

APPENDIX 7
ISOLATED WETLANDS

Effective April 15, 1987

**BASIS OF REVIEW FOR
SURFACE WATER MANAGEMENT PERMIT APPLICATIONS
WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT
APPENDIX 7
ISOLATED WETLANDS**

1.0 Introduction

An objective of the District expressed by the legislative policy of Section 373.016(2), Florida Statutes, is to manage and protect water related resources of the south Florida region, including isolated wetlands and their associated fish and wildlife functions and values. The loss of single isolated wetlands may cause localized adverse impacts to fish and wildlife and their habitats. Cumulative impacts from the loss of many such wetlands could cause significant adverse impacts on a broader basis to water quality, hydrologic function and fish and wildlife habitat. The protection of isolated wetland functions is necessary for the protection of wetland associated fish and wildlife.

Section 373.414, Florida Statutes (1986), directs water management districts to establish specific permitting criteria for review of fish and wildlife and their habitats, protection of threatened and endangered species, and consideration of cumulative and off-site impacts in isolated wetlands. This Appendix to the Basis of Review for Surface Water Management Permit Applications addresses isolated wetlands and the requirement of Section 373.414, Florida Statutes (1986). It applies to all proposed systems for projects with isolated wetlands.

Isolated wetlands vary in type and function, so the permit application for a project which contains them shall include site specific information. The applicant must provide reasonable assurance that the proposed system, including protection or mitigation/compensation plans, complies with the District's isolated wetland objectives. The applicant may provide such reasonable assurance in many cases by meeting the specific design criteria in Section 5.1 below. Other project designs will be considered pursuant to Section 5.2 below. Because of the uncertain ability of current mitigation technology to restore or create the various functions and values of isolated wetlands, protection and incorporation of existing isolated wetlands in surface water management systems are preferred alternatives to destruction and mitigation or compensation.

2.0 Glossary

2.1 Wetland--Areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats and natural ponds. [Ref: Executive Order 11990, 42 Fed. Reg. 26961 (1977)].

2.2 Isolated wetland--Any wetland not under jurisdiction of the Department of Environmental Regulation (DER) for the purposes of regulation of dredging and

filling. Multiple individual wetlands normally connected by surface flow during a wet season with average rainfall shall be presumed to be an isolated wetland.

2.3 Disturbed wetland-- Wetlands as defined in Section 2.1 altered by drainage, dredge and fill, or invasive exotic plants so that hydrologic and biological functions are significantly diminished. A wetland or portion of a wetland with a prevalence of exotic plant species, such as Melaleuca or Schinus, shall be presumed disturbed. Wetlands impacted by activities conducted in violation of District rules or permit conditions shall not be considered disturbed for the purposes of this rule.

2.4 Protected wetland--Wetland areas set aside through project design, conservation or protection easement, or other approved method, to ensure continued biological and hydrologic function indicative of that wetland's particular type.

2.5 Buffer zone--An area adjacent to the isolated wetland which protects wetland function and minimizes adverse impacts of upland development on wetland function.

2.6 Mitigation--Remedying isolated wetland impacts by restoring or enhancing affected habitat, or by creating similar habitat of equal or greater function. For purposes of this rule, there is a presumption that similar habitat equals similar function.

2.7 Compensation--Replacement of isolated wetlands with a mixture of wetland/upland habitat, unique upland habitat, or other offsetting processes which enhance fish and wildlife habitat or otherwise provide overall benefits to the natural system.

2.8 Maintenance--As used in this Appendix, maintenance means regular upkeep of isolated wetlands to assure goals of an approved mitigation or compensation plan will be met. This may include a guaranteed survival rate of planted species and/or recruited desirable wetland species, and the removal of undesirable invasion species, such as Melaleuca and Schinus.

3.0 Size threshold

Isolated wetlands less than 0.5 acres in size will not be reviewed for impacts to fish and wildlife and their habitats, and mitigation or compensation shall not be required for their loss, unless:

a. Threatened or endangered species are present (See Sections 5.1.8 and 5.2), or

b. Cumulative impacts from the loss of such wetlands reaches an excessive level based on either:

1) the presumption that the loss of such wetlands exceeding 3 acres for projects 100 acres or smaller in size or 3% of the project area for projects over 100 acres in size produces excessive cumulative impacts, or

2) an evaluation of the post development character of the site, based on significance of the habitat type, abundance of similar habitat proposed for protection within the project area, proximity to similar publicly owned and protected fish and wildlife habitat, and other relevant factors.

4.0 Review procedures for projects which propose to impact isolated wetlands.

4.1 This Appendix will apply to all pending and new applications which are not complete, as evidenced by a letter of completeness, on the effective date of this Appendix. The provisions of Rule 40E-4.301(3) (Conditions for Issuance) apply to the evaluation of applications for construction and operation permits for projects which have previously approved conceptual approvals or construction and operation permits.

For conceptual approvals issued prior to the effective date of this Appendix which have included review of impacts on wetlands, the grantee of the conceptual approval may request a verification of this determination, or a verification that future permit review of isolated wetland impacts is to be governed by applicable requirements prior to the effective date of this Appendix. Request for verification must be filed no later than September 30, 1987 and will be confirmed by the District within 60 days of the request.

4.2 Applications which propose to impact isolated wetlands may be approved in concept with a Letter of Conceptual Approval. Detailed proposals shall be submitted as part of the application for conceptual approval or as part of the application for a Surface Water Management Construction and Operation Permit and shall include

a. A description of the type and function of the isolated wetland being impacted, which shall include area, vegetative community and hydrologic regime.

b. A list of all plant and animal species listed as endangered, threatened or of special concern pursuant to 50 Code of Federal Regulations, Section 17.12 and Rules 39-27.03 39-27.04, 39-27.05, Florida Administrative Code, which are incorporated by reference and made a part of this rule, which utilize the area, and an evaluation of the probable significance of the area to the listed species.

c. A short statement of project design alternatives considered to reduce or eliminate impacts to isolated wetlands.

d. Additional information as required to evaluate site specific conditions or site-specific project designs.

4.3 Applications which propose mitigation shall include a description of the wetland habitat to be created, restored or enhanced as a result of the mitigation activity, and shall specifically include descriptions of:

- a. area and location
- b. species to be planted
- c. plant density
- d. source of plants or mulch if not supplied by a commercial plant nursery
- e. hydrologic regime.
- f. monitoring and maintenance plan

g. itemized estimate of the cost of implementing mitigation based on relevant market conditions.

4.4 Applications which propose compensation shall include relevant information to demonstrate the proposal provides the required reasonable assurances, and may include, but is not limited to, the information listed in Section 4.3 above.

4.5 The operation phase of a project which impacts isolated wetlands shall not become effective until the construction or provision of required mitigation/compensation.

5.0 Review criteria Because isolated wetlands vary in type and function, each permit application for a project that includes isolated wetlands will be reviewed individually. The applicant must provide reasonable assurance that the proposed activity, including protection or mitigation/compensation plans, complies with the District objective, expressed in the legislative policies of Sections 373.016(2) and 373.414, Florida Statutes, to maintain the functions of isolated wetlands, including fish and wildlife and their habitat, and to protect endangered and threatened species.

a. An applicant may provide reasonable assurances by: 1) meeting the criteria and quantitative values as provided in Section 5.1 below, or 2) proposing a site-specific project design appropriate for the particular site and environmental system affected and providing additional information necessary to evaluate the proposal, as provided in Section 5.2 below. Sections 5.1 and 5.2 are equivalent review procedures and either one is available to all applicants.

b. Staff may consult with the Florida Game & Fresh Water Fish Commission or other knowledgeable experts when reviewing the habitat of threatened and endangered species and considering proposals for the protection of endangered or threatened species.

5.1 Quantitative design criteria

5.1.1 The natural functions of isolated wetlands over 0.5 acres in size, including water quality, water quantity, and fish and wildlife habitat, shall be maintained, as provided for in a) - d) below.

(a) Mitigation or compensation for elimination of isolated wetlands between 0.5 and 5.0 acres in size, pursuant to Section 5.1.2 below, shall be presumed to maintain wetland functions.

(b) There is no presumption that the function of isolated wetlands over 5.0 acres in size can be maintained by measures other than protection as defined in Section 2.4 above. Protection of isolated wetlands over 5.0 acres in size shall be the preferred method of providing the required reasonable assurance, however, other reasonable alternatives proposed by the applicant will be considered.

(c) The total isolated wetlands impacted by a project shall not produce significant adverse cumulative impacts. Cumulative impacts will be evaluated by the same criteria described in Section 3.0(b)(2) above.

(d) Protection of isolated wetlands or incorporation of isolated wetlands into surface water management systems is favored over isolated wetland destruction and mitigation or compensation. Wetland destruction and mitigation or compensation shall be considered only when there are no feasible project design alternatives for the particular site. Reasonable project design alternatives to isolated wetland impacts shall be considered.

5.1.2 Isolated wetland mitigation shall be implemented based upon ratios of acres of wetlands created, or restored to acres of wetlands destroyed which provide reasonable assurance that the mitigation will be successful. The following ratios shall be presumed to provide such reasonable assurance for type-for-type mitigation:

- a. Forested swamp, non-cypress dominated-----2.5:1
- b. Forested swamp, cypress dominated-----2.0:1
- c. Freshwater marshes-----1.5:1

Ratios for mitigation with unlike habitat, including expanded littoral zones, or compensation shall be determined on a case-by-case basis. When type-for-type mitigation is provided prior to isolated wetland impacts, a one-to-one ratio shall be presumed to provide such reasonable assurance.

5.1.3 Disturbed isolated wetlands may be developed and their loss compensated for by:

a. Mitigation at ratios less than those required in 5.1.2, based on the degree of disturbance and the remaining functional qualities. Mitigation through restoration of other disturbed wetlands is preferred over wetland creation.

b. Preservation of unique uplands or inclusion of developable uplands within an upland/wetland protected system. Mitigation or compensation shall not be required for isolated wetlands which do not provide functions and values as expressed above in Sections 1.0 and 5.0.

5.1.4 Isolated or created wetlands may be part of a surface water management system provided the wetland's functional qualities are maintained or improved and no adverse water quantity impacts are caused.

5.1.5 Isolated wetlands which extend off-site may be included in surface water management systems, provided the project is consistent with other requirements of the Basis of Review for Surface Water Management Permit Applications and legal drainage rights and permit requirements are satisfied. The cooperative use of isolated wetlands is encouraged.

5.1.6 Water tables:

a. Water tables shall not be altered such that on-site and off-site isolated wetlands are adversely affected.

b. Minimum separation distance between protected wetlands and canal/lake excavations shall be 200 feet, unless soil or other data shows that water table elevations in the wetlands would not be adversely affected.

c. Control elevations shall be established which maintain or improve pre-development hydroperiods in protected wetlands.

d. Control elevations shall be established which provide adequate hydroperiods to promote successful creation, restoration or enhancement of wetlands in mitigation areas.

e. Other requirements of the Basis of Review for Surface Water Management Permit Applications shall be met.

5.1.7 Buffer zones:

a. Buffer zones may be required around isolated wetlands that are to be protected or incorporated into a surface water management system to protect wetland function and minimize adverse impacts of upland development on wetland function. Actual delineation of the buffer zone may vary according to site specific conditions. Buffer zones which extend at least fifteen feet landward from the edge of the wetland in all places and average twenty-five feet from the landward edge of the wetland will be presumed to be adequate.

b. Prior to issuance of Construction and Operation permits, buffer zones shall be field verified and delineated in the field.

c. Buffer zones may consist of undisturbed uplands, open water bodies, wildlife corridors or other natural or structural features which serve the purpose stated in Section 2.7 as appropriate for the particular site.

d. Upland areas or wildlife corridors adjacent to buffer zones may be incorporated as compensation areas, provided they are in excess of the minimum buffer zone and meet all other requirements for compensation areas.

5.1.8 An isolated wetland, regardless of size or land use, that is utilized by species of plants or animals designated as endangered or threatened pursuant to the authority cited in Section 4.2(b) shall be protected as described in Section 2.4 above.

5.2 Qualitative criteria Instead of meeting the quantitative criteria listed above, an applicant may propose a site-specific design which provides reasonable assurance that the project complies with the District's objective to manage and protect isolated wetlands and their associated fish and wildlife functions and values as expressed above in Sections 1.0, 5.0 and to protect threatened and endangered species. The applicant has the burden of demonstrating such reasonable assurance.

5.2.1 The applicant should provide the information necessary to evaluate the particular proposal. The District will consider such models it deems appropriate, including the U. S. Fish and Wildlife Service Habitat Evaluation Procedure (HEP), and information regarding the pre-and-post-development condition of the site and its relation to the surrounding ecosystem.

5.2.2 Innovative proposals for mitigation or compensation, including off-site proposals and replacement with unlike habitat, will be evaluated individually based on such factors as regional significance of the wetland type to be impacted,

expected system-wide benefits of the proposal, ability to comparatively replace lost wetland values, anticipated post development setting of the project, and requirements of public works programs authorized by Florida Statutes.

5.2.3 This section provides an alternate review process for isolated wetlands which is similar and parallels the existing procedures outlined in the Basis of Review Sections 1.3, Criteria Flexibility; 3.1.5, Process for Determining Environmental Impacts; and 3.2.3, Environmental.

6.0 Project guarantee criteria

6.1 Wetland monitoring and maintenance programs will be required for proposals involving mitigation and/or compensation.

6.2 Monitoring and maintenance requirements will normally be established based on wetland type, size, complexity and construction schedule and will typically range from 2-5 years.

6.3 Mitigation/compensation shall be provided for in each phase of construction to mitigate the wetlands lost by that phase of construction as defined by the areas included within a given construction permit.