

**PART I  
POLICY AND PROCEDURES**

**PART II  
CRITERIA FOR EVALUATION**

**12.0 Environmental Considerations**

**12.1 Wetlands and Other Surface Waters**

Wetlands are important components of the water resource because they often serve as spawning, nursery and feeding habitats for many species of fish and wildlife, and because they often provide important flood storage, nutrient cycling, detrital production, recreational and water quality functions. Other surface waters such as lakes, ponds, reservoirs, other impoundments, streams, rivers and estuaries also often provide such functions, and in addition may provide flood conveyance, navigation and water supply functions to the public. Not all wetlands or other surface waters provide all of these functions, nor do they provide them to the same extent. A wide array of biological, physical and chemical factors affect the functioning of any wetland or other surface water community. Maintenance of water quality standards in applicable wetlands and other surface waters is critical to their ability to provide many of these functions. It is the intent of the Governing Board that the criteria in ss.12.2 through 12.3.8 be implemented in a manner which achieves a programmatic goal, and a project permitting goal of no net loss of wetland or other surface water functions. This goal shall not include projects that are exempt by statute or rule, or which are authorized by a noticed general permit. Unless exempted by statute or rule, permits are required for the construction, alteration, operation, maintenance, abandonment and removal of systems so that the District can conserve the beneficial functions of these communities. The term "systems" includes areas of dredging or filling, as those terms are defined in ss.373.403(13) and 373.403(14), F.S.

**12.1.1 Environmental Conditions for Issuance**

The District addresses the conservation of these beneficial functions in the permitting process by requiring applicants to provide reasonable assurances that the following conditions for issuance of permits, set forth in s.40B-400.103 (Conditions for Issuance) and 40B-400.104 (Additional Conditions for Issuance), F.A.C., are met. Applicants must provide reasonable assurance that:

- (a) A regulated activity will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters (paragraph 40B-400.103(1)(d), F.A.C.);
- (b) A regulated activity located in, on or over wetlands or other surface waters, will not be contrary to the public interest, or if such an activity significantly degrades or is located within an Outstanding Florida Water, that the regulated activity will be clearly in the public interest (paragraph 40B-400.104(1)(e), F.A.C.);
- (c) A regulated activity will not adversely affect the quality of receiving waters such that the water quality standards set forth in chapters 62-3, 62-4, 62-302, and 62-550, F.A.C., including any antidegradation provisions of s.62-4.242(1)(a) and (b), 62-4.242(2) and (3), and 62-302.300 and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in s.62-4.242(2) and (3), F.A.C., will be violated (paragraph 40B-400.103(1)(e), F.A.C.);
- (d) A regulated activity located in, adjacent to or in close proximity to Class II waters or located in waters classified by the Department as approved, restricted, or conditionally restricted for shellfish harvesting pursuant to chapter 16R-7, F.A.C., will comply with the additional criteria in ss.12.2.5 of the Applicant's Handbook (paragraph 40B-400.104(1)(c), F.A.C.);
- (e) The construction of vertical seawalls in estuaries and lagoons will comply with the additional criteria in ss.12.2.6 of the Applicant's Handbook (paragraph 40B-400.104(1)(d), F.A.C.);
- (f) A regulated activity will not cause adverse secondary impacts to the water resources (paragraph 40B-400.103(1)(f), F.A.C.); and

(g) A regulated activity will not cause cumulative impacts upon wetlands and other surface waters in violation of ss.(b)-(c) (paragraph 40B-400.104(2), F.A.C.).

## **12.2 Environmental Criteria**

Compliance with the conditions for issuance in ss.12.1.1 will be determined through compliance with the criteria explained in ss.12.2-12.3.8 of this Handbook.

### **12.2.1 Elimination or Reduction of Impacts**

The degree of impact to wetland and other surface water functions caused by a proposed system, whether the impact to these functions can be mitigated and the practicability of design modifications for the site, as well as alignment alternatives for a proposed linear system, which could eliminate or reduce impacts to these functions, are all factors in determining whether an application will be approved by the District. Design modifications to reduce or eliminate adverse impacts must be explored, as described in 12.2.1.1. Any adverse impacts remaining after practicable design modifications have been implemented may be offset by mitigation as described in ss.12.3-12.3.8. An applicant may propose mitigation, or the District may suggest mitigation, to offset the adverse impacts caused by regulated activities as identified in s.12.2-12.2.8.2. To receive District approval, a system cannot cause a net adverse impact on wetland functions and other surface water functions which is not offset by mitigation.

**12.2.1.1** Except as provided in 12.2.1.2, if the proposed system will result in adverse impacts to wetland functions and other surface water functions such that it does not meet the requirements of s.12.2.2 through 12.2.3.7, then the District in determining whether to grant or deny a permit shall consider whether the applicant has implemented practicable design modifications to reduce or eliminate such adverse impacts.

If, after first taking into consideration the factors listed in Subsection 12.2.2.3, the District determines that an applicant's proposed system can be modified in a practicable manner that would eliminate or reduce adverse impacts to wetland functions and other surface water functions, and if the applicant refuses to modify the system accordingly, mitigation shall not be approved. The term "modification" shall not be construed as including the alternative of not implementing the system in some form, nor shall it be construed as requiring a project that is significantly different in type or function. A proposed modification which is not technically capable of being done, is not economically viable or which adversely affects public safety through the endangerment of lives or property is not considered "practicable." A proposed modification need not remove all economic value of the property in order to be considered not "practicable." Conversely, a modification need not provide the highest and best use of the property to be "practicable." In determining whether a proposed modification is practicable, consideration shall also be given to the cost of the modification compared to the environmental benefit it achieves.

**12.2.1.2** The District will not require the applicant to implement practicable design modifications to reduce or eliminate impacts when:

(a) The ecological value of the functions provided by the area of wetland or other surface water to be adversely affected is low, based on a site specific analysis using the factors in ss.12.2.2.3, and the proposed mitigation will provide greater long term ecological value than the area of wetland or other surface water to be adversely affected; or

(b) The applicant proposes mitigation that implements all or part of a plan that provides regional ecological value and that provides greater long term ecological value than the area of wetland or other surface water to be adversely affected.

**12.2.1.3** Should such mutual consideration of modification and mitigation not result in a permissible system, the District must deny the application. Nothing herein shall imply that the District may not deny an application for a permit as submitted or modified, if it fails to meet the conditions for issuance or that mitigation must be accepted by the District.

### **12.2.2 Fish, Wildlife, Listed Species and Their Habitats**

Pursuant to paragraph 12.1.1(a), an applicant must provide reasonable assurances that a regulated activity will not impact the values of wetland and other surface water functions so as to cause adverse impacts to:

- (a) The abundance and diversity of fish, wildlife and listed species; and
- (b) The habitat of fish, wildlife and listed species.

In evaluating whether an applicant has provided reasonable assurances under ss.12.2.2, *de minimis* effects shall not be considered adverse for the purposes of this subsection.

As part of the assessment of the impacts of regulated activities upon fish and wildlife, the District will provide a copy of all notices of applications for standard general, individual and conceptual approval permits which propose regulated activities in, on or over wetlands or other surface waters to the Florida Game and Fresh Water Fish Commission for review and comment. In addition, District staff may solicit comments from the Florida Game and Fresh Water Fish Commission regarding other applications to assist in the assessment of potential impacts to wildlife and their habitats, particularly with regard to listed wildlife species. Where proposed activities have a potential to impact listed marine species, the District will provide a copy of the above referenced types of applications to the Department of Environmental Protection.

Generally, wildlife surveys will not be required. The need for a wildlife survey will depend upon the likelihood that the site is used by listed species, considering site characteristics and the range and habitat needs of such species, and whether the proposed system will impact that use such that the criteria in ss.12.2.2-12.2.2.3 and ss.12.2.7 will not be met. In assessing the likelihood of use of a site by listed species, the Department will consult scientific literature, such as "Closing the Gaps in Florida's Wildlife Conservation System" (Florida Game and Fresh Water Fish Commission, 1994) and the Florida Natural Areas Inventory. Survey methodologies employed to inventory the site must provide reasonable assurances regarding the presence or absence of the subject listed species.

**12.2.2.1** Compliance with ss.12.2.2-12.2.3.7, 12.2.5-12.3.8 will not be required for regulated activities in isolated wetlands less than 0.5 acre in size, unless:

- (a) The wetland is used by threatened or endangered species;
- (b) The wetland is located in an area of critical state concern designated pursuant to chapter 380, F.S.; or
- (c) The wetland is connected by standing or flowing surface water at seasonal high water level to one or more wetlands, and the combined wetland acreage so connected is greater than 0.5 acre; or
- (d) The District establishes that the wetland to be impacted is, or several such wetlands to be impacted are cumulatively, of more than minimal value to fish and wildlife.

**12.2.2.2** Alterations in livestock watering ponds that were constructed in uplands and which are less than one acre in area and alterations in drainage ditches that were constructed in uplands will not be required to comply with the provisions of ss.12.2.2-12.2.2.3, 12.2.3.5-12.2.3.7, 12.2.5-12.3.8, unless those ponds or ditches provide significant habitat for threatened or endangered species. This means that, except in cases where those ponds or ditches provide significant habitat for threatened or endangered species, the only environmental criteria that will apply to those ponds or ditches are those included in ss.12.2.4-12.2.4.5 and 12.2.2.4. This provision shall only apply to those ponds and ditches which were constructed before a permit was required under Part IV, chapter 373, F.S. or were constructed pursuant to a permit under Part IV, chapter 373, F.S. This provision does not apply to ditches constructed to divert natural stream flow.

**12.2.2.3** The assessment of impacts expected as a result of proposed activities on the values of functions will be based on a review of pertinent scientific literature, ecologic and hydrologic information, and field inspection. When assessing the value of functions that any wetland or other surface water provides to fish, wildlife and listed s

- (a) Condition - This factor addresses whether the wetland or other surface water is in a high quality state or has been the subject of past alterations in hydrology, water quality or vegetative composition. However, areas impacted by activities in violation of a District or Department rule, order, or permit adopted or issued pursuant to chapter 373, F.S., or Part VIII of chapter 403, F.S., (1984 Supp.) as amended, will be evaluated as if the activity had not occurred;
- (b) Hydrologic Connection - This factor addresses the nature and degree of off-site connection which may provide benefits to off-site water resources through detrital export, base flow maintenance, water quality enhancement or the provision of nursery habitat;

- (c) Uniqueness - This factor addresses the relative rarity of the wetland or other surface water and its floral and faunal components in relation to the surrounding regional landscape;
- (d) Location - This factor addresses the location of the wetland or other surface water in relation to its surroundings; and
- (e) Fish and Wildlife Utilization - This factor addresses use of the wetland or other surface water for resting, feeding, breeding, nesting or denning by fish and wildlife, particularly those which are listed species.

#### **12.2.2.4 Water Quantity Impacts to Wetlands and Other Surface Waters**

Pursuant to paragraph 12.1.1(a), an applicant must provide reasonable assurance that the regulated activity will not change the hydroperiod of a wetland or other surface water, so as to adversely affect wetland functions or other surface water functions as follows:

- (a) Whenever portions of a system, such as constructed basins, structures, stormwater ponds, canals and ditches are reasonably expected to have the effect of reducing the depth, duration or frequency of inundation or saturation in a wetland or other surface water, the applicant must perform an analysis of the drawdown in water levels or diversion of water flows resulting from such activities and provide reasonable assurance that these drawdowns or diversions will not adversely impact the functions that wetlands and other surface waters provide to fish and wildlife and listed species.
- (b) Increasing the depth, duration, or frequency of inundation through changing the rate or method of discharge of water to wetlands or other surface waters or by impounding water in wetlands or other surface waters must also be addressed to prevent adverse effects to functions that wetlands and other surface waters provide to fish and wildlife and listed species. Different types of wetlands respond differently to increased depth, duration or frequency of inundation. Therefore, the applicant must provide reasonable assurance that activities that have the potential to increase discharge or water levels will not adversely affect the functioning of the specific wetland or other surface water subject to the increased discharge or water level.
- (c) Whenever portions of a system could have the effect of altering water levels in wetlands or other surface waters, applicants shall be required to monitor the wetland or other surface waters to demonstrate that such alteration has not resulted in adverse impacts; or calibrate the system to prevent adverse impacts. Monitoring parameters, methods, schedules and reporting requirements shall be specified in permit conditions.

#### **12.2.3 Public Interest Test**

In determining whether a regulated activity located in, on, or over surface waters or wetlands is not contrary to the public interest, or if such an activity significantly degrades or is within an Outstanding Florida Water, that the regulated activity is clearly in the public interest, the District shall consider and balance, and an applicant must address the following criteria:

- (a) Whether the regulated activity will adversely affect the public health, safety, or welfare or the property of others (40B-400.104(1)(a)1., F.A.C.);
- (b) Whether the regulated activity will adversely affect the conservation of fish and wildlife, including endangered or threatened species, or their habitats (40B-400.104(1)(a)2., F.A.C.);
- (c) Whether the regulated activity will adversely affect navigation or the flow of water or cause harmful erosion or shoaling (40B-400.104(1)(a)3., F.A.C.);
- (d) Whether the regulated activity will adversely affect the fishing or recreational values or marine productivity in the vicinity of the activity (40B-400.104(1)(a)4., F.A.C.);
- (e) Whether the regulated activity will be of a temporary or permanent nature (40B-400.104(a)5., F.A.C.);
- (f) Whether the regulated activity will adversely affect or will enhance significant historical and archaeological resources under the provisions of s.267.061, F.S. (40B-400.104(1)(a)6., F.A.C.); and
- (g) The current condition and relative value of functions being performed by areas affected by the proposed regulated activity (40B-400.104(1)(a)7., F.A.C.).

##### **12.2.3.1 Public Health, Safety, or Welfare or the Property of Others**

In reviewing and balancing the criterion regarding public health, safety, welfare and the property of others in paragraph 12.2.3(a), the District will evaluate whether the regulated activity located in, on or over wetlands or other surface waters will cause:

(a) An environmental hazard to public health or safety or improvement to public health or safety with respect to environmental issues. Each applicant must identify potential environmental public health or safety issues resulting from their project. Examples of these type of issues include: mosquito control; proper disposal of solid, hazardous, domestic or industrial waste; aids to navigation; hurricane preparedness or cleanup; environmental remediation, enhancement or restoration; and similar environmentally related issues. For example, the installation of navigational aids may improve public safety and may reduce impacts to public resources.

(b) Impacts to areas classified by the Department as approved, conditionally approved, restricted or conditionally restricted for shellfish harvesting. Activities which would cause closure or a more restrictive classification or management plan for a shellfish harvesting area would result in a negative factor in the public interest balance with respect to this criterion.

(c) Flooding or alleviate existing flooding on the property of others. There is at least a neutral factor in the public interest balance with respect to the potential for causing or alleviating flooding problems if the applicant meets the water quantity criteria in s.10.3-10.6 of the Handbook.

(d) Environmental impacts to the property of others. For example, the construction of a ditch that results in drawdown impacts to a wetland or other surface water on an adjacent property would be an environmental impact to the property of others. The District will not consider impacts to property values.

#### **12.2.3.2 Fish and Wildlife and Their Habitats**

The District's public interest review of that portion of a proposed system in, on or over wetlands and other surface waters for impacts to "the conservation of fish and wildlife, including endangered or threatened species, or their habitats," is encompassed within the required review of the entire system under ss.12.2.2. An applicant must always provide the reasonable assurances required under ss.12.2.2.

#### **12.2.3.3 Navigation, Water Flow, Erosion and Shoaling**

In reviewing and balancing the criterion on navigation, erosion and shoaling in paragraph 12.2.3(c), the District will evaluate whether the regulated activity located in, on or over wetlands or other surface waters will:

(a) Significantly impede navigability or enhance navigability. The District will consider the current navigational uses of the surface waters and will not speculate on uses which may occur in the future. Applicants proposing to construct bridges or other traversing works must address adequate horizontal and vertical clearance for the type of watercraft currently navigating the surface waters. Applicants proposing to construct docks, piers and other works which extend into surface waters must address the continued navigability of these waters. An encroachment into a marked or customarily used navigation channel is an example of a significant impediment to navigability. Applicants proposing temporary activities in navigable surface waters, such as the mooring of construction barges, must address measures for clearly marking the work as a hazard to navigation, including nighttime lighting. The addition of navigational aids may be beneficial to navigation. If an applicant has a U.S. Coast Guard permit issued pursuant to 14 U.S.C. s.81 (1993), 33 C.F.R. s.62 (1993) for a regulated activity in, on or over wetlands or other surface waters, submittal of this permit with the application may assist the applicant in addressing this criterion.

(b) Cause or alleviate harmful erosion or shoaling. Applicants proposing activities such as channel relocation, artificial reefs, construction of jetties, breakwaters, groins, bulkheads and beach renourishment must address existing and expected erosion or shoaling in the proposed design. Compliance with erosion control best management practices referenced in chapter 40B-4, F.A.C., will be an important consideration in addressing this criterion. Each permit will have a general condition which requires applicants to utilize appropriate erosion control practices and to correct any adverse erosion or shoaling resulting from the regulated activities.

(c) Significantly impact or enhance water flow. Applicants must address significant obstructions to sheet flow by assessing the need for structures which minimize the obstruction such as culverts or spreader swales in fill areas.

Compliance with the water quantity criteria found in ss.12.2.2.4 shall be an important consideration in addressing this criterion.

#### 12.2.3.4 Fisheries, Recreation, Marine Productivity

In reviewing and balancing the criterion regarding fishing or recreational values and marine productivity in paragraph 12.2.3(d), the District will evaluate whether the regulated activity in, on, or over wetlands or other surface waters will cause:

(a) Adverse effects to sport or commercial fisheries or marine productivity. Examples of activities which may adversely affect fisheries or marine productivity are the elimination or degradation of fish nursery habitat, change in ambient water temperature, change in normal salinity regime, reduction in detrital export, change in nutrient levels or other adverse effects on populations of native aquatic organisms.

(b) Adverse effects or improvements to existing recreational uses of a wetland or other surface water. Wetlands and other surface waters may provide recreational uses such as boating, fishing, swimming, skiing, hunting and birdwatching. An example of potential adverse effects to recreational uses is the construction of a traversing work, such as a road crossing a waterway, which could impact the current use of the waterway for waterskiing and boating.

#### 12.2.3.5 Temporary or Permanent Nature

When evaluating the other criteria in ss.12.2.3, the District will consider the frequency and duration of the impacts caused by the proposed activity. Temporary impacts will be considered less harmful than permanent impacts of the same nature and extent.

#### 12.2.3.6 Historical and Archaeological Resources

In reviewing and balancing the criterion regarding historical and archaeological resources in paragraph 12.2.3(f), the District will evaluate whether the regulated activity located in, on or over wetlands or other surface waters will impact significant historical or archaeological resources. The applicant must map the location of and characterize the significance of any known historical or archaeological resources that may be affected by the regulated activity located in, on or over wetlands or other surface waters. The District will provide copies of all conceptual, individual and standard general permit applications to the Division of Historical Resources of the Department of State and solicit their comments regarding whether the regulated activity may adversely affect significant historical or archaeological resources. The applicant will be required to perform an archaeological survey and to develop and implement a plan approved by the District, as necessary to demarcate and protect the significant historical and archaeological resources, if such resources are reasonably expected to be impacted by the regulated activity.

#### 12.2.3.7 Current Conditions and Relative Value of Functions

When evaluating other criteria in ss.12.2.3, the District will consider the current condition and relative value of the functions performed by wetlands and other surface waters affected by the proposed regulated activity. Wetlands and other surface waters which have had their hydrology, water quality or vegetative composition permanently impacted due to past legal alterations or occurrences, such as infestation with exotic species, usually provide lower habitat value to fish and wildlife. However, if the wetland or other surface water is currently degraded, but is still providing some beneficial functions, consideration will be given to whether the regulated activity will further reduce or eliminate those functions. The District will also evaluate the predicted ability of the wetlands or other surface waters to maintain their current functions as part of the proposed system once it is developed. Where previous impacts to a wetland or other surface water are temporary in nature, consideration will be given to the inherent functions of these areas, relative to seasonal hydrologic changes, and expected vegetative regeneration and projected habitat functions if the use of the subject property were to remain unchanged.

When evaluating impacts to mitigation sites which have not reached success pursuant to ss.12.3.6, the District shall consider the functions that the mitigation site was intended to offset, and any additional delay or reduction in offsetting those functions that may be caused by impacting the mitigation site. Previous construction or alteration undertaken in violation of chapter

373, F.S., or District rule, order or permit will not be considered as having diminished the condition and relative value of a wetland or other surface water.

#### **12.2.4 Water Quality**

Pursuant to paragraph 12.1.1(c), an applicant must provide reasonable assurance that the regulated activity will not violate water quality standards in areas where water quality standards apply.

Reasonable assurances regarding water quality must be provided both for the short-term and the long-term, addressing the proposed construction, alteration, operation, maintenance, removal and abandonment of the system. The following requirements are in addition to the water quality requirements found in ss.10.7.6 of the Handbook.

##### **12.2.4.1 Short-Term Water Quality Considerations**

The applicant must address the short-term water quality impacts of a proposed system, including:

- (a) Providing turbidity barriers or similar devices for the duration of dewatering and other construction activities in or adjacent to wetlands or other surface waters.
- (b) Stabilizing newly created slopes or surfaces in or adjacent to wetlands and other surface waters to prevent erosion and turbidity.
- (c) Providing proper construction access for barges, boats and equipment to ensure that propeller dredging and rutting from vehicular traffic does not occur.
- (d) Maintaining construction equipment to ensure that oils, greases, gasoline, or other pollutants are not released into wetlands or other surface waters.
- (e) Controlling the discharge from spoil disposal sites.
- (f) Preventing any other discharge or release of pollutants during construction or alteration that will cause water quality standards to be violated.

##### **12.2.4.2 Long-Term Water Quality Considerations**

The applicant must address the long-term water quality impacts of a proposed system, including:

- (a) The potential of a constructed or altered water body to violate water quality standards due to its depth or configuration. For example, the depth of water bodies must be designed to insure proper mixing so that the water quality standard for dissolved oxygen will not be violated in the lower levels of the water body, but the depth should not be so shallow that the bottom sediments are frequently resuspended by boat activity. Water bodies must be configured to prevent the creation of debris traps or stagnant areas which could result in violations of water quality standards.
- (b) Long-term erosion, siltation or propeller dredging that will cause turbidity violations.
- (c) Prevention of any discharge or release of pollutants from the system that will cause water quality standards to be violated.

##### **12.2.4.3 Additional Water Quality Considerations for Docking Facilities**

Docking facilities, due to their nature, provide potential sources of pollutants to wetlands and other surface waters. To provide the required reasonable assurance that water quality standards will not be violated, the following factors must be addressed by an applicant proposing the construction of a new docking facility, or the expansion of or other alteration of an existing docking facility that has the potential to adversely affect water quality:

- (a) Hydrographic information or studies shall be required for docking facilities of greater than ten boat slips. Hydrographic information or studies also may be required for docking facilities of less than ten slips, dependent upon the site specific features described in paragraph 12.2.4.3(b) below. In all cases, the need for a hydrographic study, and the complexity of the study, will be dependent upon the specific project design and the specific features of the project site.
- (b) The purpose of the hydrographic information or studies is to document the flushing time (the time required to reduce the concentration of a conservative pollutant to ten percent of its original concentration) of the water at the docking facility. This information is used to determine the likelihood that the facility will accumulate pollutants to the extent that

water quality violations will occur. Generally, a flushing time of less than or equal to four days is the maximum that is desirable for docking facilities. However, the evaluation of the maximum desirable flushing time also takes into consideration the size (number of slips) and configuration of the proposed docking facility; the amplitude and periodicity of the tide; the geometry of the subject waterbody; the circulation and flushing of the waterbody; the quality of the waters at the project site; the type and nature of the docking facility; the services provided at the docking facility; and the number and type of other sources of water pollution in the area.

(c) The level and type of hydrographic information or studies that will be required for the proposed docking facility will be determined based upon an analysis of site specific characteristics. As compared to sites that flush in less than four days, sites where the flushing time is greater than four days generally will require additional, more complex levels of hydrographic studies or information to determine whether water quality standards can be expected to be violated by the facility. The degree and complexity of the hydrographic study will be dependent upon the types of considerations listed in paragraph 12.2.4.3.(b), including the potential for the facility, based on its design and location, to add pollutants to the receiving waters. Types of information that can be required include site-specific measurements of: waterway geometry, tidal amplitude, the periodicity of forces that drive water movement at the site and water tracer studies that document specific circulation patterns.

(d) The applicant shall document, through hydrographic information or studies, that pollutants leaving the site of the docking facility will be adequately dispersed in the receiving water body so as to not cause violations of water quality standards based on circulation patterns and flushing characteristics of the receiving water body.

(e) In all cases, the hydrographic studies shall be designed to document the hydrographic characteristics of the project site and surrounding waters. All hydrographic studies must be based on the factors described in paragraphs (a)-(d) above. An applicant should consult with the District prior to conducting such a study.

(f) Fueling facilities shall be located and operated so that the potential for spills or discharges to surface waters and wetlands is minimized. Containment equipment and emergency response plans must be provided to ensure that the effects of spills are minimized.

(g) The disposal of domestic wastes from boat heads, particularly from liveaboard vessels, must be addressed to prevent improper disposal into wetlands or other surface waters. A liveaboard vessel shall be defined as a vessel docked at the facility that is inhabited by a person or persons for any five consecutive days or a total of ten days within a 30 day period.

(h) The disposal of solid waste, such as garbage and fish cleaning debris, must be addressed to prevent disposal into wetlands or other surface waters.

(i) Pollutant leaching characteristics of materials such as pilings and anti-fouling paints used on the hulls of vessels must be addressed to ensure that any pollutants that leach from the structures and vessels will not cause violations of water quality standards given the flushing at the site and the type, number and concentration of the likely sources of pollutants.

#### **12.2.4.4 Mixing Zones**

A temporary mixing zone for water quality during construction or alteration may be requested by the applicant. The District shall review such request pursuant to s.62-4.242 and 62-4.244(5), in accordance with the Operating Agreement Concerning Regulation Under Part IV, chapter 373, F.S. adopted by reference in s.40B-1.106, F.A.C.

#### **12.2.4.5 Where Ambient Water Quality Does Not Meet Standards**

If the site of the proposed activity currently does not meet water quality standards, the applicant must demonstrate compliance with the water quality standards by meeting the provisions in ss.12.2.4.1, 12.2.4.2, and 12.2.4.3, as applicable, and for the parameters which do not meet water quality standards, the applicant must demonstrate that the proposed activity will not contribute to the existing violation. If the proposed activity will contribute to the existing violation, mitigation may be proposed as described in ss.12.3.1.4.

#### **12.2.5 Class II Waters; Waters Approved for Shellfish Harvesting**

The special value and importance of shellfish harvesting waters to Florida's economy as existing or potential sites of commercial and recreational shellfish harvesting and as a nursery area for fish and shell fish is recognized by the District. In accordance with paragraph 12.1.1(d), the District shall:

(a) Deny a permit for a regulated activity in Class II waters which are not approved for shellfish harvesting unless the applicant submits a plan or proposes a procedure to protect those waters and waters in the vicinity. The plan or procedure shall detail the measures to be taken to prevent significant damage to the immediate project area and the adjacent area and shall provide reasonable assurance that the standards for Class II waters will not be violated;

(b) Deny a permit for a regulated activity in any class of waters where the location of the system is adjacent or in close proximity to Class II waters, unless the applicant submits a plan or proposes a procedure which demonstrates that the regulated activity will not have a negative effect on the Class II waters and will not result in violations of water quality standards in the Class II waters; and

(c) Deny a permit for a regulated activity that is located directly in Class II or Class III waters which are classified by the Department as approved, restricted, conditionally approved or conditionally restricted for shellfish harvesting. However, the District may issue permits or certifications for maintenance dredging of navigational channels, the construction of shoreline protection structures, the installation of transmission and distribution lines for carrying potable water, electricity or communication cables in rights-of-way previously used for such lines, for clam and oyster culture, and for private, single family boat docks that meet the following criteria for installation in such waters:

1. There shall be no more than two boats moored at the dock;
2. No overboard discharges of trash, human or animal waste or fuel shall occur at the dock;
3. Any nonwater dependent structures, such as gazebos or fish cleaning stations, shall be located on the uplands;
4. Prior to the mooring of any boat at the dock, there shall be existing structures with toilet facilities located on the uplands;
5. Any proposed shelter shall not have enclosed sides;
6. The mooring area shall be located in waters sufficiently deep to prevent bottom scour by boat propellers; and
7. Any structures located over grassbeds shall be designed so as to allow for the maximum light penetration practicable.

#### **12.2.6 Vertical Seawalls**

(a) The construction of vertical seawalls in estuaries or lagoons is prohibited unless one of the following conditions exists:

1. The proposed construction is located within a port as defined in s.315.02, F.S., or s.403.021, F.S.;
2. The proposed construction is necessary for the creation of a marina, the vertical seawalls are necessary to provide access to watercraft or the proposed construction is necessary for public facilities;
3. The proposed construction is to be located within an existing manmade canal and the shoreline of such canal is currently occupied in whole or in part by vertical seawalls; or
4. The proposed construction is to be conducted by a public utility when such utility is acting in the performance of its obligation to provide service to the public.

(b) When considering an application for a permit to repair or replace an existing vertical seawall, the District shall generally require such seawall to be faced with riprap material, or to be replaced entirely with riprap material unless a condition specified in subparagraphs 1-4. above exists. Nothing in this subsection shall be construed to hinder any activity previously exempt or permitted, or those activities permitted pursuant to chapter 161, F.S.

#### **12.2.7 Secondary Impacts**

Pursuant to paragraph 12.1.1(f), an applicant must provide reasonable assurances that a regulated activity will not cause adverse secondary impacts to the water resource, as described in paragraphs (a)-(d) below. Aquatic or wetland dependent fish and wildlife are an integral part of the water resources which the District is authorized to protect under Part IV, chapter 373, F.S. Those aquatic or wetland dependent species which are listed as threatened, endangered or of special concern are particularly in need of protection.

A proposed system shall be reviewed under this criterion by evaluating the impacts to: wetland and surface water functions identified in ss.12.2.2; water quality; upland habitat for aquatic or wetland dependent listed species; and historical and archaeological resources. De minimis or remotely related secondary impacts will not be considered. Applicants may propose measures such as preservation to prevent secondary impacts. Such preservation shall comply with the land preservation provisions of ss.12.3.8. If such secondary impacts can not be prevented, the applicant may propose mitigation measures as provided for in ss.12.3-12.3.8.

This secondary impact criterion consists of the following four parts:

(a) An applicant shall provide reasonable assurance that the secondary impacts from construction, alteration, and intended or reasonably expected uses of a proposed system will not cause violations of water quality standards or adverse impacts to the functions of wetlands or other surface waters as described in s.12.2.2.

Impacts such as boat traffic generated by a proposed dock, boat ramp or dry dock facility, which causes an increased threat of collision with manatees; impacts to wildlife from vehicles using proposed roads in wetlands or surface waters; impacts to water quality associated with the use of septic tanks or propeller dredging by boats and wakes from boats; and impacts associated with docking facilities as described in paragraphs 12.2.4.3(f) and (h).

Secondary impacts will be considered relative to the specific activities proposed and the potential for such impacts.

Impacts of groundwater withdrawals upon wetlands and other surface waters that result from, the use of wells permitted pursuant to chapter 40B-2, F.A.C., shall not be considered under rules adopted pursuant to Part IV of chapter 373, F.S., since these impacts are considered in the consumptive use permit application process.

Secondary impacts to the habitat functions of wetlands associated with adjacent upland activities will not be considered adverse if buffers, with a minimum width of 15' and an average width of 25', are provided abutting those wetlands that will remain under the permitted design, unless additional measures are needed for protection of wetlands used by listed species for nesting, denning, or critically important feeding habitat. The mere fact that a species is listed does not imply that all of its feeding habitat is critically important. Buffers shall remain in an undisturbed condition, except for drainage features such as spreader swales and discharge structures, provided the construction or use of these features does not adversely impact wetlands. Where an applicant elects not to utilize buffers of the above described dimensions, buffers of different dimensions, measures other than buffers or information may be proposed to provide the required reasonable assurance.

(b) An applicant shall provide reasonable assurance that the construction, alteration, and intended or reasonably expected uses of a proposed system will not adversely impact the ecological value of uplands to aquatic or wetland dependent listed animal species for enabling existing nesting or denning by these species, but not including:

1. Areas needed for foraging; or
2. Wildlife corridors, except for those limited areas of uplands necessary for ingress and egress to the nest or den site from the wetland or other surface water.

Table 12.2.7-1 identifies those aquatic or wetland dependent listed animal species that use upland habitats for nesting and denning.

For those aquatic or wetland dependent listed animal species for which habitat management guidelines have been developed by the U.S. Fish and Wildlife Service (USFWS) or the Florida Game and Fresh Water Fish Commission (FGFWFC), compliance with these guidelines will provide reasonable assurance that the proposed system will not adversely impact upland habitat functions described in paragraph (b). For those aquatic or wetland dependent listed animal species for which habitat management guidelines have not been developed or in cases where an applicant does not propose to use USFWS or FGFWFC habitat management guidelines, the applicant may propose measures to mitigate adverse impacts to upland habitat functions described in paragraph (b) provided to aquatic or wetland dependent listed animal species.

(c) In addition to evaluating the impacts in the area of any dredging and filling in, on or over wetlands or other surface waters, and as part of the balancing review under ss.12.2.3, the District will consider any other relevant activities that are very closely linked and causally related to any proposed dredging or filling which will cause impacts to significant historical and archaeological resources.

(d) An applicant shall provide reasonable assurance that the following future activities:

1. Additional phases or expansion of the proposed system for which plans have been submitted to the District or other governmental agencies; and

2. On-site and off-site activities regulated under Part IV, chapter 373, F.S., or activities described in s.403.813(2), F.S., that are very closely linked and causally related to the proposed system, will not result in water quality violations or adverse impacts to the functions of wetlands and other surface waters as described in ss.12.2.2. As part of this review, the District will also consider the impacts of the intended or reasonably expected uses of the future activities on water quality and wetland and other surface water functions.

In conducting the analysis under paragraph (d)2., above, the District will consider those future projects or activities which would not occur but for the proposed system, including where the proposed system would be considered a waste of resources, should the future project or activities not be permitted.

Where practicable, proposed systems shall be designed in a fashion which does not necessitate future impacts to wetland and other surface water functions. If future phases or project expansions have the potential to cause adverse secondary impacts, applicants must provide sufficient conceptual design information to provide reasonable assurance that these impacts can be successfully eliminated or offset.

One way for applicants to establish that future phases or system expansions do not have adverse secondary impacts is for the applicant to obtain a conceptual approval permit for the entire project.

**TABLE 12.2.7-1**

**LISTED WILDLIFE SPECIES THAT ARE AQUATIC OR WETLAND DEPENDENT  
AND THAT USE UPLAND HABITATS FOR NESTING OR DENNING**

Fishes

Species of special concern

Rivulus marmoratus (mangrove rivulus; rivulus)

Reptiles

Endangered

Chelonia mydas mydas (Atlantic green turtle)

Crocodylus acutus (American crocodile)

Dermochelys coriacea (leatherback turtle; leathery turtle)

Eretmochelys imbricata imbricata (Atlantic hawksbill turtle)

Kinosternon bauri (striped mud turtle) THIS SPECIES LISTED ONLY IN LOWER KEYS

Lepidochelys kempi (Atlantic ridley turtle)

Threatened

Caretta caretta caretta (Atlantic loggerhead turtle)

Thamnophis sauritus sackeni (Florida (Keys) ribbon snake) THIS SPECIES LISTED ONLY IN LOWER KEYS

Species of special concern

Alligator mississippiensis (American alligator)

Graptemys barbouri (Barbour's map turtle; Barbour's sawback turtle)

Macrolemys temmincki (alligator snapping turtle)

Pseudemys concinna suwanniensis (Suwannee cooter)

Birds

Endangered

Ammodramus maritimus mirabilis (Cape Sable seaside sparrow)

Mycteria americana (wood stork)

Rostrhamus sociabilis (snail kite)

Threatened

Charadrius alexandrinus tenuirostris (southeastern snowy plover)

Charadrius melodus (piping plover)

Columba leucocephalus (white-crowned pigeon)  
Grus canadensis pratensis (Florida sandhill crane)  
Haliaeetus leucocephala (bald eagle)  
Picoides borealis (red-cockaded woodpecker) THIS SPECIES ONLY WETLAND DEPENDENT IN LEE,  
COLLIER, AND CHARLOTTE COUNTIES  
Polyborus plancus audubonii (Audubon's crested caracara)  
Sterna antillarum (least tern)  
Sterna dougallii (roseate tern)

Species of special concern

Ajaia ajaia (roseate spoonbill)  
Ammodramus maritimus juncicolus (Wakulla seaside sparrow)  
Ammodramus maritimus peninsulae (Scott's seaside sparrow)  
Aramus guarauna (limpkin)  
Cistothorus palustris griseus (Worthington's marsh wren)  
Cistothorus palustris marianae (Marian's marsh wren)  
Egretta caerulea (little blue heron)  
Egretta rufescens (reddish egret)  
Egretta thula (snowy egret)  
Egretta tricolor (tricolored heron; Louisiana heron)  
Eudocimus albus (white ibis)  
Haematopus palliatus (American oystercatcher)  
Pandion haliaetus (osprey) THIS SPECIES LISTED ONLY IN MONROE COUNTY  
Pelecanus occidentalis (brown pelican)  
Rhynchops niger (black skimmer)

Mammals

Endangered

Felis concolor coryi (Florida panther)  
Microtus pennsylvanicus dukecampbelli (Duke's saltmarsh vole; Florida saltmarsh vole)  
Myotis grisescens (gray bat)  
Myotis sodalis (Indiana bat)  
Odocoileus virginianus clavium (Key deer; toy deer)  
Oryzomys argentatus (silver rice rat)  
Sylvilagus palustris hefneri (Lower Keys marsh rabbit)

Threatened

Mustela vison evergladensis (Everglades mink)  
Sciurus niger avicennia (Big Cypress fox squirrel; mangrove fox squirrel)  
Ursus americanus floridanus (Florida black bear) THIS SPECIES NOT LISTED IN BAKER AND  
COLUMBIA COUNTIES AND THE APALACHICOLA NATIONAL FOREST

Species of Special Concern

Oryzomys palustris sanibeli (Sanibel Island rice rat)  
Sorex longirostris eionis (Homosassa shrew)

**12.2.8 Cumulative Impacts**

Pursuant to paragraph 12.1.1(g), an applicant must provide reasonable assurances that a regulated activity will not cause unacceptable cumulative impacts upon wetlands and other surface waters within the same drainage basin as the regulated activity for which a permit is sought. The impact on wetlands and other surface waters shall be reviewed by

evaluating the impacts to water quality as set forth in ss.12.1.1(c) and by evaluating the impacts to functions identified in ss.12.2.2. The drainage basins within the District are identified on Figure 12.2.8-1.

An applicant must provide reasonable assurance that the proposed system, when considered with the following activities, will not result in unacceptable cumulative impacts to water quality or the functions of wetlands and other surface waters within the same drainage basin:

(a) Projects which are existing or activities regulated under Part IV, chapter 373 which are under construction or projects for which permits or determinations pursuant to s.373.421 or 403.914 have been sought.

(b) Activities which are under review, approved, or vested pursuant to s.380.06, or other activities regulated under Part IV, chapter 373 which may reasonably be expected to be located within wetlands or other surface waters, in the same drainage basin, based upon comprehensive plans, adopted pursuant to chapter 163, of local governments having jurisdiction over the activities or applicable land use restrictions and regulations.

Only those activities listed in paragraphs (a) and (b) which have similar types of impacts (adverse effects) to those which will be caused by the proposed system will be considered. (All citations in paragraphs (a) and (b) refer to provisions of Florida Statutes.)

The cumulative impact evaluation is conducted using an assumption that reasonably expected future applications with like impacts will be sought, thus necessitating equitable distribution of acceptable impacts among future applications.

**12.2.8.1** Cumulative impacts are considered unacceptable when the proposed system, considered in conjunction with the past, present, and future activities as described in 12.2.8 would then result in a violation of state water quality standards as set forth in ss.12.1.1(c), or significant adverse impacts to functions of wetlands or other surface waters identified in ss.12.2.2, within the same drainage basin when considering the basin as a whole. This analysis asks the question whether the proposed system is the proverbial "straw that breaks the camel's back" regarding water quality or wetland and other surface water functions in the basin.

**12.2.8.2** Applicants may propose measures such as preservation to prevent cumulative impacts. Such preservation shall comply with the land preservation provisions of ss.12.3.8. If unacceptable cumulative impacts are expected to occur, the applicant may propose mitigation measures as provided for in s.12.3-12.3.8.

### **12.3 Mitigation**

Protection of wetlands and other surface waters is preferred to destruction and mitigation due to the temporal loss of ecological value and uncertainty regarding the ability to recreate certain functions associated with these features. Mitigation will be approved only after the applicant has complied with the requirements of ss.12.2.1 regarding practicable modifications to eliminate or reduce adverse impacts. However, any mitigation proposal submitted for review shall be reviewed concurrently with the analysis of any modifications pursuant to ss.12.2.1. This section establishes criteria to be followed in evaluating mitigation proposals.

Mitigation as described in s.12.3-12.3.8 is required only to offset the adverse impacts to the functions identified in s.12.2-12.2.8.2 caused by regulated activities. In certain cases, mitigation cannot offset impacts sufficiently to yield a permissible project. Such cases often include activities which significantly degrade Outstanding Florida Waters, adversely impact habitat for listed species, or adversely impact those wetlands or other surface waters not likely to be successfully recreated.

Applicants are encouraged to consult with District staff in pre-application conferences or during the application process to identify appropriate mitigation options.

#### **12.3.1 Types of Mitigation**

Mitigation usually consists of restoration, enhancement, creation, or preservation of wetlands, other surface waters or uplands. In some cases, a combination of mitigation types is the best approach to offset adverse impacts resulting from the regulated activity.

**12.3.1.1** In general, mitigation is best accomplished through creation, restoration, enhancement or preservation of ecological communities similar to those being impacted. However, when the area proposed to be impacted is degraded, compared to its historic condition, mitigation is best accomplished through creation, restoration, enhancement or preservation of the ecological community which was historically present. Mitigation involving other ecological communities is acceptable if impacts are offset and the applicant demonstrates that greater improvement in ecological value will result.

**12.3.1.2** In general, mitigation is best accomplished when located on-site or in close proximity to the area being impacted. Off-site mitigation will only be accepted if adverse impacts are offset and the applicant demonstrates that:

(a) On-site mitigation opportunities are not expected to have comparable long-term viability due to such factors as unsuitable hydrologic conditions or ecologically incompatible existing adjacent land uses or future land uses identified in a local comprehensive plan adopted according to chapter 163, F.S.; or

(b) Off-site mitigation would provide greater improvement in ecological value than on-site mitigation. One example of a project that would be expected to meet the criteria of paragraphs (a) or (b) above is a linear project which cannot effectively implement on-site mitigation due to right-of-way constraints.

**12.3.1.3** Mitigation through participation in a mitigation bank shall be in accordance with ss.12.4 Use of Mitigation Banks

**12.3.1.4** In instances where an applicant is unable to meet water quality standards because existing ambient water quality does not meet standards and the system will contribute to this existing condition, mitigation for water quality impacts can consist of water quality enhancement. In these cases, the applicant must implement mitigation measures that will cause net improvement of the water quality in the receiving waters for those parameters which do not meet standards. (See 373.414(1)(16), F.S.)

**12.3.1.5** To offset adverse secondary impacts from regulated activities to habitat functions that uplands provide to listed species evaluated as provided in paragraph 12.2.7(b), mitigation can include the implementation of management plans, participation in a wildlife mitigation park established by the FGFWFC, or other measures. Measures to offset adverse secondary impacts on wetlands and other surface waters resulting from use of a system can include the incorporation of culverts or bridged crossings designed to facilitate wildlife movement, fencing to limit access, reduced speed zones or other measures designed to offset the secondary impact.

**12.3.1.6** Mitigation for certain mining activities shall be in accordance with ss.373.414(6), F.S.

**12.3.1.7** Except as provided in ss.373.414(6), F.S., mitigation or reclamation required or approved by other agencies for a specific project will be acceptable to the District to the extent that such mitigation or reclamation fulfills the requirements of s.12.3-12.3.8 and offsets adverse impacts of the same project in accordance with the criteria in s.12.2-12.2.8.2

**12.3.1.8** Innovative mitigation proposals which deviate from the standard practices described in s.12.3-12.3.6 shall be considered on a case-by-case basis. The donation of money is not considered to be an acceptable method of mitigation, unless cash payments are specified for use in a District or Department of Environmental Protection endorsed environmental preservation, enhancement or restoration project and the payments initiate a project or supplement an ongoing project. The project or portion of the project funded by the donation of money must offset the impacts of the proposed system.

### **12.3.2 Mitigation Ratio Guidelines**

Subsections 12.3.2-12.3.2.2 establish ratios for the acreage of mitigation required compared to the acreage which is adversely impacted by regulated activities. Ranges of ratios are provided below for certain specific types of mitigation, including creation, restoration, enhancement and preservation. The difference between the ranges of ratios provided for mitigation types is based on the degree of improvement in ecological value expected from each type. Creation and restoration are assigned the lowest range of ratios as these activities, when successfully conducted, add new wetlands or other surface waters which provide the same or similar functions as the areas adversely impacted. The range of ratios established for enhancement is higher than that for creation and restoration, as the area being enhanced currently provides a degree of the desired functions, and this type of mitigation serves to increase, rather than create, those functions. Preservation differs from the other types of mitigation in that it does not serve to improve the existing ecological value of an area in the short term. However, preservation does provide benefits as it can ensure that the values of the preserved area are protected and maintained in the long term, particularly when these values are not fully protected under existing regulatory programs. Therefore, the range of ratios established for preservation is higher than those for other types of mitigation. These ratios are provided as guidelines for preliminary planning purposes only. The actual ratio needed to offset adverse impacts may be higher or lower based on a consideration of the factors listed in ss.12.3.2.1 and 12.3.2.2. For example, in instances where the proposed system results in only a small loss of ecological value in the impacted area, such as cases involving impacts to areas of low ecological value or cases where the proposed system results in a small reduction of ecological value of the impacted area, then the actual mitigation ratio would normally be in the lower end of or below the range. For other types of mitigation, ratios will be determined based upon the reduction in quality and relative value of the functions of the areas adversely impacted as compared to the expected improvement in quality and value of the functions of the mitigation area.

#### **12.3.2.1 Creation, Restoration and Enhancement**

When considering creation, restoration and enhancement as mitigation, the following factors will be considered to determine whether the mitigation proposal will offset the proposed impacts and to determine the appropriate mitigation ratio:

- (a) The reduction in quality and relative value of the function of the areas adversely impacted, including the factors listed in ss.12.2.2.3, as compared to the proposed improvement in quality and value of the functions of the area to be created, restored or enhanced.
- (b) Any special designation or classification of the affected area.
- (c) The presence and abundance of nuisance and exotic plants within the area to be adversely impacted.
- (d) The hydrologic condition of the area to be adversely impacted and the degree to which it has been altered relative to the historic condition.
- (e) The length of time expected to elapse before the functions of the area adversely impacted will be offset.
- (f) The likelihood of mitigation success.
- (g) For mine reclamation activities subject to chapter 211, F.S., Part II, whether the ratio is consistent with the mine reclamation plan submitted pursuant to chapter 378, F.S.

**12.3.2.1.1** Creation and restoration have the potential to result in similar benefits, if they can be successfully accomplished. Therefore, the ratio ranges given below for these two types of mitigation are the same. Restoration is usually preferred over creation as it often has a greater chance of success due to soil characteristic, hydrologic regime, landscape position or other factors that favor re-establishment of wetland or other surface water communities. Restoration ratios will generally be at the lower end of the ratio ranges within the guidelines below. The following ratio guidelines will be used to estimate the acreage of wetland restoration or creation required:

- (a) Mangrove swamps, cypress swamps, and hardwood swamps-2:1 to 5:1 (acres created or restored: acres impacted).
- (b) Saltwater marshes and freshwater marshes-1.5:1 to 4:1 (acres created or restored: acres impacted).

**12.3.2.1.2** The ratio guidelines for use in the estimation of the acreage of wetland enhancement will range from 4:1 to 20:1 (acres enhanced: acres impacted).

#### **12.3.2.2 Preservation**

(a) Preservation of important ecosystems can provide an improved level of protection over current regulatory programs. The District will consider as mitigation the preservation, by donation or conservation easement or other comparable land use restriction, of wetlands, other surface waters or uplands. Conservation easements or restrictions must be consistent with the requirements of ss.12.3.8. In many cases it is not expected that preservation alone will be sufficient to offset adverse impacts. Preservation will most frequently be approved in combination with other mitigation measures.

(b) When considering preservation as mitigation, the following factors will be considered to determine whether the preservation parcel would offset the proposed impacts and to determine the appropriate mitigation ratio.

1. The reduction in quality and relative value of the functions of the areas adversely impacted, including those factors listed in ss.12.2.2.3, as compared to the quality and value of the functions of the area to be preserved and the additional protection provided to these functions by the proposed preservation. Factors used in determining this additional level of protection include the extent and likelihood that the land to be preserved would be adversely impacted if it were not preserved, considering the protection provided by existing regulations and land use restrictions.

2. Any special designation or classification of the affected area.

3. The presence and abundance of nuisance and exotic plants within the area to be adversely impacted.

4. The ecological and hydrological relationship between wetlands, other surface waters and uplands to be preserved.

5. The extent to which proposed management activities on the area to be preserved promote natural ecological conditions, such as natural fire patterns.

6. The proximity of the area to be preserved to areas of national, state or regional ecological significance, such as national or state parks, Outstanding Florida Waters and other regionally significant ecological resources or habitats, such as lands acquired or to be acquired through governmental or non-profit land acquisition programs for environmental conservation, and whether the areas to be preserved include corridors between these habitats.

7. The extent to which the preserved area provides habitat for fish and wildlife, especially listed species.

8. Any special designation or classification of the area to be preserved.

9. The extent of invasion of nuisance and exotic species within the area to be preserved.

(c) Wetland and other surface water preservation ratios. Since wetlands and other surface waters are, to a large extent, protected by existing regulations, the ratio guideline for preservation of wetlands and other surface waters is substantially higher than for restoration and creation. The ratio guideline for wetland and other surface water preservation will be 10:1 to 60:1 (acreage wetlands and other surface waters preserved to acreage impacted).

(d) Upland preservation ratios. Many wildlife species that are aquatic or wetland dependent spend critical portions of their life cycles in uplands. Uplands function as the contributing watershed to wetlands and are necessary to maintain the ecological value of those wetlands. Because of these values, the preservation of certain uplands may be appropriate for full or partial mitigation of wetland impacts and impacts to uplands that are used by listed aquatic or wetland dependent species as described in ss.12.2.7.1. The ratio guideline for upland preservation will be 3:1 to 20:1 (acreage of uplands preserved to acreage impacted).

12.3.2.3 To the extent that the area to be preserved offsets the adverse impact and otherwise meets the requirements of this section, wetland, other surface water, or upland habitat which is proposed to be preserved in order to prevent secondary or cumulative impacts can be considered as part of the mitigation plan to offset other adverse impacts of the system.

### **12.3.3 Mitigation Proposals**

**12.3.3.1** Applicants shall provide reasonable assurance that proposed mitigation will:

(a) Offset adverse impacts due to regulated activities; and

(b) Achieve mitigation success by providing viable and sustainable ecological and hydrological functions.

**12.3.3.2** Applicants shall submit detailed plans describing proposed construction, establishment and management of mitigation areas. These plans shall include the following information, as appropriate for the type of mitigation proposed:

- (a) A soils map of the mitigation area and other soils information pertinent to the specific mitigation actions proposed.
- (b) A topographic map of the mitigation area and adjacent hydrologic contributing and receiving areas.
- (c) A hydrologic features map of the mitigation area and adjacent hydrologic contributing and receiving areas.
- (d) A description of current hydrologic conditions affecting the mitigation area.
- (e) A map of vegetation communities in and around the mitigation area.
- (f) Construction drawings detailing proposed topographic alterations and all structural components associated with proposed activities.
- (g) Proposed construction activities, including a detailed schedule for implementation.
- (h) A vegetation planting scheme if planting is proposed, and schedule for implementation.
- (i) Sources of plants and soils used in wetland creation.
- (j) Measures to be implemented during and after construction to avoid adverse impacts related to proposed activities.
- (k) A management plan comprising all aspects of operation and maintenance, including water management practices, vegetation establishment, exotic and nuisance species control, fire management and control of access.
- (l) A proposed monitoring plan to demonstrate mitigation success.
- (m) A description of the activities proposed to control exotic and nuisance species should these become established in the mitigation area. The mitigation proposal must include reasonable measures to assure that these species do not invade the mitigation area in such numbers as to affect the likelihood of success of the project.
- (n) A description of anticipated site conditions in and around the mitigation area after the mitigation plan is successfully implemented.
- (o) A comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented.
- (p) For mitigation plans with projected implementation costs in excess of \$25,000.00, an itemized estimate of the cost of implementing mitigation as set forth in ss.12.3.7.8.

#### **12.3.4 Monitoring Requirements for Mitigation Areas**

Applicants shall monitor the progress of mitigation areas until success can be demonstrated as provided in ss.12.3.6. Monitoring parameters, methods, schedules, and reporting requirements will be specified in permit conditions.

#### **12.3.5 Protection of Mitigation Areas**

Applicants shall propose and be responsible for implementing methods that assure that mitigation areas will not be adversely impacted by incidental encroachment or secondary activities which might compromise mitigation success.

#### **12.3.6 Mitigation Success**

Mitigation success will be measured in terms of whether the objectives of the mitigation can be realized. The success criteria to be included in permit conditions will specify the minimum requirements necessary to attain a determination of success. The mitigation shall be deemed successful by the District when all applicable water quality standards are met, the mitigation area has achieved viable and sustainable ecological and hydrological functions and the specific success criteria contained in the permit are met. If success is not achieved within the time frame specified within the permit, remedial measures shall be required. Monitoring and maintenance requirements shall remain in effect until success is achieved.

#### **12.3.7 Financial Responsibility for Mitigation.**

As part of compliance with paragraph 40B-400.103(1)(j), F.A.C., where an applicant proposes mitigation, the applicant shall provide proof of financial responsibility to:

- (a) Conduct the mitigation activities;
- (b) Conduct any necessary management of the mitigation site;

- (c) Conduct monitoring of the mitigation; and
- (d) Conduct any necessary corrective action indicated by the monitoring.

#### **12.3.7.1 Applicants Not Subject to Financial Responsibility Requirements.**

The following applicants shall not be subject to the financial responsibility requirements in ss.12.3.7-12.3.7.9:

- (a) Applicants whose mitigation is deemed successful pursuant to ss.12.3.6 of this Handbook prior to undertaking the construction activities authorized under the permit issued pursuant to Part IV, chapter 373, F.S.
- (b) Applicants whose mitigation is estimated to cost less than \$25,000.00.
- (c) Federal, state, county and municipal governments, state political subdivisions and investor owned utilities regulated by the Public Service Commission, and rural electric cooperatives.
- (d) Mitigation banks which comply with the financial responsibility provisions of s.12.4 of this Handbook.

#### **12.3.7.2 Amount of Financial Responsibility**

The amount of financial responsibility provided by the applicant shall be in an amount equal to 110 percent of the cost estimate determined pursuant to ss.12.3.7.8 below, for each phase of the mitigation plan submitted under the requirements of s.12.3 -12.3.8.

#### **12.3.7.3 Documentation**

The permit applicant shall provide draft documentation of the required financial responsibility mechanism described below with the permit application, and shall submit to the District the executed or finalized documentation within the time frames specified in the permit.

#### **12.3.7.4 General Terms for Financial Responsibility Mechanisms**

In addition to the specific provisions regarding financial responsibility mechanisms set forth in ss.12.3.7.6 below, the following, as they relate to the specific mechanism proposed, shall be complied with:

- (a) The form and content of all financial responsibility mechanisms shall be approved by the District.
- (b) The financial mechanisms shall name the District as sole beneficiary or shall be payable solely to the District. If the financial mechanism is of a type which is retained by the beneficiary according to industry standards, the original financial responsibility mechanism shall be retained by the District.
- (c) The financial responsibility mechanisms shall be established with a state or national bank, savings and loan association, or other financial institution, licensed in this state. In the case of letters of credit, the letter of credit must be issued by an entity which has authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency. In the case of a surety bond, the surety bond must be issued by a surety company registered with the state of Florida.
- (d) The financial responsibility mechanisms shall be effective on or prior to the date that the activity authorized by the permit commences and shall continue to be effective through the date of notification of final release by the District in accordance with ss.12.3.7.2 below of this Handbook.
- (e) The financial responsibility mechanisms shall provide that they cannot be revoked, terminated or canceled without first providing an alternative financial responsibility mechanism which meets the requirements of ss.12.3.7-12.3.7.9. Within 90 days of receipt by the permittee of actual or constructive notice of revocation, termination or cancellation of a financial responsibility mechanism or other actual or constructive notice of cancellation, the permittee shall provide such an alternate financial responsibility mechanism.

**12.3.7.5** If the permittee fails to comply with the terms and conditions of the permit, ss.12.3.7 or fails to complete the mitigation and monitoring within the timeframes specified in the permit conditions or any extension thereof, such failure shall be deemed a violation of chapter 40B-4 and/or 40B-400, F.A.C., and the permit issued thereunder. In addition to any

other remedies for such violation as the District may have, the District, upon notice as provided in the mechanism or if none, upon reasonable notice, may draw upon the financial mechanism.

#### **12.3.7.6 Financial Responsibility Mechanisms**

Financial responsibility for the mitigation, monitoring and corrective action for each phase of the project may be established by any of the following methods, at the discretion of the applicant:

- (a) Performance bond;
- (b) Irrevocable letter of credit;
- (c) Trust fund agreement;
- (d) Deposit of cash or cash equivalent into an escrow account;
- (e) An audited annual financial statement submitted by a Certified Public Accountant representing that the applicant has a tangible net worth equal to or in excess of the cost of the mitigation plan. For purposes of this subparagraph, "tangible net worth" means total assets, not including intangibles such as goodwill and right to patents or royalties, minus total liabilities, computed in accordance with generally accepted accounting principles;
- (f) A demonstration that the applicant meets the financial test and corporate guarantee requirements set forth in 40 C.F.R. s.264.143(f) incorporated herein by reference. Where the referenced test is used to provide evidence of financial resources necessary to conduct mitigation activities the term "closure and post-closure cost estimates" as set forth therein, shall be construed to mean "mitigation cost estimates."
- (g) Guarantee bond;
- (h) Insurance certificate; and
- (i) A demonstration that the applicant meets the self-bonding provisions set forth at 30 C.F.R. s.800.23 incorporated herein by reference. Where the referenced provisions are used to provide evidence of financial responsibility to conduct mitigation activities, the term "surface coal mining and reclamation operations," as set forth therein, shall be construed to mean "mitigation activities."

#### **12.3.7.7 Cost Estimates**

For the purposes of determining the amount of financial responsibility that is required by this subsection, the applicant shall submit a detailed written estimate, in current dollars, of the total cost of conducting the mitigation, including any maintenance and monitoring activities, and the applicant shall comply with the following:

- (a) The cost estimate for conducting the mitigation and monitoring shall include all associated costs for each phase thereof, including earthmoving, planting, structure installation, maintaining and operating any structures, controlling nuisance or exotic species, fire management, consultant fees, monitoring activities and reports.
- (b) The applicant shall submit the estimates, together with verifiable documentation, to the District along with the draft of the financial responsibility mechanism.
- (c) The costs shall be estimated based on a third party performing the work and supplying materials at the fair market value of the services and materials. The source of any cost estimates shall be indicated.

##### **12.3.7.7.1 Partial Releases**

The permittee may request the District to release portions of the financial responsibility mechanism as phases of the mitigation plan, such as earth moving or other construction or activities for which cost estimates were submitted in accordance with ss.12.3.7.7 are successfully completed.

The request shall be in writing and include documentation that the phase or phases have been completed and have been paid for or will be paid for upon release of the applicable portion of the financial responsibility mechanism.

The District shall authorize the release of the portion requested upon verification that the construction or activities have been completed in accordance with the mitigation plans.

##### **12.3.7.7.2 Final Release**

Within 30 days of the District determining that the mitigation is successful in accordance with subsection 12.3.6, the District shall so notify the permittee and shall authorize the return and release of all funds held or give written authorization to the appropriate third party for the cancellation or termination of the financial responsibility mechanism.

#### **12.3.7.8 Financial Responsibility Conditions.**

For applicants subject to the financial responsibility of ss.12.3.7-12.3.7.9, the District will include the following conditions on the permit.

(a) A permittee must notify the District by certified mail of the commencement of a voluntary or involuntary proceeding under Title XI (Bankruptcy), U.S. Code naming the permittee as debtor within ten business days after the commencement of the proceeding.

(b) A permittee who fulfills the requirements of ss.12.3.7-12.3.7.9 by obtaining a letter of credit or performance bond will be deemed to be without the required financial assurance in the event of bankruptcy, insolvency or suspension or revocation of the license or charter of the issuing institution. The permittee must reestablish in accordance with ss.12.3.7-12.3.7.9 a financial responsibility mechanism within 60 days after such event.

(c) When transferring a permit in accordance with s.40B-4.1130, F.A.C., the new owner or person with legal control shall submit documentation to satisfy the financial responsibility requirements of ss.12.3.7-12.3.7.9. The prior owner or person with legal control of the project shall continue the financial responsibility mechanism until the District has approved the permit transfer and substitute financial responsibility mechanism.

#### **12.3.7.9 Financial Responsibility Mechanisms for Multiple Projects**

A applicant may use a mechanism specified in ss.12.3.7.6 above to meet the financial responsibility requirement for multiple projects. The financial responsibility mechanism must include a list of projects and the amount of funds assured for each project. The mechanism must be no less than the sum of the funds that would be necessary in accordance with ss.12.3.7.2 above, as if separate mechanisms had been established for each project. As additional permits are issued which require mitigation, the amount of the financial responsibility mechanism may be increased in accordance with ss.12.3.7.2, above and the project added to the list.

#### **12.3.8 Real Property Conveyances**

(a) All conservation easements shall be granted in perpetuity without encumbrances, unless such encumbrances do not adversely affect the ecological viability of the mitigation. All liens against the conservation easement site shall release, be subordinated to, or joined with the conservation easement. All conservation easements shall be consistent with s.704.06, F.S.; and shall contain restrictions that ensure the ecological viability of the site.

(b) All real property conveyances shall be in fee simple and by statutory warranty deed, special warranty deed, or other deed, without encumbrances that adversely affect the integrity of the preservation. The District shall also accept a quit claim deed if necessary to aid in clearing minor title defects or otherwise resolving boundary questions.