDEP and WMDs are responsible for overseeing implementation of the ERP program delegated to any local government. FLDEP and the five regional WMDs have equivalent authority to administer the ERP program under state law. In practice, FLDEP and the four WMDs outside of the panhandle have divided responsibilities according to categories of activities. For certain activities, FLDEP conducts permit application review and takes all agency action (e.g., any associated compliance and enforcement activities or issuance of the ERP and any associated PAs). For other various activities, the applicable WMD takes the lead on permit review and associated regulatory actions. This division of responsibilities between the FLDEP and the four WMDs that implement the ERP program is specified in operating agreements that have been adopted by rule by each of the agencies.

43 Local governments may be delegated all or part of the ERP program, by FLDEP and/or the relevant WMD. See Fla. Stat. Ann. § 373.441 (West 2007); Fla. Admin. Code Ann. r. 62-344. To date, the only comprehensive delegation has been to Broward County, which assumed many ERP permitting responsibilities but not the PA program. In addition, the City of Tallahassee and Miami-Dade County have both received limited delegations from FLDEP (power to grant stormwater general permits and power to verify certain and publish the consent by rule that accompanies those docks, respectively). A pending petition from Miami-Dade County for a comprehensive delegation of the ERP program from both FLDEP and the South Florida WMD is under currently under review. Fry, supra note 42.
44 The five regional WMDs are: Northwest Florida, Saint John’s River, South Florida, Southwest Florida, and Suwannee River. As noted, the Northwest Florida WMD, covering the “panhandle” region (the 16 counties in the northwest portion of the state), does not administer the ERP program in its district. At the time the ERP program was established, the state’s regulatory program in the panhandle was grandfathered to function under the then-existing program due a shortage in funding. The grandfathered program in the panhandle had been legislatively extended until 2010; however, during the 2006 legislative session, rulemaking for the ERP program in the Northwest Florida WMD was authorized. See supra note 6, at 2; Fla. Stat. Ann. § 373.4145; Fla. Admin. Code Ann. r. 62-25, 62-312.
46 FLDEP generally reviews and takes action on activities involving extraction, waste disposal, dredging, energy production, industry, and communications, as well as those involving coastal zone construction. WMDs generally take action on applications involving commercial and residential developments. See Florida Department of Environmental Protection, ERP Primer 5 (undated) (on file at ELI).
FLDEP and the WMDs coordinate regularly to ensure consistency of ERP issuance and other decision-making. Coordination generally occurs via quarterly meetings between FLDEP and WMD staff; regular, ongoing correspondence; rulemaking (the FLDEP uses the rules of each of the WMDs, and the WMDs use certain rules of the FLDEP); joint training; and ongoing discussion on administrative hearings and court cases that affect the agencies.  

Statewide, approximately 520 staff administer the ERP program. About half conduct project review, while the remainder are split between compliance and enforcement activities and administrative functions, although many staff share responsibilities for different program tasks. Current annual funding is estimated at approximately $31 million. This funding comes from a variety of sources, including state general revenue, WMD property taxes, permit application fees, and state trust funds.  

§401 certification

Florida’s wetland regulatory program is based on independent state authority and applies in addition to (not as a substitute for or superseded by) the federal §404 program. ERP program jurisdiction is broader than the §404 program because it regulates alterations of uplands that may affect surface water flows (including issues of flooding and stormwater treatment) and alterations to “isolated” wetlands that lie beyond federal jurisdiction; however, wetland resource program jurisdiction does not include any isolated wetlands. Applicants must get all appropriate permits and authorizations from both the appropriate state and federal agencies before beginning work. The issuance of an ERP or wetland resource permit also constitutes the state’s water quality certification or waiver; the state does not have a separate program for granting or waiving state water quality certifications. Thus, the Corps may not act on applications that require a §404 permit unless an ERP or wetland resource permit has been issued or the project is exempt.  

State and federal general permits

Nationwide permits. Florida determined 2002 Corps Nationwide Permits # 8 (Oil and Gas Structures) and # 29 (Single Family Housing) to be inconsistent with the Florida Coastal Zone Management Program. Water quality certification also has been denied for NWP # 29. The

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48 Fry, supra note 1.
49 Florida Department of Environmental Protection, supra note 6, at 14.
50 Florida has not assumed the federal § 404 program for several reasons, including differences between the state and federal delineation methodologies and “navigable waters” (i.e., most of Florida’s waters are non-assumable under §404 because they are navigable, navigable in fact, or navigable with improvement). See Florida Department of Environmental Protection, Summary of the Wetland and Other Surface Water Regulatory and Proprietary Programs in Florida 13 (May 22, 2002) (on file at ELI).
51 The FLDEP has determined that projects exempt from the ERP permit requirements are automatically certified as complying with state water quality standards. The ERP integrated permit review process also includes a determination of the proposed project’s consistency with the Florida Coastal Zone Management Program, and issuance of an ERP constitutes the state’s finding of such consistency. Florida’s incorporation of the coastal zone management program consistency determination into the ERP process also precludes § 404 permitting. Id. at 1-2.
state otherwise conditionally approved the remaining 2002 NWPs, subject to an applicant obtaining the applicable state wetland resource or environmental resource permit or exemption, any applicable sovereignty submerged lands authorization, and meeting other specified special conditions and limitations. Florida’s action on the 2007 NWPs could not be reviewed within the reporting period.

**State Programmatic General Permit.** The Corps has also issued a State Programmatic General Permit (SPGP) to FLDEP that authorizes the agency to issue federal wetland permits (§404/§10) for certain activities. Permits processed by a FLDEP “designee” are included in the SPGP.

**General permits.** The state has issued a number of noticed general permits for the ERP program. Applicable activities are slightly larger than those that qualify for exemptions and have been determined to have minimal potential for individual direct and secondary impacts. Similarly, the Corps has issued a number of Regional General Permits for various activities.

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53. Note that water quality certification for the following NWPs is not applicable in the State of Florida: # 1 (Aids to Navigation), # 2 (Structures in Artificial Canals), # 8 (Oil and Gas Structures), # 9 (Structures in Fleeing and Anchorage Areas), # 10 (Mooring Buoys), # 11 (Temporary Recreational Structures), # 28 (Modification of Existing Marinas), and # 35 (Maintenance Dredging of Existing Basins). See Letter from David B. Struhs, Secretary, Fla. Dep’t of Envtl. Prot., to Colonel James G. May, Dep’t of the Army (Mar. 11, 2002), available at http://www.dep.state.fl.us/water/wetlands/docs/erp/NWP_conditions2002.pdf.

54. NWPs # 21 (Surface Coal Mining), # 24 (State Administered Section 404 Programs) and # 34 (Cranberry Production Activities) do not apply within Florida. Letter from David B. Struhs, Secretary, Fla. Dep’t of Envtl. Prot., to Colonel James G. May, Dep’t of the Army (Mar. 14, 2002), available at http://www.dep.state.fl.us/water/wetlands/docs/erp/NWP_conditions2002.pdf.


56. Activities covered by the current SPGP, SPGP IV, include: construction of shoreline stabilization structures; boat ramps and launch areas and associated activities; maintenance dredging of canals and channels; selected regulatory exemptions; and selected ERP noticed general permits. See Letter from Colonel Robert M. Carpenter, Department of the Army, State Programmatic General Permit State of Florida, (available at http://www.dep.state.fl.us/water/wetlands/forms/spgp/SPGP_IV_Permit_Instrument.pdf).

57. The geographic area covered by the SPGP excludes Monroe County and the Northwest Florida WMD, which is subject to the panhandle exemption. Letter from Colonel Robert M. Carpenter, Dep’t of the Army, State Programmatic General Permit State of Florida (July 24, 2005), available at http://www.dep.state.fl.us/water/wetlands/forms/spgp/SPGP_IV_Permit_Instrument.pdf.


59. Activities subject to general permits include: construction and modification of boat ramps of certain sizes; installation and repair of riprap at the base of existing seawalls; installation of culverts associated with stormwater discharge facilities; and construction and modification of certain utility and public roadway construction activities. See FLA. STAT. ANN. §§ 373.118, 373.414(9); FLA. ADMIN. CODE ANN. r. 62-341, 40B-400.201 to .630, 40C-4.400.201-.630, 40D-400.201 to .630, 40E-400.201 to .630.
Mitigation

Florida’s mitigation provisions are designed to further the state’s goal of “no net loss” of wetland and other surface water functions. Mitigation measures may be considered only after modifications have been made to eliminate or reduce adverse impacts. 60 Florida applies a uniform mitigation assessment methodology (UMAM) to calculate required compensatory mitigation. 61 The methodology calculates the amount of functional loss of impacted wetlands and amount of proposed functional gains produced by mitigation wetlands. On-site mitigation is preferred, but mitigation also may occur off-site if it provides greater long-term viability or ecological value. If an applicant proposes to mitigate any adverse impacts within the same drainage basin as the impacts, and if the mitigation fully offsets those impacts, the regulated activity will be considered to have no unacceptable cumulative impacts upon wetlands and other surface waters. 62

Mitigation banks and in-lieu fee programs have been legislatively authorized. 63 Public or private mitigation banks must obtain an environmental resource/mitigation bank permit from FLDEP or the appropriate WMD. 64 FLDEP, a WMD, or a local government may sponsor a regional off-site in-lieu fee mitigation project that is paid for by monies accepted as mitigation. 65

FLDEP and the WMDs participate on the state’s interagency Mitigation Bank Review Team (MBRT), along with Corps Jacksonville District, National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and USDA Natural Resources Conservation Service. The goals of the MBRT are “to obtain consensus on issues related to the establishment, use, and operation of mitigation banks,” “to streamline the respective evaluation

60 See Suwannee River Water Management District Applicant’s Handbook 12.2.1-12.2.2.3, St. John’s River Water Management District Applicant’s Handbook 12.2.1-12.2.2.3, Southwest Florida Water Management District Basis of Review 3.2.1-3.2.2.3., and South Florida Water Management District Basis of Review 4.2.1-4.2.2.3. See also Florida Department of Environmental Protection, supra note 6, at 15.

61 FLA. ADMIN. CODE ANN. r. 62-345. See also Florida Department of Environmental Protection, Uniform Mitigation Assessment Methodology, at http://www.dep.state.fl.us/water/wetlands/Mitigation/umam.htm (last updated June 12, 2007).

62 Florida Department of Environmental Protection, supra note 6, at 13-15.

63 See FLA. STAT. ANN. § 373.4135 to .4136; FLA. STAT. ANN. § 373.414; FLA. ADMIN. CODE ANN. r. 62-342; Suwannee River Water Management District Applicant’s Handbook 12.4; St. John’s River Water Management District Applicant’s Handbook 12.4; Southwest Florida Water Management District Basis of Review Appendix 4; and South Florida Water Management District Basis of Review 4.4.

64 An environmental resource/mitigation bank permit prescribes the following requirements: the banker must have sufficient legal interest in the property to preserve it by a perpetual conservation easement or donation to the state prior to any release of credits; a detailed mitigation plan must be presented to support viable and sustainable functional improvements for the regional watershed; the number and type of potential mitigation credits must be established, as well as the environmental criteria and schedule for the release of those credits for use; the mitigation bank must maintain a ledger to track the number and type of credits released and used; a mitigation service area, based on watersheds and other ecological criteria, must be established; a long-term plan must be established to maintain the mitigation success in perpetuity; and financial assurance must be established for both the implementation and perpetual management of the bank. See Florida Department of Environmental Protection, supra note 6, at 15.

65 A memorandum of agreement (MOA) is required between the sponsoring organization and the FLDEP or WMD, as appropriate, for any regional offsite mitigation area (ROMA) project used for five or more projects or for more than 35 acres of impact. The MOA must address most of the same requirements required by mitigation bank permits. In addition, the sponsoring agency must provide a full cost accounting of the monies received to ensure that all monies were used in the ROMA. Id.
process and reduce redundancy between the state and federal laws,” “to evaluate the technical aspects of mitigation banking through a team approach,” and “to provide input to applicants regarding the feasibility of proposed mitigation bank projects before extensive time and money resources are put into developing proposed banks.”66

In 1995, Florida established a mitigation program specific to the Florida Department of Transportation (FLDOT).67 FLDOT annually provides an inventory of anticipated wetland impacts to the regional WMDs, which then develop mitigation plans in coordination with other state and federal regulatory agencies.68

**Compliance and enforcement**

A variety of administrative, civil, and criminal remedies are available to enforce state wetland requirements.69 FLDEP, the WMDs, and delegated local governments are authorized to take administrative and civil actions, but criminal provisions may only be enforced by the Office of the State Attorney.70 The division of responsibility for enforcement between FLDEP, the WMDs, and the delegated local governments is based on the division of permitting responsibilities under the ERP program.71 FLDEP maintains a Compliance and Enforcement Manual to provide guidance to staff and conducts an annual compliance/enforcement workshop for government staff.72

Available enforcement actions include: civil damage and penalties for injury to air, waters or property, including plants, animals, and aquatic life,73 and administrative fines.74 Only FLDEP may recover damages and civil penalties for violations involving state-owned submerged lands.75 Injunctive relief is also available to redress wetlands violations.76 Criminal provisions prescribe fines and imprisonment for willful or reckless violations of wetlands requirements and violations of sovereign submerged lands requirements.77 In practice, the majority of violations are resolved using administrative or civil procedures; criminal actions are used only in the most serious cases that cannot otherwise be resolved.78

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68 This program does not relieve FLDOT from eliminating or reducing impacts or obtaining permits for the impacts and the agency must provide funding to conduct the required mitigation projects. See Florida Department of Environmental Protection, supra note 6, at 15.
70 See Florida Department of Environmental Protection, supra note 6, at 13.
71 Fry, supra note 42.
72 Florida Department of Environmental Protection, supra note 6, at 13.
77 Id. § 403.161.
78 Florida Department of Environmental Protection, supra note 6, at 13.
Tracking systems
The FLDEP and each WMD have their own tracking systems to record the permit processes, assessment findings, enforcement actions, and compensatory mitigation. Most data are reported statewide.\textsuperscript{79}

III. Water Quality Standards
The goals and objectives of state water policy, including the wetland program, are outlined in Florida’s water plan.\textsuperscript{80} Compliance with the state’s surface water quality standards is an integral part of Florida’s wetlands protection program and all ERP and wetland resource permit applications must demonstrate such compliance.\textsuperscript{81}

Under Florida’s water quality regulatory scheme, all surface waters in Florida fall into one of five classifications based upon their present and future most beneficial use.\textsuperscript{82} Narrative and numeric water quality criteria are designed to support those designated uses,\textsuperscript{83} and an antidegradation policy applies to wetlands based on designated use classifications.\textsuperscript{84,85} In general, an activity cannot cause or contribute to violations of state water quality standards. Additional, more stringent, water quality standards apply to those waters designated as Outstanding Florida Waters (OFWs). In general, an activity in or directly discharging into an OFW cannot degrade the ambient water quality within the OFW.\textsuperscript{86}

In order to qualify for an ERP or wetland resource permit, a regulated activity must also comply with the state’s groundwater standards.\textsuperscript{87} In addition, special standards have been adopted for discharge of treated stormwater and wastewater into wetlands.\textsuperscript{88}

IV. Monitoring and Assessment

\textsuperscript{79} Id.
\textsuperscript{80} FLA. ADMIN. CODE ANN. r. 62-40; see also: Florida Department of Environmental Protection, Office of Water Policy, at http://www.dep.state.fl.us/water/waterpolicy/index.htm (last updated July 10, 2007).
\textsuperscript{81} FLA. STAT. ANN. § 373.414; FLA. ADMIN. CODE ANN. r. 62-302.
\textsuperscript{82} The five designated use classifications are: (I) Potable Water Supplies; (II) Shellfish Propagation or Harvesting; (III) Recreation, Propagation and Maintenance of a Healthy Population of Fish and Wildlife; (IV) Agricultural Water Supplies; and (V) Navigation, Utility, and Industrial Use. Most bodies of water in Florida, including most wetlands, are Class III waters. Florida Department of Environmental Protection, supra note 6, at 14-15.
\textsuperscript{85} Florida’s water quality regulatory scheme also provides several “relief mechanisms” that allow for limited lowering of water quality, including Site Specific Alternative Criteria, mixing zones, variances, and exemptions, provided specified conditions are met. See generally: FLA. STAT. ANN. §§ 120.542, 403.201; FLA. ADMIN. CODE ANN. r. 62-4.243, 62-4.244.
\textsuperscript{86} FLA. ADMIN. CODE ANN. r.§ 62-4.242.
\textsuperscript{87} FLA. ADMIN. CODE ANN. r. 62-520, 62-522, 62-550.
\textsuperscript{88} FLA. ADMIN. CODE ANN. r. 62-25.042; FLA. STAT. ANN. § 373.414(3) to (4); Florida Department of Environmental Protection, supra note 6, at 12.
Monitoring and assessment for wetlands
Florida does not currently operate a comprehensive wetlands monitoring network. Some monitoring data are collected in the permit review process and from restoration programs that may require water quality monitoring data.  

Monitoring and assessment for streams
FLDEP’s Biological Assessment Program for rivers and streams uses two biomonitoring tools: the Stream Condition Index (SCI) and BioReconnaissance (BioRecon). The SCI is a composite macroinvertebrate metric for use in flowing streams, and the BioRecon is the screening tool version of the SCI. Habitat and physical/chemical characterizations are conducted in conjunction with all macroinvertebrate sampling.  

Several FLDEP regulatory programs areas use SCI and BioRecon, including: the Fifth Year Inspection Program, a domestic wastewater facilities permitting program; the 305(b) Program for reporting to the U.S. Environmental Protection Agency on the status of state waters; the Total Maximum Daily Load Program; and the National Pollutant Discharge Elimination System permitting program. The tools are also used for non-regulatory purposes, including assessing forestry and agricultural effects and best management practices and WMD mini-basin studies.  

V. Restoration and Partnerships
Florida restoration projects are underway in multiple regions of the state, each with its own individual legislation, targeted plan, goals, sponsors, and partners. Two major, multi-year, multi-billion dollar wetland restoration efforts include those on the Kissimmee River and in the Florida Everglades. Authorized by the U.S. Congress in 1992, the Kissimmee River restoration is jointly led by the South Florida WMD and the Corps. The effort involves the restoration of an estimated 40 square miles of rivers and floodplains and includes land acquisition, advanced science and engineering, and monitoring. Federal and state legislation have also been established to restore Florida’s Everglades and Florida Bay. Guided by the 2000 Comprehensive Everglades Restoration Plan, the Corps, South Florida WMD, and numerous other federal, state, local, and tribal partners, many projects have been completed to date, leading  

90 Sampling consists of 20 sweeps of the most productive habitats found in a 100-meter stretch of stream using a dip net. Organisms are collected and identified. The SCI assigns points to seven biological metrics to rate a site as excellent, good, poor, or severely degraded. The scoring system is the calibrated to be regionally specific for three bioregions in Florida: the panhandle, peninsula, and northeast.  
91 Florida Department of Environmental Protection, Bioassessment, at http://www.dep.state.fl.us/water/bioassess/flipdate.htm (last updated Dec. 12, 2006).  
92 Id.  
94 FLA. STAT. ANN. §§ 373.4592 to 373.45931.
to significant milestones in the restoration effort.\textsuperscript{95} Additional legislation targets restoration of Lake Okeechobee, the Geneva Freshwater Lens, Lake Apopka, Lake Panasoffkee, and the Harris Chain of Lakes.\textsuperscript{96}

The Florida Forever program is the state’s major land conservation and acquisition program, devoting $300 million annually to land acquisition and management. Nearly a quarter of those funds may be used for facilities development, ecological or hydrological restoration, or other capital improvements. Most ecological and hydrological restoration funds are distributed through the regional WMDs.\textsuperscript{97}

FLDEP maintains a wetland restoration database to aid local governments and community organizations by providing online tools and research materials needed for the implementation and management of restoration projects.\textsuperscript{98} The state also has a very active invasive plant management program that is critical to its wetland restoration programs.\textsuperscript{99}

In the late 1980s, Florida established the Surface Water Improvement and Management (SWIM) Program to address the degradation and impairment of surface water bodies throughout the state.\textsuperscript{100} SWIM requires that each WMD identify and maintain a priority list of water bodies of regional or statewide significance and develop plans and programs for their improvement. In implementing SWIM, the WMDs work with all levels of government and the private sector, with each partner contributing funding or in-kind contributions, or both. SWIM has proven to be one of the state’s most important public-private partnerships that preserves and restores Florida’s wetlands, in large part because the program is designed to address a waterbody’s needs as a system of connected resources on a priority basis.\textsuperscript{101}

Finally, FLDEP operates the Florida Wetland Restoration Information Center, which provides a framework for statewide ecological restoration of wetlands and their associated uplands using ecosystem management and ecological principles. The Center operates a web portal that includes: a searchable inventory of current and proposed restoration projects; tools and resources to aid in restoration planning and implementation; a library of online resources and searchable biographies related to restoration; a searchable database of funding resources for restoration; and information on Florida’s wetland programs.\textsuperscript{102}

\begin{footnotes}
\item[97] Florida Department of Environmental Protection, Florida Forever, at http://www.dep.state.fl.us/lands/acquisition/FloridaForever/default.htm (last updated June 19, 2007); see also: Florida Department of Environmental Protection, supra note 91.
\item[98] Florida Department of Environmental Protection, Florida Wetland Restoration Information Center, at http://www.dep.state.fl.us/water/wetlands/fwric/index.htm (last updated June 6, 2007).
\item[99] Florida Department of Environmental Protection, State Lands Invasive Plant Management, at http://www.dep.state.fl.us/lands/invaspec/index.htm (last updated July 3, 2007).
\item[101] Florida Department of Environmental Protection, supra note 50, at 24.
\item[102] Florida Department of Environmental Protection, Florida Wetland Restoration Information Center, at http://www.dep.state.fl.us/WATER/wetlands/fwric/ (last updated June 6, 2007).
\end{footnotes}
VI. Education and Outreach

FLDEP, WMDs, and delegated local governments produce a variety of education programs, videos, and publications for the general public. In addition, FLDEP and the WMDs have regular and active training programs for agency staff, as well as the staff of delegated local governments. These programs concentrate on technical procedures (e.g., wetlands delineation) and implementation of the wetlands program. This training is also provided to consultants and other members of the public when appropriate. Upon request, FLDEP staff make presentations on the state’s wetland protection programs to private and public organizations. This also includes participating in two “short course” conferences hosted by the Florida Chamber of Commerce each year for consultants and other representatives of the regulated community.

VII. Coordination with State and Federal Agencies

The Corps and the State of Florida have adopted joint permit application booklets and forms and coordinate under an operating agreement. The agreement stipulates that FLDEP or the applicable WMD (or delegated local government) initially receives all permit applications. Copies of those applications that do not qualify under the SPGP are forwarded to the Corps within five working days. At that point, both the Corps and the state independently process permit applications. The agreement also specifies what actions taken by the FLDEP, the WMDs, and delegated local governments constitute a state water quality certification or waiver thereto and a coastal zone consistency concurrence or waiver thereto, as well as measures to share programmatic information on mitigation banks, training opportunities, and compliance and enforcement activities.

Florida’s federally-approved coastal zone management program reviews all activities in the coastal zone that involve federal actions and/or funding, as well as activities that require federal permits or licenses. As part of this effort, FLDEP coordinates with numerous state agencies that evaluate relevant activities for consistency with statutory authorities.

At the state level, FLDEP and the WMDs have worked with the Florida Department of Agricultural and Consumer Services to develop various Best Management Practices handbooks that assist the agricultural and silvicultural communities in minimizing adverse impacts to wetlands and other surface waters.

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104 Florida Department of Environmental Protection, supra note 6, at 16.
105 Id. at 14.
106 Multiple Florida agencies are consulted during this coordinated process, including the Florida Fish and Wildlife Conservation Commission, Department of Community Affairs, Department of State, Department of Agriculture and Consumer Services, Department of Health, and Department of Transportation.
VIII. Acronyms and Abbreviations

BioRecon – BioReconnaissance
Corps – U.S. Army Corps of Engineers
ERP – Environmental Resource Permit
FLDEP – Florida Department of Environmental Protection
FLDOT – Florida Department of Transportation
GIS – Geographic Information Systems
JCP – Joint Coastal Permit
MBRT – Mitigation Banking Review Team
MOA – Memorandum of Agreement
MSSW – Management and Storage of Surface Waters
NWP – Nationwide Permit
OFW – Outstanding Florida Waters
PA – Proprietary Authorization
ROMA – Regional Offsite Mitigation Area
SCI – Stream Condition Index
SPGP – State Programmatic General Permit
SWIM – Surface Water Improvement and Management
UMAM – Uniform Mitigation Assessment Methodology
USDA – U.S. Department of Agriculture
WMD – Water Management District