

2021 Handbook of Florida Water Regulation: Florida Water Resources Policy¹

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Preface

This handbook is designed to provide an accurate, current, and authoritative summary of the principal federal and state laws that directly or indirectly relate to agriculture in Florida. This handbook provides a basic overview of the many rights and responsibilities that farmers, farmland owners, and other Florida residents and businesses have under both federal and state laws, as well as the appropriate contact information to obtain more detailed information. However, the reader should be aware that because the laws, administrative rulings, and court decisions on which this handbook is based are subject to constant revision, portions of this publication could become outdated at any time. Several details of cited laws are also left out due to space limitations. This handbook is provided as an educational text for those interested in water use and water resource issues in Florida.

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Florida Water Resources Policy Overview

This publication provides an overview of laws and regulations governing water resource management and use in Florida. The publication gives an overview of laws and regulations discussed in the Handbook of Florida Water Regulations (https://edis.ifas.ufl.edu/topic_series_handbook_of_florida_water_regulation).

Florida Water Resources

Water resources define Florida's unique character. Among the most recognizable symbols of Florida are its top-ranked beaches, lush tropical vegetation, wetlands wildlife, and parks and waterparks, all of which depend upon clean and abundant water. Florida is also home to a strong agricultural industry, with many crops dependent on irrigation. Overall, water is required to meet the needs of Florida's growing population, support its fragile ecosystems,

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grow agricultural products, and provide other goods and services.

With the diverse and increasing water uses, wise management of water resources is important, and laws are set in place to regulate water use and protect the environment.

Florida Water Policies and Regulations

Water has unique characteristics that differentiate it from other products regulated in the marketplace.

Water constantly moves from place to place, making water users dependent on each other in complex ways that are not easily adaptable to buy-and-sell market transactions. Water use can be impossible to control. Due to its unique characteristics, private property rights for water are difficult to define, and markets cannot efficiently allocate water among diverse users. Rather, formal or informal agreements among the members of a society are needed to regulate the use of water resources.

The water laws and regulations discussed in the Handbook of Florida Water Regulation (https://edis.ifas.ufl.edu/topic_series_handbook_of_florida_water_regulation) are the formal rules created over time by societies to regulate water resource use and protection. Water use in Florida started out mostly unregulated, and landowners could legally use water whichever way they desired. However, with increases in the number of people in the state, greater water needs, and growing knowledge about co-dependence and withdrawal impacts on the environment, Florida began regulating water use to protect water quality and water availability for all life forms.

History of Water Regulation in Florida

Before 1972, Florida's water law was based on common law doctrines that had evolved in the eastern United States beginning in colonial times. Florida followed the common law eastern riparian doctrine, which essentially provided landowners with absolute ownership of water on their property. Landowners had the right to use water on their property so long as it did not unreasonably interfere with another landowner's right. Underground waters that flowed in definite channels (i.e., waters in the aquifer) were covered under the riparian doctrine; however, percolating waters, which are waters that flow without any permanent or definite channel (i.e., rain waters seeping through the ground)

were not covered under the riparian doctrine. Additionally, the doctrine did not address water quality until the late twentieth century because scientific knowledge about the impacts of certain actions on the quality of surface and groundwater was limited.

Water-use conflicts that developed over time led the courts and the legislature to refine the water laws and regulations. Specifically, in 1958, in the landmark case, *Koch v. Wick*, the Florida Supreme Court narrowed the scope of waterfront property-owners' right to use water on their property. The Court adopted the *reasonable use rule*, which, like the eastern riparian doctrine, gave all property owners an equal right to use the water located on their property, as long as it did not cause harm to other property owners. However, the reasonable use rule was subject to the condition that water use should be *reasonably related to the natural use of the landowner's property* (in other words, purchasing land to withdraw and sell water was not a reasonable use of land). This reasonable use rule applied to surface and groundwater, including percolating waters.

Before the 1950s, Florida managed its water resources through single purpose districts, which were tasked with addressing specific problems within specifically defined boundaries (i.e., mosquito-control districts, flood-control districts, and irrigation districts). In the late 1960s, faced with a rapidly growing state population, policymakers and water managers began to argue for a more cohesive solution to water quality and quantity problems, and for more integration in state regulatory and government agencies. In 1972, the Florida legislature responded by enacting the Florida Water Resources Act of 1972.

Florida Water Resources Act of 1972

As the keystone of Florida's water policy and law, the Florida Water Resources Act of 1972 (Chapter 373, Florida Statutes), henceforth, "the Act," was largely based on the *Model Water Code*, which was a scholarly review of Florida's surface water, groundwater, diffused surface water, and water pollution. The *Model Water Code* was published by Dean Frank E. Maloney and his colleagues at the University of Florida. The code integrated concepts from the common law water rights doctrines (which includes the reasonable use rule; See Maloney, *Florida's New Water Resources Law*, 10 U. FLA. L. REV. 119 (1957).

The fundamental structure of the Act has stood the test of time. The Florida legislature has added provisions to

address new issues, but the purpose and structure remain the same as in 1972.

Florida Water Resource Planning and Management

Before the passage of the Act, only two Water Management Districts (WMDs) existed. These were the Southwest Florida WMD and the Central and Southern Florida Flood Control District (the predecessor to the South Florida WMD). The Act established five WMDs and provided the regulatory agencies the responsibility of addressing issues such as water supply, drainage/flood protection, water quality, and protection of natural resources (See Fla. Stat. §373.026). The boundaries of the WMDs were determined by the five major water basins in the state: the Northwest Florida WMD, St. Johns River WMD, the Suwannee River WMD, the South Florida WMD, and the Southwest Florida WMD. By establishing five WMDs, the Act provided a statewide comprehensive approach to solving water issues. Under the Act, all five WMDs (Figure 1) were assigned the same mandates and responsibilities. For more information regarding WMDs, see FE594 (FWMD) at <https://edis.ifas.ufl.edu/publication/FE594>.

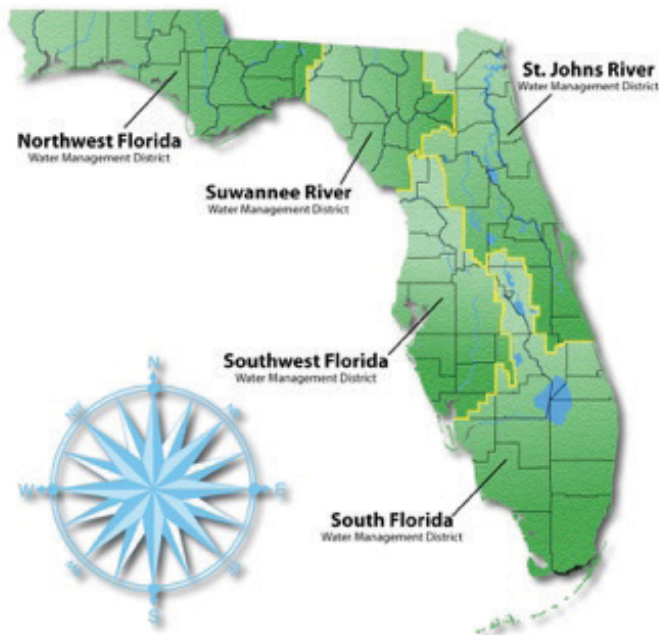


Figure 1. Florida's Five Water Management Districts.
Credits: St. Johns River Water Management District (2017), about the district.

While WMDs address regional issues, according to the Act, statewide authority for water resource management is vested in the Florida Department of Environmental Protection (FDEP 2013a). FDEP has *general supervisory*

authority over WMDs and delegates water resources programs to WMDs wherever possible. The legislative intent was to provide for the continuity of the statewide water management policy, with regional implementation taking into account the variability of water resources in the state. For additional information about FDEP, see FE593 (FDEP) at <https://edis.ifas.ufl.edu/publication/fe593>.

State and Regional Water Supply Planning

The Florida Water Resources Act of 1972 provides the five Florida WMDs with the planning responsibilities to address current issues and prevent future problems from occurring. These responsibilities include developing short- and long-term water-supply plans and providing feedback on local government comprehensive water plans. The five WMDs were directed to develop 20-year districtwide water supply assessments, and where needed regional water supply plans, which are intended to estimate the needs for water for various categories (such as public water supply and agriculture), and to balance these with the protection of environmental systems. Furthermore, a five-year water resource development work program must describe water supply components to guarantee the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event (373.536(6)(a)4, Florida Statutes). Annually, FDEP submits to the governor and the state legislature a report about the status of regional water supply planning (373.709(6), Florida Statutes; Regional Water Supply Planning). For example, the latest Annual Report on Regional Water Supply Planning can be accessed at the FDEP website at <https://floridadep.gov/water-policy/water-policy/content/water-supply>.

Water Resource Management through Permitting

Another highlight of the Florida Water Resources Act was the emphasis upon environmental protection through the permit programs that regulate water withdrawals and alterations of the surface water flows.

Rather than the absolute landowners' ownership for water adjacent and under their property (as was practiced under the historical riparian rights doctrine), Florida water resources are owned by the state, and their use is regulated by permits issued by WMDs.

Consumptive water use permits (or water use permits) (Authorized by Part II of Chapter 373) allow surface

and groundwater withdrawals for beneficial use such as public water supply, agricultural and landscape irrigation, industrial use, and power generation (Florida's Water Management Districts Permitting Portal 2013). Individual permits are required for water withdrawals above certain limits (set for annual average daily withdrawal volumes or well diameters). Applicants for the individual permits must establish that the intended use is a reasonable-beneficial use, that it is consistent with the public interest, and that it does not interfere with any existing permitted water uses, as well as Minimum Flows and Minimum Water Levels set for lakes, wetlands, and aquifers. For more information about the regulations related to the consumptive use permits, see FE604, Consumptive Use, at <https://edis.ifas.ufl.edu/publication/FE604>.

Permits may also be required for well installation to ensure that wells meet standards for safety and durability and to safeguard both the quality of water extracted from the wells and the quality of the source (aquifer) water. The permits are issued by WMDs (see FE603, Water Wells at <https://edis.ifas.ufl.edu/publication/fe603>).

Finally, alterations to the hydrologic regime (such as management and storage of surface water) are regulated by Environmental Resource Permits, also issued by WMDs. Environmental Resource Permits are required for activities that change surface water flow (e.g., a construction project that will increase stormwater flow, see FDEP 2013b). There is a variety of Environmental Resources Permits. You can learn about them in this handbook, available online at https://edis.ifas.ufl.edu/topic_series_handbook_of_florida_water_regulation.

Surface Water Quality Regulation

The federal Clean Water Act (CWA) establishes the basic regulatory structure for the discharge of pollutants and sets quality standards for surface water (such as lakes, rivers, and streams) in all states in the United States. The goal of CWA is to maintain and restore the chemical, physical, and biological integrity of navigable waters. CWA provides states with the responsibility of reviewing, establishing, and revising water quality standards. For more information, see FE582 (CWA) at <https://edis.ifas.ufl.edu/publication/FE582>.

The Total Maximum Daily Load (TMDL) program is among the major programs implemented by FDEP to address water quality issues in the state (FDEP2013c). CWA requires states to submit a list of surface waters that do not meet water quality standards (referred to as “impaired”), and to establish TMDL limits for these waters. A TMDL is

the total amount of pollution that a water body can receive over a certain period of time (usually, a year) and still meet water quality standards.

Section 303(d) of CWA requires states to compile a list of impaired waters, which they must submit to the United States Environmental Protection Agency (EPA) every two years for approval. States assign a priority ranking for establishing TMDLs in the waterbody. The ranking is prioritized based on the severity of the pollution and the designated use of the waterbody (i.e., potable water supplies or human recreation).

The Florida Legislature enacted the Florida Watershed Restoration Act (FWRA) in 1999 to protect Florida's waters and to apply and extend federal requirements related to the TMDL program and CWA to the state of Florida. Florida's water quality standards are published in the Florida Administrative Code (FAC) at 62-302 and 62-302.530. The topics covered in FAC include classifications, criteria, an anti-degradation policy, and protection of outstanding Florida waters. In Florida, the TMDL process includes the identification, verification, and listing of impaired waters; development of the TMDL plan with the initial allocation of allowable loads among polluting sources; and the TMDL implementation plan, referred to as the basin management action plan (BMAP), with a list of measures and projects to achieve TMDL and an evaluation of strategy to judge the progress. These steps are followed by BMAP implementation, progress monitoring and evaluation, and BMAP modifications if water quality targets are not achieved. For more information, see FE608 (FWRA) at <https://edis.ifas.ufl.edu/publication/FE608>.

In addition to the TMDL program, to prevent harm to Florida's waters, both the FDEP and Florida WMDs are vested with the authority to require permits for the management and storage of surface water and impose conditions on those permits. This authority is delegated almost entirely to FWMDs, which should be consulted before any alteration of surface water is undertaken. At the most basic level, the planned activity cannot be against the public interest. For more information on the management and storage of surface waters, see FE605 (MSSW) at <https://edis.ifas.ufl.edu/publication/FE605>.

Farmers interested in limiting their exposure to unwanted penalties and liabilities related to the potential impact on water resources should use BMPs. FDEP, FDACS, WMDs, and USDA have provided both cost-share and technical assistance to farmers to help implement BMPs to reduce point-source and nonpoint-source pollution from

agriculture operations. For more information on environmentally safe practices, see FE600 (Agricultural BMP) at <https://edis.ifas.ufl.edu/publication/FE600>.

Groundwater Quality Regulation

Almost all water used by Floridians for household needs is withdrawn from the Floridan aquifer (groundwater). The federal Safe Drinking Water Act (SDWA) passed in 1974 aims to eliminate the pollution in drinking water by protecting water quality from the source to the tap. For more information see FE587 (SDWA) at <https://edis.ifas.ufl.edu/publication/FE587>. In Florida, the SDWA is implemented under the primacy of the state, rather than federal agencies, through the Florida Safe Drinking Water Act of 1977.

Discharge of waste into state waters (including groundwater) is prohibited unless permitted by a state agency. A discharge activity is not permitted if the contaminants reduce ground or surface water quality below the standards required by FDEP. For more information on groundwater discharge regulations at the state level, see the discussion of the state and federal groundwater discharge regulations in FE601 (state) at <https://edis.ifas.ufl.edu/publication/FE601> and FE602 (federal) at <https://edis.ifas.ufl.edu/publication/FE602>.

Two more state regulatory acts are intended to protect groundwater quality: the Florida Water Quality Assurance Act of 1983 and the Florida Underground Petroleum Environmental Response Act of 1986. The Florida Water Quality Assurance Act addressed the need to compile data related to water resources; prevent contamination of potable water supplies; plug abandoned artesian wells; regulate the siting of septic tanks; clean up existing contamination sites; prevent pollution from leaking from underground fuel storage tanks; and require the proper treatment, storage, and/or disposal of all hazardous wastes. For more information about onsite sewage treatment and disposal covered by the Florida Water Quality Assurance Act, see FE614 (OSTD) at <https://edis.ifas.ufl.edu/publication/FE614>. In turn, the Florida Underground Petroleum Environmental Response Act further addressed the need to prevent pollution from leaking from underground petroleum storage tanks and to fund the cleanup of existing pollution sites. For more information, see FE613 (PSTS) at <https://edis.ifas.ufl.edu/publication/FE613>.

Protecting Water Quality

Along with several other laws, the Air and Water Pollution Control Act as amended (Chapter 403, Florida Statutes) provides the statutory basis for the regulation of most of the aspects of water quality in Florida. This law provides FDEP with broad powers and duties to accomplish the statutory goal of protecting and improving water quality throughout the state. These include the power to classify surface and groundwater bodies according to their most beneficial uses (e.g., potable water supply or recreation); establish ambient water-quality criteria for various parameters of water quality; develop standards of quality for wastewater discharges; implement a permit system for the *operation, construction, or expansion of any installation that may be a source of water pollution*; and require posting bond to operate any such installation. For more information, see FE607 (FAWPCA) at <https://edis.ifas.ufl.edu/publication/FE607>.

Protecting the Coast and Coastal Waters

The Florida Pollutant Discharge Prevention and Control Act is intended to maintain and protect the coast and coastal waters, beaches, and public lands that adjoin it in as close to a pristine condition as possible. FDEP and the Florida Fish and Wildlife Conservation Commission (FFWCC) use the Florida Coastal Protection Trust Fund (FCPTF) to regulate, investigate, rehabilitate, and cleanup sites contaminated by spills and discharges of substances and pollutants. These spills and discharges often occur as a result of procedures involved in the storage, transportation, and transfer of these substances and pollutants between ships, onshore facilities, offshore facilities, and terminal facilities within the jurisdiction and waters of Florida, and from saltwater traps permeated with pollutants. For more information, see FE585 (FPDPCA) at <https://edis.ifas.ufl.edu/publication/FE585>.

Protecting Wetlands

The regulation of wetlands is carried out at the federal level by the Army Corps of Engineers and at the state level by FDEP. For more information, see FE606 (Activities in Wetlands) at <https://edis.ifas.ufl.edu/publication/FE606>.

South Florida's unique wetland, the Everglades, is extremely important for Florida, the nation, and the world. It was designated as a Wetland Area of Global Importance by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). To restore and protect the system, the [Florida Everglades Forever Act](#) (FEFA) includes

provisions for water supply improvement and restoration, evaluation of water quality standards, monitoring and controlling exotic species, and other programs important for the Everglades (see <https://edis.ifas.ufl.edu/publication/FE609>). In turn, the [Northern Everglades and Estuaries Protection Program](#) focuses on improving and protecting the water quality and quantity in the Lake Okeechobee, Caloosahatchee River, and St. Lucie River watersheds, which are hydrologically connected with the Everglades (NEEPP, 373.4595, Florida Statutes). See at the summary in FE610 (NEEPP) at <https://edis.ifas.ufl.edu/publication/FE610>.

Protecting Endangered Species

The federal Endangered Species Act protects species of fish, wildlife, and plants that are threatened with extinction as well as the ecosystems critical to the survival of those species. To find out more, see FE592 (ESA) at <https://edis.ifas.ufl.edu/publication/FE592>.

Other Programs and Laws

Water quality and availability can be affected by a variety of human activities. To address these problems, various government programs have been developed to protect and restore the environment, including water resources.

For example, the manufacturing and handling of toxic chemicals and the management of hazardous substances and sites can be harmful for water resources. They are therefore regulated by the following laws:

- *Federal Toxic Substances Control Act*—governs the manufacturing, disposing, importing, distribution, use, and processing of all toxic chemicals, with “toxic chemicals” being defined as those chemicals that present unreasonable risk of injury to public health or the environment. For more information, see <https://edis.ifas.ufl.edu/publication/FE591>.
- *Federal Resource Conservation and Recovery Act*—manages hazardous wastes (i.e., wastes that are potentially harmful to human health or the environment) as well as non-hazardous solid wastes. For more information, see relevant documents listed below:
- *Federal Comprehensive Environmental Response, Compensation, and Liability Act*—includes provisions for investigation and cleanup of sites contaminated by hazardous substances (commonly referred to as brownfields) (see <https://edis.ifas.ufl.edu/publication/FE584>).

- *Federal Emergency Planning and Community Right-to-Know Act (EPCRA)*—establishes requirements for federal, state, and local governments; Native American tribes; and chemical facilities regarding emergency planning for releases/spills of toxic chemicals, hazardous chemicals, or extremely hazardous substances, and community right-to-know reporting on toxic chemicals, hazardous chemicals, and extremely hazardous substances (see <https://edis.ifas.ufl.edu/publication/FE586>).

Water resources may also be affected by various chemicals used in agriculture. As a result, the following laws can apply to water resource protection:

- *Federal Insecticide, Fungicide, and Rodenticide Act*—regulates all phases of pesticide sale, use, handling, and disposal (see <https://edis.ifas.ufl.edu/publication/FE588>).
- *Florida Pesticide Law*—regulates the distribution, sale, and use of pesticides in Florida to protect people and the environment from the adverse effects of pesticides. To the extent that regulations under FPL do not violate federal pesticide law (FIFRA and FQPA), the state pesticide regulations can be more restrictive than the federal ones (see <https://edis.ifas.ufl.edu/publication/FE590>).
- *Federal Food Quality Protection Act (FQPA)*—protects the public from the health risks presented with exposure to excessive pesticide residues in/on foods and in the everyday surroundings, such as in the home and at work (see <https://edis.ifas.ufl.edu/publication/FE589>).
- *Florida Right-to-Farm Act*—restricts nuisance lawsuits against farmers by providing that farm operations that have been in operation for one year or more since their established dates and that were not nuisances when they were established will not constitute a public or private nuisance if the farm operations conform to generally accepted agricultural and management practices. For more information on the Florida Right-to-Farm Act and to learn more about private lawsuits, see <https://edis.ifas.ufl.edu/publication/FE599>.

Florida Water Resource Management

In addition to FDEP and Florida’s five WMDs that play a major role in water resource management, a few other agencies are responsible for protecting water resources. These are

- *Florida Department of Agriculture and Consumer Services (FDACS)*—among other functions, the agency conserves and protects the state’s agricultural and natural resources by promoting environmentally safe agricultural practices.

Within FDACS, the Office of Agriculture Water Policy works with farmers and businesses to develop and implement best management practices (BMPs) to protect and improve water quality. FDACS also administers a pesticide review and registration program to assure that pesticides labeled for use in Florida have been tested under Florida's conditions and will not pose an unreasonable threat to water quality. For more information on FDACS, see FE596, at <https://edis.ifas.ufl.edu/publication/FE596>.

- *Florida Fish and Wildlife Conservation Commission (FFWCC)*—the agency is responsible for the management, protection, and conservation of wild animal life, fresh water aquatic life, and marine life. For more information on FFWCC, see FE595 at <https://edis.ifas.ufl.edu/publication/FE595>.
- *Florida Department of Health (FDOH)*—the agency is responsible for implementing procedures to promote and protect public health and safety. Farmers must contact FDOH when they are involved in activities that might pollute public drinking supplies. FDOH conducts investigations on wells or specific areas when they are potentially at risk due to a chemical release and provides an alternate drinking source when the water exceeds the maximum contaminant level. For more information on FDOH, see FE597 at <https://edis.ifas.ufl.edu/publication/FE597>.

Sources

FDACS, <https://fdacs.gov/#Water>

FDEP, <https://floridadep.gov/>

NWFWMD, <https://www.nwfwater.com>

SFWMD, <http://www.sfwmd.gov>

SJRWMD, <https://www.sjrwmd.com>

SRWMD, <https://www.mysuwanneeriver.com>

SWWMD, <http://www.swfwmd.state.fl.us>