



SURFACE WATER MANAGEMENT POLICY, M-1 & M-2 BASINS

I. PURPOSE

To establish the Indian Trail Improvement District’s surface water management policy (“Policy”). This Policy addresses and mitigates negative impacts on the Works of the District from potential loss of on-site surface and ground water storage. The water quality criteria established by South Florida Water Management District (SFWMD) for on-site discharges, as they may be amended from time to time, are hereby adopted and incorporated into this Policy.

II. AUTHORITY

1. Section 298.22(8) and (10), Florida Statutes.
2. Section 3, Sections 3 and 5, Chapter 2002-330, Laws of Florida, as amended.

III. BACKGROUND: ABBREVIATED HISTORY

Indian Trail Improvement District (ITID or District) is a special taxing district of the State of Florida originally created by Chapter 57-646, Laws of Florida (LOF). Chapter 2002-330, Laws of Florida, subsequently codified the special laws relating to the District. The District operates according to the provisions of Chapter 2002-330, LOF, as amended and supplemented, and the applicable provisions of Chapter 298, Florida Statutes.

SFWMD Permit No. 1207 was issued March 7, 1960, which included the Village of Royal Palm Beach, the M-1 Basin, and the M-2 Basin. The SFWMD permit is now split into separate permits for these 3 areas. The District’s M-1 Basin SFWMD permit 50-000761-S and its M-2 Basin SFWMD permit 50-00754-S have been modified over the years several times. These SFWMD permits are based on pre-1980 unrecorded plats that utilize land use assumptions based upon the intended use as single family residential and limited agricultural uses.

Regulatory criteria have evolved to require higher finished floors and higher septic tank drainfield elevations. Single family homes have also been constructed larger in size than were typical when originally conceived for the typical 1.25-acre lot. Higher finished floors, larger homes, and higher septic tanks and drainfields have resulted in more fill being placed on lots. In addition, regulations have affected property owners’ ability to dig a small pond for fill thus resulting in average higher lot elevations. All of the aforementioned result in diminishing flood protection and raising the flood stages within the community. Palm Beach County is and has been revising its lot fill criteria since at least the previous adoption of Indian Trail Improvement District’s Surface Water Management Policy. Please refer to Palm Beach County’s latest lot fill requirements that apply to all single family residential home building.



Further, an Indian Trail Water Resource Task Force was established and published a "Report on Wetland Mitigation for the Acreage in Palm Beach County" on June 30, 1995. This report settled any District wetlands issues, provided the land use remained single family/agricultural residential use. As PBC requires a "legal positive outfall" for any land use within the activated M-1 and M-2 Basins other than single family/agricultural residential use, the District has established a Special Permitting process to address such uses. The District permitting criteria have also evolved over the years, and this is the first modification to the Policy that was adopted on September 18, 2019.

The following surface water management permitting criteria are adopted by the District.

IV. SINGLE FAMILY and AGRICULTURAL/RESIDENTIAL LAND USES.

1. Palm Beach County (PBC) criteria shall be followed as processed by PBC Building Department.
2. The District does not regulate single family lot permits as established in the pre-1980 unrecorded plats.
3. The District requires driveway permits for all single family lots. See District's driveway policy and application form with attachments for requirements within the District's easements. The driveway policy addresses roadway and canal access.
4. The District is required to meet permitted road grade criteria and will accept lot drainage into the roadway swale but will not lower the road or swale to accommodate a lot that is lower than the roadway swale. Note the existing swale may or may not be at the required grade. A lot owner will be given the required swale grades when they apply for a driveway permit.

V. NON-SINGLE FAMILY and NON-AGRICULTURAL/RESIDENTIAL LAND USES.

Note: these provisions do not apply to Santa Rosa Groves (see separate policy) or Unit 11 that is now an environmental preserve.

1. The District does not control land use but does require Special Permits for all non-single family or non-agricultural/residential land uses in active Units of Development (see Special Permit Application and Procedures). All lots within active Units of Development must satisfy District surface water management criteria whether or not a direct connection into the District facilities is proposed.
2. The District requires the same water quality treatment as established in the latest South Florida Water Management Rules and Regulations even if the project size allows a self-certification to the State or is below State permitting thresholds. Calculations demonstrating compliance shall be submitted with the Special Permit application and signed and sealed by a professional engineer



registered in the State of Florida. The volumetric water quality criteria are:

- a. Wet detention volume shall be provided for the first inch of runoff from the developed project or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater.
 - b. Dry detention volume shall be provided equal to 75 percent of the above amounts computed for wet detention.
 - c. Retention volume shall be provided equal to 50 percent of the above amounts computed for wet detention. Retention volume included in flood protection calculations requires a guarantee of long term operation and maintenance of system bleed-down ability.
3. The following water quality information may help the applicant:
- a. In the District's M-1 Basin the SFWMD in conjunction with the District have established the following water quality elevations are applicable: In the Upper M-1 Basin: 18.3' NGVD based on a wet season control elevation of 16.0' and 1" of runoff. In the Lower M-1 Basin: 17.1' NGVD based on a wet season control elevation of 15.0' and 1" of runoff. These elevations apply to a surface water management system that is connected directly to the District's canal system without a control structure when applicable.
 - b. The M-2 Basin does not have canal water quality elevations.
4. The bleeder in a water control structure shall be no smaller than a 6" x 6" inverted triangle.
5. Equal compensating storage is required in both the M-1 and M-2 Basins. The stage used for calculations in the M-2 Basin is 19.2' NGVD. The M-2 elevation is based upon the Federal Emergency Management Agency (FEMA) FIRM flood maps. The stages in the M-1 Basin used for calculations are 20.8' NGVD in the Lower M-1 Basin and 22.1' NGVD in the Upper M-1 Basin. The M-1 Basin elevations are based on historical records. Both surface water and groundwater storage must be included in the calculations. Equal compensation storage calculations are with zero discharge.
6. Equal compensating storage can be on site or off site as long as the compensating storage is in the same drainage sub-basin. There are 2 drainage sub-basins in the M-1 Basin, the Upper and Lower Basins. There are 12 drainage sub-basins in the M-2 Basin. If off site compensating storage is utilized, the lot may be donated to the District after completion provided there is a direct surface connection to the District canal. The direct connection can be either an open water connection to the canal if adjacent or a piped connection. If a pipe connection is utilized, the starting point for equal compensating storage calculations is the lowest point at which surface water is discharged (groundwater recovery is not allowed in Indian Trail's equal compensating



storage calculations). For example, if the bottom of a dry detention area is at elevation 20.0' and the pipe or bleeder (whichever is higher) that discharges surface water is at 21.0', the starting elevation allowed for the equal compensating storage calculations is 21.0', not 20.0' at the bottom of the detention area. Storage below Control Structure bleeders is not allowed in equal compensating storage calculations, again, groundwater recovery is not allowed in equal compensating storage calculations. The bottom of a dry detention area must be at least 1.0' above the surface water control elevation in the dry season for the Drainage Basin. Equal compensation storage areas must either be donated to the District after completion, or the portion of the land utilized for storage must be defined by a legally recorded restrictive covenant or other agreed upon legal instrument that prevents the use of said land without the consent of the District.

7. The maximum allowable discharge is limited to the minimum bleeder size unless calculations are submitted as signed and sealed by a registered professional engineer in the State of Florida that demonstrate discharge is less than or equal to 1"/day for a 10-year 3-day rainfall.
8. As discharge can currently be limited to 1/4"/day in the M-1 Basin for storms above the 10-year 3-day rainfall when an emergency is declared, the discharge should be assumed to be 0.0 cfs for setting on-site grading minimums if designed for rainfalls in excess of the 10 year 3 day storm (parking, roads, finished floors). Equal compensating storage is required as cited above.
9. Underground Exfiltration Systems are not allowed for water quantity (equal compensating storage) calculations below the positive outfall of the exfiltration system. Such systems can be utilized for volumetric storage with single owners or entities with full time maintenance staff, but volumetric storage requires a positive drawdown via a bleeder or other direct connection to positively recover the storage in the exfiltration system (groundwater recovery is not to be included in equal compensating storage calculations). The design shall include sediment traps with access ports. The owner shall guarantee proper maintenance.
10. Canal stages for some design storms are available upon request. Control elevations are also available upon request.

VI. ALL OTHER SPECIAL PERMIT APPLICATION REVIEWS

Should a Special Permit application be submitted that doesn't fall into the above categories, the same principles will be used for review but will be adapted to fit the circumstances of the application. Special Permits that block or interfere with swale/canal drainage are not allowed.

VII. FORMATION OF NEW UNITS OF DEVELOPMENT

Criteria for new Units of Development will be developed as appropriate to the rules and regulations applicable at the time of formation and shall be established during the development of the Engineer's Report that follows the Water Control Plan.