Commissioners



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SWCMCD Stormwater Discharge Requirements into Mosquito Ditches

Currently, the drainage capacity of segments of SWCMCD mosquito ditches is exceeded under a multitude of design storm events. NWFWMD does not require an evaluation of the increase in stormwater volume being released as a result of a development project unless the site discharges to a closed drainage system; yet the overall volume being released downstream is greater than in pre-development conditions. The increased volumes of stormwater discharges affect the high-water stages in the ditches, topping banks with standing water for longer periods than in the past, negatively affecting mosquito breeding and increasing public health risks. Lacking a comprehensive model of the mosquito ditch system that can be used to accurately model discharges to the ditches by new developments, the safest solution to address flooding, standing water, and mosquito control is to require new discharges meet SWCMCD mosquito ditch standards.

Requirements for Discharges to SWCMCD Ditches

The total post-development volume of stormwater leaving the project site shall be no more than the total predevelopment volume leaving the site for the 100-year 24-hour storm and must recover through a non-operable structure in no sooner than 10 days and no longer than 14 days after the storm event. The rate of runoff leaving the site post-development for the mean annual, 25-year and 100-year 24-hour storm events shall not exceed the rate for the same storms based on pre-development conditions. New discharges require a 25-foot maintenance easement to ensure adequate access for equipment.

Erosion and Sediment Control Criteria for Parcels Adjacent to SWCMCD Ditches

A double row of silt fence installed per FDOT Index 102 shall be required for erosion and sediment control where any construction abuts a South Walton County Mosquito Control District ditch. Silt fencing shall be installed parallel to the top of bank to prevent silt and drainage from entering the ditch from the construction site. Daily inspection shall be made by the contractor and silt accumulation must be removed when depth reaches six inches. When dewatering operations consist of off-site discharge, the contractor must ensure the effluent meets state water quality standards. The standards for discharging water into a receiving body cannot exceed 29 nephelometric turbidity units (NTU's) above background. Samples of the effluent should be taken at the discharge point into the receiving body. For best results, samples should be taken 2 times a day, at least 4 hours apart.

Head Walls

Stabilize all disturbed slopes adjacent to a SWCMCD ditch with sod over geotextile fabric including all areas around headwalls.

Rip Rap

Line the ditch bottom and ditch side slopes around discharge pipes with 155 SF/197 CF of rubble rip-rap meeting FDOT Spec. 530-2.2.2 so that riprap extends the maximum flow depth. Extend riprap to five times the bottom width upstream and downstream of the discharge pipe.