Notice of Proposed Rule

WATER MANAGEMENT DISTRICTS
Southwest Florida Water Management District
RULE NO: RULE TITLE
40D-4.091: Publications, Forms and Agreements Incorporated by Reference
PURPOSE AND EFFECT: To amend the District's Environmental Resource Permit Information Manual, Part B, Basis of Review (BOR), which is incorporated by reference in Rule 40D-4.091, F.A.C. These amendments are intended to provide permit applicants with the flexibility to meet the conditions for permit issuance and prevent adverse offsite flooding impacts which may occur as a result of the construction and operation of a surface water management system. Additionally, the proposed amendments to the BOR are intended to be consistent with the methods used to establish the 100 year flood elevations in the updated floodplain maps developed for FEMA by the District.
SUMMARY: Conditions for environmental resource permit issuance in Rule 40D-4.301, F.A.C, are intended to prevent adverse offsite flooding impacts. Criteria in the BOR provide the basis for meeting the conditions for permit issuance. The BOR identifies the 100 year, 24 hour storm event as the basis for determining the 100 year floodplain and the 25 year, 24 hour storm event for comparing pre- and post-development discharge rates. In certain circumstances, higher flood elevations can occur following more frequent storm events than those specified in the Basis of Review. In those cases, it is desirable to consider other storm events of different frequency or duration to provide reasonable assurance of compliance with the conditions of issuance. The proposed amendments are intended to provide the flexibility to meet the conditions for permit issuance in those cases where basin hydraulics cause higher flood elevations to occur following more frequent storm events than those specified in the BOR.
SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS: In general, the rule revisions clarify requirements associated with using credible and appropriate flood levels and storm events when designing and constructing projects requiring an Environmental Resource Permit. The potential additional costs to applicants include the following: cost of additional storm water modeling/analyses, cost of constructing and maintaining larger storm water management systems, and cost of dedicating additional land for the larger storm water management systems.
For a typical 40 to 100-acre project there could be additional applicant modeling cost, if required, of $2,000. Although modeling costs may increase, additional storage may not be necessary. The SERC also details costs under a worst case scenario. Lastly, the SERC includes a sensitivity analysis performed in order to determine the extent to which soil type and increasing time of concentration affect modeling results. Changing the soil type and/or time of concentration had little, if any, impact on the amount of additional water storage required.
Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.
SPECIFIC AUTHORITY: 373.044, 373.046, 373.113, 373.171, 373.414 FS.
LAW IMPLEMENTED: 373.0361, 373.114, 373.171, 373.403, 373.413, 373.4135, 373.4136, 373.414, 373.4144, 373.416, 373.429, 373.441 FS.
IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN FAW.
THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Karen.West@watermatters.org or 2379 Broad Street, Brooksville, FL 34604-6899

THE FULL TEXT OF THE PROPOSED RULE IS:

40D-4.091 Publications, Forms and Agreements Incorporated by Reference.
The following documents are hereby incorporated by reference and are applicable to this chapter and Chapters 40D-40 and 40D-400, F.A.C.:
(1) Environmental Resource Permitting Information Manual Part B, Basis of Review, Environmental Resource Permit Applications within the Southwest Florida Water Management District, _____, ~~May 17, 2009~~. This document is available from the District's website at www.watermatters.org. or from the District upon request.

(2) through (6) No change.

Rulemaking Authority 373.044, 373.046, 373.113, 373.171, 373.414, F.S. Law Implemented 373.0361, 373.114, 373.171, 373.403, 373.413, 373.4135, 373.4136, 373.414, 373.4144, 373.416, 373.429, 373.441, F.S. History – New 4-2-87, Amended 3-1-88, 9-11-88, 10-1-88, 4-1-91, 11-16-92, 1-30-94, 10-3-95, 12-26-95, 5-26-96, 7-23-96, 4-17-97, 4-12-98, 7-2-98, 12-3-98, 7-28-99, 8-3-00, 9-20-00, 6-12-01, 10-11-01, 2-27-02, 7-29-02, 3-26-03, 7-23-03, 8-3-03, 3-11-04, 6-7-04, 2-1-05, 6-30-05, 10-19-05, 2-8-06, 5-2-06, 7-1-07, 9-25-07(1), 9-25-07(4), 11-26-07, 5-12-08, 5-20-08, 6-22-08, 5-12-09, 5-17-09, 8-30-09, _____.

Part B, Basis of Review
Environmental resource Permit Applications Within The
Southwest Florida Water Management District
Chapter Four – Water Quantity

4.1 General.

~~This document refers to flood and drought frequency impacts interchangeably with rainfall frequency. The applicant is cautioned, however, that water resource impacts are of interest in the permit process, and that additional calculations may be necessary to identify other combinations of site conditions and rainfall frequencies which might result in impacts of the specified frequency.~~

Pursuant to the Conditions for Issuance in Rule 40D-4.301, an applicant must provide reasonable assurance that the proposed construction, alteration, operation, maintenance, removal or abandonment of a surface water management system:

a. Will not cause adverse water quantity impacts to receiving waters and adjacent lands;
b. Will not cause adverse flooding to on-site or off-site property;
c. Will not cause adverse impacts to existing surface water storage and conveyance capabilities; and
d. Will not adversely impact the maintenance of surface or ground water levels or surface water flows established pursuant to Chapter 373.042, F.S.

Utilization of the design criteria in Sections 4.2 through 4.9 shall provide reasonable assurance of compliance with these conditions for issuance unless credible historical evidence of past flooding or the physical capacity of the downstream conveyance or receiving waters indicates that the conditions for issuance will not be met without consideration of storm events of different frequency or duration. In those instances, applicants shall be required to provide additional analyses using storm events of different duration or frequency than those referenced below, or to adjust the volume, rate or timing of discharges, to provide reasonable assurance of compliance with the conditions for issuance. Pre-application meetings are encouraged for projects in flood-prone areas to determine whether additional analysis is necessary to demonstrate reasonable assurance of compliance with the conditions for issuance.

4.2 Discharge.

Off-site discharge is limited to amounts which will not cause adverse off-site impacts.

a. For a project or portion of a project located within an open drainage basin, the allowable discharge is:
1. historic discharge, which is the peak rate at which runoff leaves a parcel of land by gravity under existing site conditions, or the legally allowable discharge at the time of permit application; or
2. amounts determined in previous District permit actions.
b. Except as described in Section 4.1, ~~Unless otherwise specified~~ off-site discharges for the existing and developed conditions shall be computed using the Southwest Florida Water Management District's 24-hour, 25-year rainfall maps and the Natural Resources Conservation Service type II Florida Modified 24-hour rainfall distribution with an antecedent moisture condition II.
c. No change.
d. When not in conflict with the objectives of recharge, dewatering, or maintaining ground water levels, projects serviced by a permitted or approved regional surface water management system may discharge storm water runoff at the rate and volume established by the agency operating the regional storm water system. The permittee must provide written verification from the operating agency stating the acceptable rate and volume of storm water runoff from the project. ~~The District permit will, by condition, indicate that a waiver from the District surface water rule criteria has been granted.~~
e. In no case shall the proposed surface water management system be required to account for storm events less frequent than the 25 year event in an open basin or the 100 year event in a closed basin.

4.3 Flood Protection.

Flood protection for structures should be provided as follows ~~(Flood elevations should be determined from the most appropriate information available, including Federal Flood Insurance Rate Maps).~~

a. Residential buildings should have the lowest floor elevated above the 100 year flood elevation for that site.

b. Industrial, commercial or other non-residential buildings susceptible to flood damage should have the lowest floor elevated above the 100 year flood elevation or be designed and constructed so that below the 100 year 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.

4.4 Flood plain Encroachment.

No net encroachment into the flood plain, up to that encompassed by the 100 year event, which will adversely ~~effect~~ 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.

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.

4.5 through 4.9 No change**.**

Chapter Seven – Design Information

7.1 No change**.**

7.2 Rainfall Volume.

The ~~Southwest Florida Water Management District's 24-hour, 25-year and 100-year~~ rainfall isohyetal maps in Part D will be used to determine rainfall amounts.

7.3 Rainfall Distribution.

The Natural Resource ~~Soil~~ Conservation Service Type II Florida Modified ~~24-hour~~ rainfall distribution will be used unless the applicant demonstrates that a different distribution better characterizes the actual rainfall distribution based on rainfall record.

7.4 through 7.8.1 No change.

NAME OF PERSON ORIGINATING PROPOSED RULE: Karen E. West, Deputy General Counsel
NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: Southwest Florida Water Management District Governing Board
DATE PROPOSED RULE APPROVED BY AGENCY HEAD: July 28, 2009
DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: September 11, 2009