



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

May 29, 2008

Martin County Board of County Commissioners
2401 SE Monterey Road
Stuart, FL 34996

Subject: Application No. 070927-17, **Tropical Farms Storm Water Quality Retrofit**
Martin County, Hanson Grant/T39S/R41E

Enclosed is a copy of the South Florida Water Management District's staff report covering the permit application referenced therein. It is requested that you read this staff report thoroughly and understand its contents. The recommendations as stated in the staff report will be presented to our Governing Board for consideration on **Thursday, June 12, 2008. Please note, the meeting will be held at Edison College, Taeni Hall, Rooms 106 and 107, 8099 College Parkway in Fort Myers.**

Should you wish to object to the staff recommendation or file a petition, please provide written objections, petitions and/or waivers (refer to the attached "Notice of Rights") to:

Elizabeth Veguilla, Deputy Clerk
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

The "Notice of Rights" addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. You are advised, however, to be prepared to defend your position regarding the permit application when it is considered by the Governing Board for final agency action, even if you agree with the staff recommendation, as the Governing Board may take final agency action which differs materially from the proposed agency action.

Please contact the District if you have any questions concerning this matter.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the addressee this 29th day of May, 2008 in accordance with Section 120.60 (3), Florida Statutes.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Brown".

Robert M. Brown, Director
Environmental Resource Regulation Department

RMB/ja

CERTIFIED #7003 2260 0007 1914 0585
RETURN RECEIPT REQUESTED

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose to the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District's Governing Board takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

Last Date For Agency Action: 10-JUL-2008

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Tropical Farms Storm Water Quality Retrofit
Permit No.: 43-02200-P
Application No.: 070927-17 **Associated File:** 070928-8 WU
Application Type: Environmental Resource (New Construction/Operation)
Location: Martin County, HANSON GRANT T39S/R41E
Permittee : Martin County Board Of County Commissioners
Operating Entity : Martin County Board Of County Commissioners
Project Area: 1915 acres



Project Land Use: Residential
Agricultural
Golf Course Development
Commercial

Drainage Basin: TIDAL ST LUCIE

Receiving Body: SOUTH FORK ST. LUICE RIVER

Class: CLASS III

Special Drainage District: NA

Total Acres Wetland Onsite: 2.04

Total Acres Wetland Preserved Onsite: 2.04

Total Acres Presv/Mit Compensation Onsite: 2.04

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit to authorize construction and operation of a surface water management system to serve 468 acres of existing residential, commercial, and agricultural development in a 1,915 acre basin tributary to Roebuck Creek. Staff recommends approval with conditions.

PROJECT EVALUATION:

PROJECT SITE DESCRIPTION:

Please see the attached Location Map Exhibit 1.0. The Tropical Farms Water Quality Retrofit basin boundary is depicted on Exhibit 2.0 T and contains approximately 1,915 acres within the Tidal St. Lucie Basin. This sub-basin consists primarily of residential, agricultural, and commercial developments along Kanner Highway (S.R. 76) and Locks Road. The basin is bounded by River Forest and Locks Landing developments to the west, the South Fork of the St. Lucie River and C-44 Canal to the north, Kansas Avenue and Florida's Turnpike to the east, and the Box Ranch development to the south.

There are numerous previously permitted developments within the basin. Primary conveyance through the basin is provided by Roebuck Creek. The northwestern 272 acres of the basin drains via a tributary to Roebuck Creek (Tributary 1 Channel). This channel was initially constructed as a bypass channel for the C-44 Canal during construction of the St. Lucie Locks. The downstream portion of Tributary 1 Channel flows into the Martin County owned Phipps Park, which has a clearly defined channel section until the tributary converges with Roebuck Creek. As part of the construction of Florida's Turnpike, Roebuck Creek was re-routed and piped into (3) three 60 inch temporary culverts crossing beneath a service road. These temporary permitted culverts along with the service road are being removed by FDOT.

There is one wetland located east of the proposed treatment cells within Phipps Park and consists of mixed hardwood wetland plants.

PROPOSED PROJECT:

The project is a water quality improvement project for the water shed tributary to Roebuck Creek. Storm water treatment cells (STA) and wet detention areas are proposed to provide additional water quality treatment for 468 acres within the existing 1,915 acre basin prior to discharging to the South Fork of the St. Lucie River.

The proposed improvements include construction of a piped conveyance system along SW Locks Road and SW Tropical Avenue to divert the first inch of stormwater runoff from the surrounding sub-basins, construction of a lake and a Storm Water Treatment Area (STA) to provide additional water quality treatment. Four separate control structures are proposed for this project. The primary control structure CS-1 will control the discharge from the STA to Roebuck Creek. The proposed control structure CS-2 will control the discharge from the proposed lake to the proposed stormwater treatment area. The proposed control structure CS-3 will divert the first inch of runoff volume from sub-basin T2-12+30 into the proposed STA. The proposed control structure CS-4 will divert the first inch of runoff volume from sub-basins S. Locks Rd 1 and S. Locks Rd 2 into the proposed STA. The proposed Stormwater Treatment Area, proposed lake, and associated control structures have been depicted in Exhibit 2.0. The piped conveyance system has been sized to accept the first inch of runoff resulting from a storm. Should the capacity of the conveyance system be exceeded, excess runoff will sheet flow and discharge via the existing overland routes and Roebuck Creek.

LAND USE:

Construction:

Project:

Total Project		
Comm/Industrial	81.00	acres
Farm Area	160.00	acres

Total Project

Natural Areas	207.96	acres
Residential - Single	1464.00	acres
Wetland	2.04	acres

Total: 1915.00

WATER QUANTITY :

No water quantity issues are anticipated. Please see the pre vs. post Roebuck Creek flood profiles Exhibit 2.0 U. The applicant has provided reasonable analysis of the impacts of the proposed project on the 1,915 acre water shed tributary to Roebuck Creek. An ICPR model was developed for the water shed and calibrated against the information previously published in the Federal Emergency Management Agency (FEMA) Flood Insurance Study for Martin County, Florida and Incorporated Areas (October 4, 2002), the existing District Environmental Resource Permits for developments within the area, and the reports of minor roadway flooding from the Martin County Engineering department. The analysis indicates the proposed improvements will not negatively impact the existing basin.

Discharge Rate :

As shown in the table below, the proposed project discharge is within the allowable limit for the area based on predevelopment conditions.

Discharge Storm Frequency : 25 YEAR-3 DAY

Design Rainfall : 12 inches

Basin	Allow Disch (cfs)	Method Of Determination	Peak Disch (cfs)	Peak Stage (ft, NGVD 29)
STA	76.78	Pre Vs Post	76.78	8.51
Lake	n/a	n/a	n/a	11.46

Finished Floors :

Building Storm Frequency : 100 YEAR-3 DAY

Design Rainfall : 14 inches

Basin	Peak Stage (ft, NGVD 29)	Proposed Min. Finished Floors (ft, NGVD 29)	FEMA Elevation (ft, NGVD 29)
STA	9.81	N/A	7
Lake	12.03	N/A	N/A

Road Design :

Road Storm Frequency : 10 YEAR-1 DAY

Design Rainfall: 7 inches

Basin	Peak Stage (ft, NGVD 29)	Proposed Min. Road Crown (ft, NGVD 29)
STA	6.93	n/a
Lake	10.39	n/a

Control Elevation :

Basin	Area (Acres)	Ctrl Elev (ft, NGVD 29)	WSWT Ctrl Elev (ft, NGVD 29)	Method Of Determination
STA	76.00	4	4.00	Wetland Indicator Elevation
Lake	378.00	6	6.00	Wet Season Soil Borings

Receiving Body :

Basin	Str.#	Receiving Body
Sta	CS-1	ROEBUCK CREEK
Lake	CS-2	STA

Water Quality Structures: Note: The units for all the elevation values of structures are (ft, NGVD 29)**Bleeders:**

Basin	Str#	Count	Type	Width	Height	Length	Dia.	Invert Angle	Invert Elev.
Lake	CS-2	1	Circular Orifice				5"		6
STA	CS-1	2	Circular Orifice				11"		4

Weirs:

Basin	Str#	Count	Type	Width	Height	Length	Dia.	Elev.
Lake	CS-2	1	Sharp Crested	54"				10 (crest)
STA	CS-1	2	Sharp Crested	54"				6.5 (crest)

WATER QUALITY :

No adverse water quality impacts are anticipated as a result of the proposed project. The project is providing water quality improvements for 468 acres within an existing developed 1,915 acre water shed that currently discharges to the South Fork of the St. Lucie River via Roebuck Creek. This project is a water quality retrofit and does not provide water quality treatment for new development within the basin.

The authorization for construction of the surface water management system is issued pursuant to the water quality net improvement provisions referenced in Rule Section 40E-4.303(1), Florida Administrative Code; therefore, the state water quality certification is waived.

Silt fencing, turbidity barriers, and other appropriate erosion control devices shall be installed prior to the commencement of construction along the limits of construction as well as along the landward edge of the wetland preservation area and associated upland buffer area. Please refer to Exhibit 2 and the Special Conditions.

Basin	Treatment Method		Vol Req'd (ac-ft)	Vol Prov'd
STA	Treatment	Other	0	39
Lake	Treatment	Wet Detention	0	4.2

WETLANDS:

The site contains a forested wetland within the construction footprint of this project. Wetland 1 is 2.04 acres of mixed wetland hardwoods (FLUCCS 617) and includes a small portion of Roebuck Creek on the south side. The area of the creek within the wetland will not be disturbed or cleaned out by heavy

machinery, only hand removal of exotic/nuisance vegetation will be conducted in this area. The wetland will be bordered by a 25 foot naturally vegetated upland buffer to prevent the assessment of secondary impacts.

The project proposes to discharge into the wetland to maintain an adequate hydroperiod for this forested hardwood system. The control elevation of structure CS1 has been set at the normal pool elevation for the wetland which is 4.0 feet NGVD.

Monitoring/Maintenance:

A monitoring program shall be implemented in accordance with the monitoring and maintenance plan included in Exhibit 3 and the Special Conditions. The monitoring and maintenance plan describes the exotic treatment/removal, monitoring and maintenance activities, and discusses the monitoring methodology. Monitoring will include vegetative data and photographs, wildlife observation, water level and rainfall data and recommendations for maintenance work. Monitoring reports will be submitted annually for 5 years and in accordance with the work schedule attached as Exhibit 4.

Wetland Inventory :

CONSTRUCTION NEW -TROPICAL FARMS WATER QUALITY RETROFIT

Site Id	Site Type	Pre-Development				Post-Development						
		Pre Fluc cs	AA Type	Acreage (Acres)	Current Wo Pres	With Project	Time Lag (Yrs)	Risk Factor	Pres. Adj. Factor	Post Fluc cs	Adj Delta	Functional Gain / Loss
1	ON	617	Preservation	2.04								
Total:				2.04								

<u>Fluc cs Code</u>	<u>Description</u>
617	Mixed Wetland Hardwoods

Wildlife Issues:

The project site provides potential habitat for wetland-dependent endangered or threatened wildlife species or species of special concern.

The onsite wetland will be preserved with the associated upland buffer. It is anticipated that the proposed onsite preservation area will maintain the roosting and foraging opportunities for wetland-dependent endangered/threatened species or species of special concern. Therefore, no adverse impacts to wetland-dependent endangered/threatened species or species of special concern are anticipated as a result of the proposed project.

The site also provides habitat for gopher tortoises (*Gopherus polyphemus*) and the eastern indigo snake (*Drymarchon corais couperi*). It is the permittee's responsibility to coordinate onsite construction activities with the Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements. Please refer to the Special Conditions.

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

RELATED CONCERNS:**Water Use Permit Status:**

The applicant has indicated that irrigation is not necessary for the project.

The applicant has indicated that dewatering is required for construction of this project. Water Use application number 070928-8 for dewatering has been submitted and is being processed concurrently for this project.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation, unless the work qualifies for a No-Notice Short-Term Dewatering permit pursuant to Chapter 40E-20.302(3) or is exempt pursuant to Section 40E-2.051, FAC.

CERP:

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

Right-Of-Way Permit Status:

A Right-of-Way Permit is not required for this project.

DRI Status:

This project is not a DRI.

Historical/Archeological Resources:

The District has received correspondence from the Florida Department of State, Division of Historical Resources indicating that the agency has no objections to the issuance of this permit.

DCA/CZM Consistency Review:

The District has not received a finding of inconsistency from the Florida Department of Environmental Protection or other commenting agencies regarding the provisions of the federal Coastal Zone Management Plan.

Third Party Interest:

No third party has contacted the District with concerns about this application.

Enforcement:

There has been no enforcement activity associated with this application.



STAFF RECOMMENDATION:

The Staff recommends that the following be issued :

Construction and operation of a surface water management system to serve a 468 acre basin known as Tropical Farms Water Quality Retrofit.

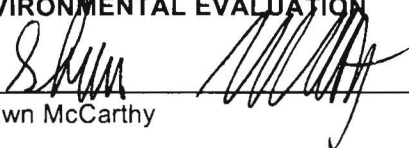
Based on the information provided, District rules have been adhered to.

Staff recommendation is for approval subject to the attached
General and Special Conditions.

STAFF REVIEW:

NATURAL RESOURCE MANAGEMENT APPROVAL

ENVIRONMENTAL EVALUATION

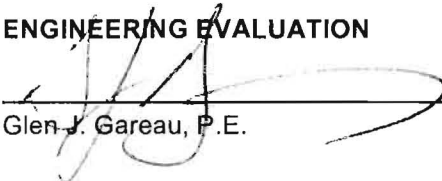

Shawn McCarthy

SUPERVISOR

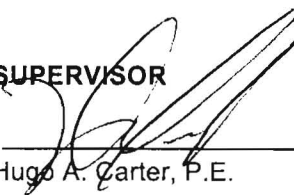

Melinda Parrott

SURFACE WATER MANAGEMENT APPROVAL

ENGINEERING EVALUATION


Glen J. Gareau, P.E.

SUPERVISOR

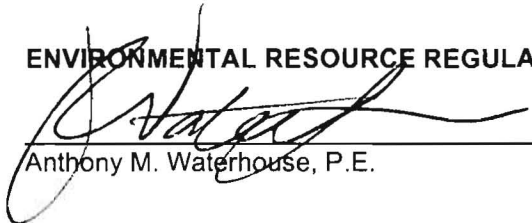

Hugo A. Carter, P.E.

ENVIRONMENTAL RESOURCE PERMITTING DIVISION DIRECTOR :


Anita R. Bain

DATE: 5/28/08

ENVIRONMENTAL RESOURCE REGULATION DEPUTY DEPARTMENT DIRECTOR :


Anthony M. Waterhouse, P.E.

DATE: 5/28/08