

**Southwest Florida Water Management District**

**PART B**  
**Basis of Review**

**Environmental Resource Permit Applications within  
the  
Southwest Florida Water Management District**

**MANAGEMENT AND STORAGE OF SURFACE WATERS**

**December 29, 2011**

## CHAPTER ONE - INTRODUCTION

### 1.1 Objectives.

Under Part IV of Chapter 373, Florida Statutes (F.S.) and Chapters 40D-4, 40, and 400, Florida Administrative Code (F.A.C.), the District is responsible for permitting construction and operation of surface water management systems within its jurisdictional boundaries. The objective of this document is to identify the usual procedures and information used by the District staff in permit application review. The objective of the review is to ensure that the permit will authorize activities or situations which are not harmful to the water resources of the District or inconsistent with the public interest.

### 1.2 Application Review Process.

The District issues three types of environmental resource permits as authorized by Part IV of Chapter 373, Florida Statutes: individual including conceptual, general, and noticed general permits.  
Amended 11-2-09

#### 1.2.1 Application Forms.

Applicants for Environmental Resource Permits shall fill out the form entitled, "Joint Application for Environmental Resource Permit and Authorization to Use State Owned Submerged Lands" and Federal Dredge and Fill Permit.

Engineered systems are required to have plans and calculations signed and sealed by a Florida Professional Engineer in accordance with Chapter 471, Florida Statutes.

### 1.3 Criteria Flexibility.

The primary goal of the review criteria is to meet District water resource objectives. However, the criteria are designed to be flexible. Performance criteria are used where possible. Other methods of meeting overall objectives will be considered depending on the magnitude of specific or cumulative impacts.

### 1.4 Simultaneous Reviews.

Aside from purely technical aspects, legal and institutional factors must be considered. Because of legal time constraints for processing permits, it is advisable for the applicant to contact other interested agencies, organizations, and affected citizens prior to submitting a formal application to the District. Summaries of meetings and copies of responses from appropriate parties should be included in the application.

It may be in the applicant's best interest to seek simultaneous reviews from all agencies with jurisdiction. This provision is not intended to preclude the submission of an application to this District prior to receiving other necessary approvals, but the application should contain at least a status report on other approvals being sought, with an indication that the surface water management portion of the project will be approved by other pertinent jurisdictions.

Issuance of an Environmental Resource Permit by the District does not relieve the applicant of the responsibility to obtain all necessary federal, state, local or special district permits or authorizations.

### 1.5 Compliance with Laws.

Activities discussed herein must be conducted in accordance with all other applicable laws. Of specific note are those activities covered by laws as follows, including but not limited to:

- a. Section 404, Federal Water Pollution Control Act, - U.S. Army Corps of Engineers - fill
- b. Chapter 471, F.S. - Florida professional engineer seal and signature on all engineering plans and documents (subject to the exemptions of the Chapter).

### 1.6 Construction/Operation Criteria Applicability.

The District issues permits to construct and operate proposed surface water management activities and to operate, alter or abandon existing systems. The criteria herein are specifically intended to apply to those activities.

flood elevation the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The design should take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effect of buoyancy and impacts from debris. Flood proofing measures should be operable without human intervention and without an outside source of electricity.

c. Accessory buildings may be constructed below the 100-year flood elevation provided there is minimal potential for significant damage by flooding.

Amended 12-9-09

#### **4.4 Flood Plain Encroachment.**

No net encroachment into the flood plain, up to that encompassed by the 100-year event, which will adversely affect either conveyance, storage, water quality or adjacent lands will be allowed. Any required compensating storage shall be equivalently provided between the seasonal high water level and the 100-year flood level to allow storage function during all lesser flood events.

Amended 12-9-09

##### **4.4.1 100-Year Flood Level Determination.**

a. Flood elevations shall be determined using the most accurate information available, which can include:

1. Actual data, including water level, stream flow and rainfall records, or
2. Hydrologic/hydraulic modeling, or
3. Federal Flood Insurance Rate Maps and supporting flood study data.
4. Floodplain analysis studies approved by the District Governing Board.

b. Flood elevations shall be evaluated for accuracy considering the extent to which flood elevations are validated by site specific data.

c. The 24 hour, 100-year storm shall be used to determine the 100-year flood elevation except in those circumstances where credible historical evidence exists that higher flood stages have occurred, and can be expected to re-occur, following more frequent storm events. In those cases, the 100-year flood elevation shall be determined using a 100-year storm of sufficient duration to exceed the flood stages observed following more frequent events.

Amended 12-9-09

#### **4.5 Minimum Drainage.**

Commercial and industrial projects to be subdivided for sale are required to install a minimum drainage system as described in (a) and (b) below. Projects permitted in such a manner shall require deed restrictions which notify lot or tract purchasers of the amount of additional on-site storm water management system necessary to provide flood attenuation and any additional retention/detention required for water quality purposes.

a. The required water quality system must have treatment capacity for one inch of runoff if wet detention is used, or one-half inch of runoff if retention, effluent filtration or exfiltration is used, from the total developed site and contributing offsite area.

b. A storm water collection and conveyance system must be provided to interconnect the retention/detention system with the project outfall, including access points to the system available to each individual lot or tract. The system shall be sized to limit discharge under full build-out design conditions to the allowable discharge.

#### **4.6 Overdrainage and Water Conservation** - Where practicable, systems shall be designed to:

a. maintain water tables at the highest practicable level; the depth to which the water table can be lowered will be determined based on the potential adverse impact on recharge, the effect on water resources (quality and quantity), and the necessity for fill and its impact on existing natural upland vegetation; and

- b. preserve site environmental values; and
- c. not waste freshwater through overdrainage; and
- d. not lower water tables which would adversely affect existing legal uses; and
- e. preserve site groundwater recharge characteristics; and
- f. retain water on-site for use and re-use for irrigation and other reasonable beneficial uses.

**4.6.1** In addition to the design considerations in 4.6 above, the system shall not reduce or suppress the flow of a watercourse or the level of water in a wetland or other surface water or the level of ground water below a minimum flow or level that has been established pursuant to Section 373.042, F.S.

**4.6.2** The effects of water withdrawals shall not be considered as the ambient condition in the design of surface water management systems permitted under Chapters 40D-4, 40D-40, or 40D-400, F.A.C., except to the extent that the long term success of mitigation would be affected adversely.

**4.7 Historic Basin Storage.**

Provision must be made to replace or otherwise mitigate the loss of historic basin storage provided by the project site.

**4.8 Offsite Lands.**

The application shall include provisions to allow drainage from off-site upgradient areas to downgradient areas without adversely altering the time, stage, volume, point or manner of discharge or dispersion and without degrading water quality.

**4.9 Isolated Wetlands.**

Owned or controlled by the applicant may be used for flood attenuation purposes when not in conflict with environmental or public use considerations.