# District Notes & News



Established 1923 Winter 2010-2011

#### **SUPERVISORS**

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President

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#### DISTRICT OFFICE

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#### Office Hours:

8:00 a.m. - 4:30 p.m. Monday-Friday

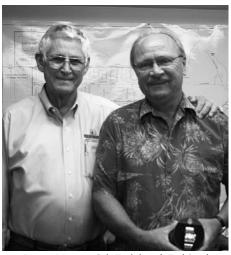
The Board of Supervisors meets the third Thursday of each month at Jupiter High School at 7:30 p.m. Contact the District Office for an agenda.

### General Manager's Annual Report (October 2009-September 2010)

As the District continues to move forward, several components have been prominent. Whether it is a government, a corporation, or a nuclear family unit, there must be present a spirit of unity and harmony, with each participant acting responsibly to achieve their individual and corporate objectives.

The District's structure can be generally defined by its personnel and management, the maintenance and improvement of the works of the District, and our interrelations with outside agencies and governments. Maintaining this structural coherence is, as always, a work in progress.

This year our longest-employed operator, Earl Smith, retired after 32 years of service. Another employee, a part-timer, resigned to complete his schooling. Part-time operators are utilized when needed, but we have no immediate plans to replace the full-time employee who resigned. The District provides a full range of benefits to its employees including sick and vacation time, health insurance, life insurance, safety programs and training, operational skills training, retirement benefits, and uniforms. All operators are encouraged to take advantage of the District's cross-



District Manager Gale English with Earl Smith

training for all equipment in its inventory. All the operators are trained in interpersonal relations and safety procedures while mowing, grading or excavating and will cooperate with passing equestrian traffic,



Gale English

however, you must keep a safe distance from their operations.

Another, and probably the most defining component of the District, is its maintenance program. This includes water control and road maintenance issues. During the rainy season, there is an accelerated demand placed on road maintenance, flood control, and mowing operations. Unimproved road sections can only absorb so much water, after which it remains on the surface, filling every low area and causing traffic distress. This year we received a slightly lower than normal rainfall total of 63.69" through August 2010. The lowest recorded monthly total was 1.92", while the highest recorded monthly total was 9.99". The District meets the service demand by replacing mowing decks with box scrapers that are then utilized in assisting the motor graders to quickly return the road surfaces to an acceptable condition. Simultaneously, backhoe wheel tractors are patrolling all roads for erosion shoaling, non-functioning driveway culverts, and temporary installations of any type and are removing those obstructions.

Another problem is keeping pace with 185 miles of road and swale mowing, as well as 60 miles of canal berm mowing. Each mower operator is assigned a zone of responsibility and is expected to maintain that zone as a priority (emergency work elsewhere not withstanding). The effort is entered into whole-heartedly by all operators and we have endeavored to maintain that attitude towards the residents' expectations.

#### **General Manager's Report**

(continued from pg. 1)

We receive very few complaint calls, and when we do, we typically respond by the following day to correct the problem. We have been recontouring road surfaces for the previous three years with very good results on the unimproved road sections. It involves transferring the elevated shoulders back to the road crown and restoring the crown to original cross-sections, which prevents water build-up on the road.

We retain emergency material in the District's compound for major problems that are usually caused by hurricanes or major rain storm events. To provide stable, secure end walls on new driveway and District road-crossing culverts, we are continuing, with good results, to insist on rip-rap walls. In addition, if a driveway culvert no longer functions correctly, it must be removed and replaced with an appropriate culvert.

And speaking of emergency preparations, the Palm Beach County Fire Department Station #14 has been relocated to 120th Terrace N, just north of Indiantown Road. The new building is constructed to resist hurricane damage and to house fire personnel during a storm.



Sign notifying landowners of recent roadway referendum

The District continues to be concerned with the illegal and reckless use of ATVs and dirt bikes on roadways and public right-of-ways such as restricted canal berms. These illegal activities are monitored by the Palm Beach Sheriff's Office, who is writing citations and in some cases, confiscating the vehicles.

Landscape debris that is deposited on roadsides must be correctly cut before the solid waste authority will remove it. If the debris is not removed in a reasonable time, Code Enforcement will tag the pile as illegal dumping and the homeowner may

be cited. Note that they will not transport tree stumps. Please be advised that debris deposited within the traveled portion of the road right-ofways is subject to a citation as well.

The District continues to apply regulated and permitted herbicides in the canal and outfall systems for the control of aquatic weeds. The 60 miles of canal banks and work platforms are mowed regularly to ensure safe access for pedestrian and equestrian traffic.

In response to landowner's requests, the Board of Supervisors continues to assist in providing paving for interested residents. Currently, the existing OGEM-surfaced roads are on a schedule to receive long-term maintenance service of fogging and overlay material. This service does not require special assessments to implement.

The District continues to be involved on a broader scale with the extended community of municipal, county, and state government and agencies, as well as support groups and committees that serve their interests. These agencies have the

potential for major impact on District landowners and our participation remains vital to ensure that the District's best interests are considered. For instance, for the convenience of our residents, the work center serves as polling precinct #1021 for the Palm Beach County Elections Office.

This year the District received \$36,000 in arrears from the School District of Palm Beach County, \$30,000 from Palm Beach County for road maintenance, and \$24,000 from the Verizon lease. In addition, the District received approximately 7500 cubic yards of fill and road stabiliza-

tion road materials from surplus material generated by nearby county and District-related projects.

Alligators are particularly bothersome during drought conditions and migrate from pond to pond and from canal to canal searching for deeper water. Caution is urged around any water body such as backyard ponds, canals, or drainage ditches. Whatever you do, DO NOT FEED THE 'GATORS! And, if gators were not enough, we must now contend with pythons being caught within five miles of the District in the Corbett Wildlife area.



Canal 2 culvert replacement in Jupiter Farms

For the benefit of new landowners in the District, the following is a brief overview of our function as a special taxing district. The District provides both water control and road maintenance functions for landowners and operates under limitations imposed by Chapter 298 of the Florida Statutes. Assessments are levied in the amount necessary to provide those services and are closely monitored with monthly reports and annual audits to ensure accountability of available funds.

Within the 12,000 acre service area of the District, there are 60 miles of primary drainage canals and 185 miles of roadways that are maintained on a regular basis. Of the 185 miles of roads, 29 miles are currently paved to Department of Transportation standards and approximately 42 miles are surfaced with OGEM material, placing most residents within one-half mile of a paved road.

The District's office is open and available to any interested landowners from Monday through Friday between the hours of 8:00 am and 4:30 pm. You are invited to stop by and make us aware of any questions or problems with which we can assist you within the scope of our responsibility and authority.



General Manager Gale English and Operations Superintendent Mike Dillon at the 19th Annual Landowners Family Day

## District Engineer's Annual Report (October 2009-September 2010)

For the last year, engineering activities in support of South Indian River Water Control District (SIRWCD), can be

Lennart J. Lindahl, P.E. categorized into three primary areas of interest:

- 1. Existing and future water management issues that have a direct or indirect affect on works of the District and/or their operations.
- The investigation and/or initiation of capital improvements involving District roadways.
- 3. Providing engineering support to District operations and maintenance.

Since SIRWCD is positioned as a strategic entity in the planning and management of water resources to the surrounding area, the District is involved in activities external to its boundary. As plans are being developed and implemented, the geographic location of the District is a strategic element in any water management plan for the Loxahatchee River Basin. The potential impacts from development, particularly from a water quantity and quality standpoint, are being monitored by agencies and/or individuals that have a focused interest on maintaining a healthy ecosystem within the Loxahatchee River Basin and the Northwest Fork of the Loxahatchee River. The Board of Supervisors and staff actively engage in the many external dealings that influence the District from a water supply, flood control, water quality, and ecosystem management perspective. They are focused on ensuring that the goals and expectations of these external activities do not conflict with the District's best interests with regard to the functioning of SIRWCD's system and the ability to deliver an appropriate level of service.



Rocky Pines Road after surfacing with OGEM

The District examines the need to implement capital improvement projects that could enhance the works of the District. Roadway improvements are initiated where the traffic volumes for a specific roadway necessitate the improvements, or the improvements are undertaken as a result of landowner initiatives. Landowner-initiated roadway petitions for the application of Palm Beach County Standard Asphalt or Open-Graded Emulsified Mix (OGEM) are received periodically and analyzed by staff. This year, the Fifteenth Plan of Improvements for 1.7 miles of OGEM application was constructed and two roadway improvement projects initiated in 2009 completed the referendum process.

From an operation and maintenance standpoint, the District continues to work with landowners at improving conditions affecting water management and roadways. District staff continues to assist the Board of Supervisors with operation and maintenance involving site-specific drainage improvements that impact landowners, canal and culvert maintenance, and restoration to facilities that affect the works of the District. The District's operation and maintenance is discussed in detail at the Annual Landowners Meeting, informing residents about how and why the water management system and roadways are operated and maintained. Discussions include, but are not limited to, the level of service and performance standards represented by the existing system and that are, to a large extent, regulated by local, regional, state, and federal agencies.

The SIRWCD Board of Supervisors, through its policies and procedures, is responsible for formulating direction regarding District operations and intergovernmental issues. This is accomplished through a respected structure in

which the District is managed through its Board of Supervisors and staff. The Board establishes policy and provides direction to staff concerning the budget, priorities, relationship with other public entities, and landowner issues. Staff is responsible for implementing Board policy. Accordingly, staff responds pursuant to the Board's direction. Engineering tasks continue to be formulated to respond to the Board of Supervisors by implementing their policies and directives, as well as supporting the General Manager in resolving various landowner issues. The relationship between the Board and District staff has been extremely effective in both the delivery of services to the residents within the District and prospective management in response to requirements that are imposed upon the District by other governmental entities.

With regard to the current status of the District, to the best of my knowledge and belief, the District is in compliance with all regulatory requirements that affect works of the District and their operation, and the works of the District continue to be operated and maintained in a manner that achieves the available level of service.

#### **CAPITAL IMPROVEMENTS** Fifteenth Plan of Improvements

Based on a landowner initiative, a referendum was prepared by SIRWCD and verified by the Palm Beach County Supervisor of Elections to implement the application of OGEM on their roadway surfaces as an improvement project to approximately 2.1 miles of roads within the District:

#### Unit of Development RI-15C (1.1 miles)

- 152nd Street N between 111th Terrace N and 115th Avenue N
- 158th Street N between 133rd Terrace N and Canal 13 (East Perimeter Canal)
- 187th Place N between 126th Terrace N and 129th Terrace N and 129th Terrace N between 186th Court N and 187th Place N

#### Unit of Development RI-15D (1.0 miles)

• Rocky Pines Road from Indiantown Road south to the end, including 172nd Place N

The Fifteenth Plan of Improvements received all the necessary approvals and South Florida Water Management District (SFWMD) staff found no issues with the proposed plan. Based on discussions at subsequent Board of Supervisor's meetings, a referendum was reissued for 187th Place N between 126th Terrace N and 129th Terrace N and 129th Terrace N between 186th Court N and 187th Place N. As a result, this proposed landowner initiated improvement was not part of the construction effort.

Construction began on the project with the exception of 187th Place N between 126th Terrace N and 129th Terrace N and 129th Terrace N between 186th Court N and 187th Place N in December 2009, and was completed in March 2010. The construction costs for the improvements totaled \$390,079. The results for the reissued referendum for 187th Place N between 126th Terrace N and 129th Terrace N and 129th Terrace N between 186th Court N and 187th Place N were submitted to the Palm Beach County Supervisor of Elections and the majority of landowners that responded were "in favor" of the project. The construction of these roads will be included in the construction of the next plan of improvements.

## Pending Capital Improvement Projects

## 2009 Landowner Initiated Roadway Project

Since last year, SIRWCD has been receiving landowner-initiated petitions for the application of both asphalt and OGEM on District roadways within the Jupiter Farms and Palm Beach Country Estates areas. The roads had met the requirements to distribute a referendum to all benefited landowners and pursuant to Board direction, staff prepared a referendum for the landowner-proposed projects that was mailed June 9, 2010 with the request that the landowner submit their response to the Palm Beach County Supervisor of Elections by July 14, 2010. The majority of the landowners who voted on the following roadways were "in favor" of asphalt roadway improvements:

- 72nd Drive N between 150th Place N and 154th Road N
- 165th Street N between 75th Avenue N and 79th Terrace N
- 72nd Drive N between 155th Drive N and 159th Court N
- 167th Court N between 75th Avenue N and 78th Drive N
- 84th Avenue N between 155th Place N and 159th Court N
- 140th Lane N between 64th Drive N and 69th Drive N
- 75th Way N between 165th Street N and 167th Court N
- 67th Avenue N between 141st Lane N and Donald Ross Road
- 71st Drive N between 150th Place N and 154th Road N
- 151st Court N between 69th Drive N and 69th Trail N

In addition to the application of asphalt, landowners also petitioned for the application of OGEM. The majority of the landowners who voted on the following roadways were "in favor" of OGEM roadway improvements:

- 92nd Way N between 150th Court N and 154th Road N
- 151st Lane N between 133rd Terrace N and Canal 13
- 98th Trail N between 150th Court N and 154th Road N
- 80th Drive N between 155th Place N and 159th Court N

The project consists of approximately 2.7 miles of Palm Beach County standard asphalt roadways and approximately 1.5 miles of OGEM roadways if this capital improvement is implemented.

# The District has over 60 miles of primary drainage canals

#### **Resource Regulations**

## National Pollutant Discharge Elimination System (NPDES)

The current Palm Beach County Municipal NPDES Permit was issued by the Florida Department of Environmental Protection (FDEP) on November 18, 2002. SIRWCD is a co-permittee along with 34 municipalities, the Department of Transportation, Palm Beach County, and four special districts. In order to complete the permit-related activities that are performed collectively by the co-permittees, a NPDES Steering Committee was formed. The Steering Committee meets on a regular basis to evaluate the program, provide training and resources, and assist with the preparation of annual reports. AECOM continues to attend the meetings as a Steering Committee Board member. This past year the meetings included discussions on completion of the 7th Year Annual Report and the Joint Report, the draft Third Term Permit, education subcommittee reports, and viewing of two training videos for NPDES "credit". In addition, discussions were held regarding updates to the development of Numeric Nutrient Criteria, Surface Water Body Classifications, and Total Maximum Daily Loads. An FDEP request for TMDL model data was responded to in July, and comments on the draft Third Term Permit were submitted to FDEP in August.

The co-permittees continue to wait on the Third Term Permit to be issued by FDEP. At that time, new Interlocal Agreements will be executed. FDEP has added a requirement for development of a standard operating procedures manual for NPDES program activities and a total inventory of the surface water management system, including all pipes, inlets, etc., in the first year of the new permit.

## Public Facilities Report/Water Control Plan

Chapter 189 of the Florida Statutes, the Uniform Special District Accountability Act, requires the preparation and submission of a Public Facilities Report to governmental jurisdictions in which the special district resides. Special Districts are required to submit this report by March 1st of each year and, at a minimum, must contain information as to the status of the District's public facilities and changes or revisions to those facilities that have occurred in the past year. Since 1991, when the District filed its first Public Facilities Report, data collection has been an on-going process to provide for better and more accurate mapping of the works of the District. The Public Facilities Report will be modified during the next year as required by Chapter 189.415, Florida Statutes. The modification will include the Fifteenth Plan of Improvements and proposed capital improvements for next year. In accordance with Chapter 298.225 Florida Statutes, the Water Control Plan is amended consistent with the preparation of any proposed Plan of Improvements during the last year.

#### Florida Department of Environmental Protection (FDEP) Backflow Protection Requirement

The FDEP, has been in the process of revising Florida Statutes Chapter 62-550: Drinking Water Standards, Monitoring, and Reporting, and Chapter 62-555:

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Permitting, Construction, Operation, and Maintenance of Public Water Systems as they relate to the requirements for backflow prevention and cross-connection control.

The issue arose during the Palm Beach County Health Department certification process of Milestone 3 of the Thirteenth Plan of Improvements for the Palm Beach Country Estates Water Main Improvements Project. The FDEP in conjunction with the Palm Beach County Health Department, began requiring that all homes serviced by a water utility that also have an auxiliary water source present on the property, such as a well for irrigation (which applies to the properties in Palm Beach Country Estates), have an approved backflow prevention device installed.

For a period of approximately three months, from July 2008 through the end of September 2008, any resident residing in Palm Beach Country Estates that wished to hook up to the Town of Jupiter water system was required by the Health Department and the FDEP to install a backflow assembly device in order to meet the proposed new requirements of the rule.

At the beginning of October 2008, the Town of Jupiter suspended the requirement for the backflow assembly installations under the advisement of the FDEP. This suspension of enforcement was to allow for the evaluation of information prior to a recommendation by the FDEP for final rule determination.

On December 23, 2008, the FDEP issued a memorandum regarding the proposed revisions to the Backflow Protection Requirements at Residential Premises with an Auxiliary Water System. This applied to the homes in Palm Beach Country Estates that were hooked up to or were planning to hook up to the Town of Jupiter water system and keep their existing well for irrigation.

The proposed rule amendments in the memorandum allowed one of the following three options for the homes of Palm Beach Country Estates:

- 1. Install a Reduced Pressure Principal Assembly (RP), which costs approximately \$600.00 and must be tested annually at \$50.00-\$100.00 per year.
- 2. Install a Double Check Valve Assembly (DC), which costs approximately \$400.00 and must be tested annually at \$50.00-\$100.00 per year.
- 3. Install a Dual Check Device, which costs approximately \$100.00 and does not have to be checked annually, but must also be combined with one of the following:
- a. Well water testing on an annual basis for E. Coli, and every five years for nitrates/ nitrites.
- b. Have the property inspected for potential cross-connections at maximum every
- c. Have meters that can detect a backflow event and provide notification of the event, or records the backflow event and is viewed on at least a monthly basis.
- d. The Utility (in this case the Town of Jupiter) and customer sign an agreement that prohibits the customer from crossconnecting the customer's auxiliary or reclaimed water system to the customer's potable water system. This agreement shall stipulate penalties for a discovered crossconnection (such as monetary fines, discontinuation of service, and/or a requirement for installation of a more protective backflow preventer, such as an RP or a DC).

In February and July of 2009, the FDEP hosted workshops to discuss and receive feedback on the proposed rule

amendments. As of the July workshop, the requirements listed above are still reflected in the proposed revised rules.

The rule revisions were originally anticipated to be finalized by the end of 2009; however the FDEP placed the rulemaking efforts temporarily on hold. It is anticipated that the rule revision process will resume in the fall of 2010. Should the proposed rule revisions with the options listed above remain the same in the finalized revised rules, the Town of Jupiter will be responsible for making a determination of what options to utilize for backflow prevention and cross-connection control requirements.

#### FDEP Stormwater Statewide Rule

To address concerns regarding the over-enrichment of Florida's surface waters, groundwaters, and springs by nutrients, the FDEP and State Water Management Districts began developing a statewide stormwater treatment rule in 2008. A Technical Advisory Committee (TAC) was created to assist in the development of this rule. The TAC meetings were held between March 2008 and September 2009 and were open to the public. The FDEP is proposing this rule as an alternative to the numeric nutrient criteria proposed by the EPA, as it has been developed using local sampling data. The FDEP proposes adoption of the Stormwater Statewide Rule no sooner than July 2011.

#### FDEP Water Body Classification

The FDEP received a petition from the Florida Stormwater Association requesting formal rulemaking to amend the existing classification structure for designating water bodies. Under federal law, FDEP is responsible for reviewing and setting the state's surface water quality standards. FDEP has performed a comprehensive evaluation of designated uses

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#### SIRWCD AND REGULATORY AGENCIES

Each year, a summary of regulatory agencies affecting SIRWCD is listed in the Annual Report to help landowners be aware of the number of regulatory agencies and cooperative associations the District deals with and their potential impact on District capital improvements, operations, and maintenance:

- United States Environmental Protection Agency
- United States Fish and Wildlife Services
- Florida Department of Community Affairs
- Florida Fish and Wildlife Conservation Commission South Florida Water Management District
- Treasure Coast Regional Planning Council
- Loxahatchee River Environmental Control District
- Northern Palm Beach County Improvement District Indian Trail Improvement District
- Seacoast Utility Authority
- Seminole Improvement District

- United States Army Corps of Engineers
- Florida Department of Environmental Protection
- Florida Department of Transportation
- City of West Palm Beach
- City of Palm Beach Gardens
- Loxahatchee River Ecosystem Management Area Committee
- Numerous Citizen Interest Groups and Committees
- U.S. Geological Survey
- Palm Beach County
- Town of Jupiter
- Jupiter Inlet District
- Martin County

and water body classifications and determined that refining the current system could improve protection of public health and the aquatic life that live in our rivers, lakes, streams, wetlands, and estuaries. The current classification system has been in effect for more than 30 years. Factors other than water quality, such as aquatic habitat availability and water flow patterns, can greatly affect aquatic life. As FDEP's water quality protection programs adapt to the newer science and other changes, Florida now has an opportunity to improve the way to protect public health and aquatic life by modifying the designated uses classification system.

The FDEP has begun the process of revising surface water classifications according to designated use, as required by the Clean Water Act. The current classes are as follows:

- Class I Potable Water Supplies
- Class II Shellfish Propagation or Harvesting
- Class III Recreation, Propagation, and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife
- Class IV Agricultural Water Supplies
- Class V Navigation, Utility, and Industrial Use

FDEP proposes to refine the existing classification system by adding a sub-classification to Class III, which will be labeled Class III-Limited. In general, this will classify the man-made conveyance systems into a separate class with different water quality parameters. Under the current classification system, man-made conveyance systems are considered Class III waters.

#### ■ Environmental Protection Agency

On January 14, 2010, the EPA proposed a rule entitled "Water Quality Standards for the State of Florida's Lakes and Flowing Waters." With this rule, the EPA has proposed water quality standards in the State of Florida that would set a series of numeric limits on the amount of phosphorus and nitrogen, also known as "nutrients," that would be allowed in Florida's surface waters. The rulemaking proposes Numeric Nutrient Criteria (NNC) for the following body types in Florida: lakes, streams, springs and clear streams, and canals.

The EPA held public hearings in February 2010 where comments were provided by representatives of over 50 special districts, agriculture, environmental groups, public utilities, and municipalities.

The primary concern is the economic cost of the proposed rule; other concerns include how the NNC were developed, the limitations of special districts' authority, and impacts to reclaimed water and stormwater treatment systems currently in place.

The date for promulgation of the NNC (total nitrogen and total phosphorus) for lakes and flowing (fresh) waters is October 15, 2011. The promulgation of NNC for estuaries and coastal waters, as well as canals, is scheduled for first notice on November 14, 2011 and final promulgation on August 15, 2012.

#### **Intergovernmental Coordination**

## Loxahatchee River Management Coordinating Council

SIRWCD continues to participate as an active member of the Loxahatchee River Management Coordinating Council. The Northwest Fork of the Loxahatchee River is the primary stormwater outfall for that entire portion of SIRWCD lying west of the SFWMD C-18 Canal. SIRWCD and the Coordinating Council also have several mutual issues and interests. In the last year, the Coordinating Council meetings have emphasized the following topics of importance to SIRWCD:

- North Palm Beach County Part 1 CERP Project
- Town of Jupiter Surface Water Recharge System
- Town of Jupiter Water Use Permit Renewal and Modification
- Wild and Scenic River Management Plan
- Water Quality and Condition Monitoring

## North Palm Beach County CERP Project

Project Management Plan (PMP) was completed and approved in June 2005. The PMP focuses on development of the Project Implementation Report (PIR), for the Northern Palm Beach County Comprehensive Everglades Restoration Plan (CERP) Project - Part 1 components. During the PIR phase, data collection and modeling were performed to evaluate basin demands and available runoff. The PIR determined the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system and for compliance with water quality permitting requirements.

A series of multi-agency Project Delivery Team Meetings were held this past year to discuss the modeling and gain consensus on alternatives. South Florida Water Management District (SFWMD) has now completed the Watershed Modeling (LECSR) runs. A tentative plan has been selected based on a matrix that was used to rank and compare alternatives to performance measures, such as habitat, operational viability, and evaluation criteria. The Army Corps of Engineers and SFWMD will now present the plan to the next level of reviews.

Concurrently with the CERP project, several components of the Northern Palm Beach County Comprehensive Water Management Plan (NPBCCWMP) continue to move forward. Accepted by the SFWMD Governing Board on May 2002, the NPBCCWMP proposed improvements to store and convey water that would otherwise be lost to tide in the wet season and provide supplemental supplies in the dry season, thus meeting environmental needs, and the projected 2020 urban and agricultural demands.

Activities on components located outside of the Loxahatchee River Basin that are integral to the NPBCCWMP include:

- 1. The L-8 Reservoir currently has approximately 16,000 acre-feet of useable storage available with interim inflow (approximately 600 cfs) and discharge (75 cfs) capability. SFWMD has initiated geotechnical and survey work for an L-8 Reservoir embankment stabilization project. The design process is scheduled for 2011 with construction scheduled for December 2011-September 2012. The design of a permanent inflow facility (1,500-3,000 cfs) and discharge pump station (400-600 cfs) has not been scheduled. Work is expected in October to develop operational criteria specific to the tentatively selected plan for the NPBC CERP PIR. This work will include optimization modeling which will be utilized for the pump station and inflow structure design.
- 2. The City of West Palm Beach is proceeding with the design and construction of a new 300+/- cfs Control No. 2 pump station. The construction plans are currently 60% complete and construction is scheduled to begin in March or April 2011
- 3. Phase 2 of the widening of the M-Canal by the City of West Palm Beach is on hold pending resolution of property rights issues. The City previously bid and awarded the project however, never issued a Notice to Proceed. Additional hydraulic analysis is being performed to see if the existing canal section can handle the 300 cfs flow from the proposed new Control 2 pump station.

4. The construction of a new G-92 structure was completed January 2010. The new structure has the same design capacity (400 cfs) as the prior structure.

Operational agreements among SFWMD, the City of West Palm Beach, Northern Palm Beach County Improvement District and SIRWCD will need to be developed for operation of the various facilities described above.

## Florida Association of Special Districts

SIRWCD's Board of Supervisors and staff continue to participate in the Florida Association of Special Districts. The association acts as a watchdog for codes, ordinances, rules and legislation that might affect the activities of Special Districts. Regular meetings are held throughout the year, where information is shared with regard to policies, procedures, and operation and maintenance issues.

As explained in the previous section, the FDEP has initiated a rulemaking process to establish quantitative nutrient standards, known as Numeric Nutrient Criteria. In response to these proposed criteria, FASD has formed a Water Quality Task Force to track FDEP's rulemaking process for development of these Numeric Nutrient Criteria.

## Review of G-160 Impact Analysis Study

In January 2004, SFWMD completed construction of the G-160 in the east leg of the C-18 Canal, immediately south of the C-18's confluence with the west leg. The structure provides for restoration of a more natural hydro-period for wetland areas located upstream, while maintaining flood protection for adjacent developed areas. It also provides base flow augmentation to help restore freshwater flows in the Northwest Fork of the Loxahatchee River. An interlocal agreement executed in August 2005 between SIRWCD, City of Palm Beach Gardens, and Northern Palm Beach County Improvement District (NPBCID), addresses a future planned course of action regarding the phased operation schedule for the structure and a study of potential mitigation measures to protect existing facilities. In accordance with the agreement, a study has been initiated by SFWMD and NPBCID to determine any potential mitigation measure requirements. In February of 2009, FDEP issued a letter to SFWMD requiring permit compliance by incremental increases in control elevation of the G-160 structure, which was

initiated on June 1, 2009. In conjunction, with this schedule, SFWMD coordinated with NPBCID, the City of Palm Beach Gardens, and SIRWCD staff to establish a plan to monitor the influence of the increased G-160 levels on communities adjacent to the east side of the Loxahatchee Slough. Regular meetings with SFWMD and the interested parties have been held since June 2009 to discuss implementation of the monitoring program. The monitoring wells were

completed in March 2010 and water level data has been collected since July 12,

#### Palm Beach County - Hatcher/ Halpryn Joint Venture Property

In 2008, Palm Beach County purchased the Hatcher/Halpryn property and presented their plan for development to the SIRWCD Board of Supervisors. The County plans to expand the existing lake and rehydrate the existing slough. In addition, the County proposes a park use on the property. A permit application has been submitted to SFWMD and copied to

SIRWCD. The perimeter of the property was cleared by the County in 2010 for survey purposes. Staff is in the process of coordinating with Palm Beach County in the review of their SFWMD permit application. Staff met with the County's staff in November 2009, June 2010, and July 2010 to discuss the hydrologic and hydraulic model for

the parcel, as well as the proposed plan of operations for the project.

#### Operation and Maintenance

The District's canal network consists of over 60 miles of canals which are continuously in need of being maintained, restored, and enhanced. The canal clearing and maintenance program's objective is to



Pine Glades Natural Area to the west of SIRWCD

keep the canal sections easily accessible and, to the extent possible, free from trees and other vegetation that may potentially enter the canal during a major storm event and thereby create a restriction that would aggravate flooding.

The canal clearing and maintenance program provides services that include clearing, grading, and shaping of the canals as well as restoring, replacing or enhancing structural improvements. The program is an ongoing effort and the District has continued to work to maintain and achieve the desired goals.



The Hatcher/Halpryn property off Indiantown Road

The Board of Supervisors has authorized an on-going swale maintenance program which allows the District Engineer and General Manager to identify areas within SIRWCD that could be improved for conveyance and storage. Staff will continue to work toward the desired goals of the Board in the swale maintenance program.

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- In accordance with the provisions of the Florida Statutes, the District maintains a Policies and Procedures Manual that is available to any landowner.
- There are approximately 185 miles of roads within SIRWCD. These roads give access to each subdivided parcel of land. Currently there are 29 miles of roads paved to Palm Beach County standards, and 41.7 miles of roads which are surfaced with OGEM material. Approximately 117 miles of roads within SIRWCD are currently unpaved.
- The District continues its efforts to control aquatic weeds within the primary canal system. In the future, more emphasis may be needed for this program to comply with NPDES water quality programs, the Ecosystem Management Area Plan, and other intergovernmental activities.

#### Water Quality Monitoring

Due to the many ecological and regulatory pressures being exerted over the Loxahatchee River Basin area, it is necessary for the District to sample and monitor water quality within and adjacent to its boundaries. SIRWCD had historically taken samples through a co-operative agreement with the United States Geological Survey (USGS), but the Loxahatchee River District (LRD) has been obtaining water quality sampling in recent years. The tests analyze the surface water and groundwater for various metal, organic and inorganic contaminants as well as water quality criteria. Due to the new water quality legislation being proposed, the Board of Supervisors has instructed staff to implement a water quality monitoring

program that augments and expands the current LRD program.

The Lateral Control Structures as part of the 9th Plan of Improvements have provided the District with a significant amount of water level monitoring data that is very valuable to the District to better manage the system for flood protection and environmental benefits. Likewise, the new water quality monitoring program is being revised to complement the recording stations constructed in association with the 9th Plan of Improvements.

#### **FEMA**



The Federal Emergency Management Agency (FEMA) is currently in the process of updating Palm Beach County's floodplain mapping and staff has been contacted by FEMA representatives to provide modeling information concerning the area.

In addition, the District has received requests from landowners within Palm Beach Country Estates to change the flood zone designation due to the impacts to the landowner's home insurance. The District has researched the process for revising a FEMA floodplain map in this area. A letter was sent to the affected landowners in July to gather information from the landowners who may be interested in SIRWCD applying for a Letter of Map Revision based on Fill (LOMR-F) with FEMA for the affected residential structures located within the flood zone. See page 11.

#### **Rainfall Totals**

For the twelve month period from September 2009 through August 2010, the District received 63.69 inches of rainfall. This is slightly lower than the average annual rainfall of 65.98 inches for the same time period.

#### **General Comments**

SIRWCD is not an entity that can look solely within its boundaries with regard to its authorized activities. The District has an obligation to its landowners and the surrounding area to consider both internal and external activities due to its strategic location within naturally sensitive conservation areas. A major portion of SIRWCD's activities require participation in activities that look at infrastructure needs and ecosystem management for the overall region. The District and its landowners share in the continued responsibility of being good stewards in maintaining compatibility with these natural systems. The policies and procedures for management of our water resources from a quantity and quality standpoint will continue to evolve and the District will continue to work with SFWMD and other agencies in developing and implementing plans for the District and the Loxahatchee River Basin.

AECOM appreciates the opportunity to continue serving as the SIRWCD Engineer, and we look forward to working with the Board of Supervisors, landowners, and staff in the coming year.



## District Photo Contest

Do you have an artistic eye? Does everyone tell you that you take great pictures? South Indian River Water Control District is working on a new website and would like to include pictures that represent the natural beauty, as well as the operations of the District.

We'd like to invite all landowners to send in their best digital images of the District. Photos of landscapes, canals and other water features, roads and trails, plants and animals (such as this baby alligator) are all welcome.

Please identify where the photo was taken and include your name and community (Jupiter Farms, Egret Landing, Palm Beach Country Estates) along with the digital image. You can submit multiple images. E-mail your submissions to *deninno@sirwcd.org* up until February 15.

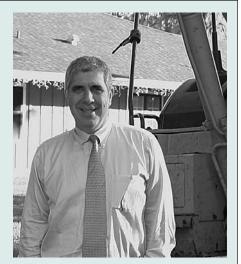
We will acknowledge first, second and third place winners on the new website and in an upcoming issue of the newsletter. We know there are great photographers out there...get your pictures in today!

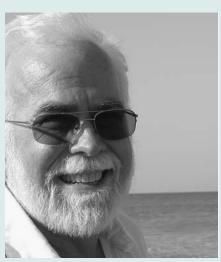
## Mike Danchuk and Mike Ryan Elected to SIRWCD Board of Supervisors

Michael Danchuk has been reelected to a three-year term and Michael J. Ryan to his first term on the South Indian River Water Control District's Board of Supervisors. Danchuk has served on the board since 2001.

Certified totals from the Supervisor of Elections office show that Ryan received 1,374 votes, while Danchuk received 1,318 votes. Bob Berman, who was also running for reelection and had served on the Board for 11 years, received 1,045 votes. In addition, there were 168 write-in, 9 undeterminable, 23 unsigned and 2 over vote ballots. There were 250 under votes where only one vote was cast. Undeterminable, unsigned and over votes invalidate the ballots and are not counted in the totals, however, under votes are included.

Danchuck and Ryan were sworn in at a rescheduled monthly meeting of the South Indian River Water Control District (SIRWCD) Board of Supervisors on October 7.





#### PALM BEACH COUNTRY ESTATES PARK

At a rescheduled board meeting on Dec. 2, the SIRWCD Board of Supervisors discussed options for usage of funds for a community park in Palm Beach Country Estates. Terry Lewis, of the District Attorney's law firm, noted that there were limitations and the District has the authority to operate and maintain property they receive and that maintenance funds are allowable only for certain aspects of the project that relate to maintenance, such as grading, drainage, fencing and paving. If other structures such as playground equipment or basketball courts were turned over to the District once constructed, they could possibly be maintained. District Treasurer Charles Haas stated that the District had set aside money for "enhanced maintenance" that did not have a specific designation and there is a line item of \$83,000.

Some supervisors expressed concern regarding keeping reserves at appropriate levels and that residents should be made aware of the options regarding these funds. They also noted that costs needed to be established by the park committee in Palm Beach Country Estates.

The board unanimously voted to move forward with a minor, insubstantial water control amendment to the *7th Plan of Improvements* and authorized staff to incorporate the park into the plan.

# Landowner-Initiated Roadway Improvement Project 2010 Approved by Board of Supervisors

A final public hearing on the 2010 Landowner-Initiated Roadway Improvement Project to apply asphalt or open-graded emulsified mix (OGEM) on certain roadways in the District was held prior to the South Indian River Water Control District's (SIRWCD) board meeting on December 2.

After public comments, the Board of Supervisors approved the Engineer's Report and directed District Engineer Lennart J. Lindahl to proceed with the *16th Plan of Improvements*. The following roadways in Palm Beach Country Estates will be improved to conform with Palm Beach Country standards:

- 67th Avenue N between 141st Lane N and Donald Ross Road
- 71st Drive N between 150th Place N and 154th Road N
- 72nd Drive N between 150th Place N and 154th Road N
- 72nd Drive N between 155th Drive N and 159th Court N
- 75th Way N between 165th Street N and 167th Court N
- 84th Avenue N between 155th Place N and 159th Court N
- 140th Lane N between 64th Drive N and 69th Drive N
- 151st Court N between 69th Drive N and 69th Trail N
- 154th Road N between 69th Drive N and 75th Avenue N
- 165th Street N between 75th Avenue N and 79th Terrace N
- 167th Court N between 75th Avenue N and 78th Drive N

The following roads in Jupiter Farms and Palm Beach Country Estates will receive an application of open-graded emulsified mix:

• 80th Drive N between 155th Place N and 159th Court N

- 92nd Way N between 150th Court N and 154th Road N
- 98th Trail N between 150th Court N and 154th Road N
- 151st Lane N between 133rd Terrace N and Canal 13

It was announced that the referendum for construction of a Palm Beach County standard asphalt roadway on 154th Road N between 69th Drive N and 75th Avenue N in Palm Beach Country Estates had passed with 10 in favor of the project and 7 opposed, as certified by the Palm Beach County Supervisor of Elections. The board unanimously accepted the certification of this road referendum and noted it is to be included in this project.

In addition, 187th Place N between 126th Terrace N and 129th Terrace N and 129th Terrace N between 186th Court N and 187th Place N, which was part of the 15th Plan of Improvements, but was suspended pending a revote that affirmed the majority of votes cast were in favor of the improvement, will be included in the construction of the 16th Plan of Improvements.

The total estimated annual payment per parcel for the Palm Beach County standard asphalt roads is estimated at approximately \$975 per parcel, while the roadways seeking to apply OGEM would be approximately \$636 annually per parcel. These estimates are based upon current interest rates over a term of up to fifteen years. If landowners choose to, they may pay in full without financing – estimated at \$9,036 for the asphalt roadways and \$5,208 for the OGEM roadways.

# Florida Stormwater Education Corner Protecting Florida's Water

We've been informing and advising landowners about the EPA's setting of nutrient criteria for the state of Florida for a while now and an update is included in the article below. Landowners are probably wondering how this issue affects them as property owners. While we've included information on fertilizers in previous issues of this newsletter, this month's NPDES Tip gets into details about the use of fertilizers and how it relates to the upcoming nutrient criteria standards.

It is important to note that if landowners make wise plant choices and use large quantities of mulch, your garden will need very little fertilizer. Choosing native plants that naturally grow in our soil and climatic conditions will substantially decrease the amount of fertilizer needed by your yard. Mulching also helps dramatically reduce the amount of fertilizer needed by adding an organic component to an otherwise barren soil. Make sure plants are properly placed with respect to drainage, irrigation, space requirements and sunlight.

A proper fertilizer schedule is one that makes nutrition available to the plants when needed and is tailored to South Florida's wet and dry seasons. More fertilizer is needed in the warm, wet season and less fertilizer is needed in the dry, cool months.

The use of native vegetation - the right plant in the right place will save you time and money - is best for minimizing stormwater runoff and infiltrating it into the ground below. Turfgrass is Florida's largest crop and while a lush lawn adds aesthetic value to your property, keeping your lawn "green" can have a negative impact on the environment. It is suggested to minimize turf areas where possible and keep it healthy so it can help filter out pollutants and protect soil from washing away. It is important to use the appropriate amount of fertilizer to keep your lawn in good condition, as too much can cause problems, both for the grass and

for the rest of the environment.

Why is too much fertilizer a problem? Nitrogen, phosphorous, and potassium are the three most common nutrients in fertilizers. Nitrogen can cause algae blooms that choke out other aquatic life forms and phosphorous is a major cause of excessive aquatic plant growth. This depletes oxygen in ponds and lakes, which cause fish kills.

The nutrient criteria standards being set for the state of Florida will limit nitrogen and phosphorous levels in surface waters, including canals.

While there is still a debate on how these standards will be met, landowners can take action to help alleviate the situation.

- Use a slow-release fertilizer with low or no phosphorus with a middle number 2 or less, such as 13-0-13. The first number is the nitrogen concentration, the second is phosphorous, and the third number is potassium.
- Apply fertilizer using smaller applications rather than a large, single application. Follow the label directions carefully.
- Postpone fertilizing when more than 1 inch of rain is expected.
- Use a tarp under the spreader when filling or emptying to prevent spills. Make sure fertilizer does not fall onto sidewalks or impervious surfaces during application. If this happens, sweep granular fertilizer onto the lawn, NEVER hose it off.
- Do not apply fertilizer on lawn areas within 10 feet of the water's edge.

Please do your part in keeping Florida's waters clean by responsible use of fertilizers.

## Florida Water Quality Standards Finalized by the EPA

The U.S. Environmental Protection Agency (EPA) has finalized protective numeric criteria standards to help reduce water pollution that causes harmful algae blooms, which are harmful to aquatic life. The blooms are caused by nitrogen and phosphorous pollution from excess fertilizer, stormwater and wastewater that flows off land into waterways.

The final standards set limits on the amount of pollution permitted in the surface waters in the state. The EPA felt the current standards were too general and that the new specific limits will provide "predictability and clarity."

Implementation for lakes and flowing waters is expected by October 15, 2011, however, the date for South Florida waters, including canals, has been extended to coincide with the revised date for promulgation of numeric criteria for estuaries and coastal waters – the first notice will be November 14, 2011, with final promulgation on August 15, 2012.

The EPA extended implementation

dates to allow towns, cities, businesses, and other stakeholders such as special districts, time to review the standards and develop strategies for implementation.

During the 15-month period before the standards take effect, the EPA plans to work closely with the state and Florida Department of Environmental Protection (FDEP) to determine the next steps to meet the standard's objectives.

The EPA conducted 13 well-attended public hearing sessions in six cities in Florida during a three-month comment period. They received over 22,000 comments on the original proposal.

It is possible that the implementation of these new water quality standards for Florida waters, including man-made canals, may impact the day-to-day operations of the District and significantly impact the District and its landowners economically.

As the FDEP is currently revising surface water classifications according to designated use and is proposing to add a sub-classification that will assign manmade conveyance systems (such as canals) to a separate class with different waterquality parameters, this may change criteria standards for these waters.

Attorney General Bill McCollum recently announced that the state of Florida is suing the EPA to block the new nutrient criteria standards. Florida officials said "the new standards would be costly, in dollars and jobs, and was not implemented with proper scientific evidence," something that environmentalists, who sued the EPA to enforce the Clean Water Act and support the standards, have disputed.

At the December 2 Board of Supervisors meeting, District Engineer Lennart J. Lindahl reported that he would provide more details on the numeric standards to the Board at a special workshop meeting.

He also noted that the District is seeking qualified firms to perform water quality sampling services to the District, as previous requested by the Board.

# COST SAVING OPPORTUNITY - FEMA FLOOD ZONE REVISION PALM BEACH COUNTRY ESTATES

**WHO?** Homeowners in Palm Beach Country Estates, currently in FEMA Flood Zone AO.

**WHAT?** SIRWCD previously mailed notices to affected homeowners in July to gauge support for applying for a FEMA Flood Map revision, known as a Letter of Map Revision based on Fill ("LOMR-F"). A second notice is being sent out for those in this flood zone (see map below). Please watch your mail.

WHEN? Interested homeowners can use the form provided in the second notice or send in their name and property control number indicating their interest in participating in the Flood Zone Revision to the SIRWCD District office at 15600 Jupiter Farms Road, Jupiter, FL 33478 by February 28. If you have already sent in your form, you do not need to resend it. Also, this is a voluntary program...you do not need to participate if you wish to keep your flood insurance.

**WHY?** Landowners have requested SIRWCD's assistance in seeking a change in Flood Zone to reflect higher building pad elevations in this area. An approved change in Flood Zone can make flood insurance optional, instead of mandatory, and save homeowners a substantial amount of money each year in insurance premiums.

#### WHAT ELSE SHOULD YOU KNOW?

Flood insurance is mandated for most mortgage holders in Flood Zone AO. Changing to a moderate-to-low risk zone can make flood insurance optional and can help homeowners save anywhere from \$300 to \$2,000 each year on insurance premiums.

LOMR-F zone modifications are potentially available to 462 developed lots within Flood Zone AO in Palm Beach Country Estates. Vacant lots are not eligible for participation.

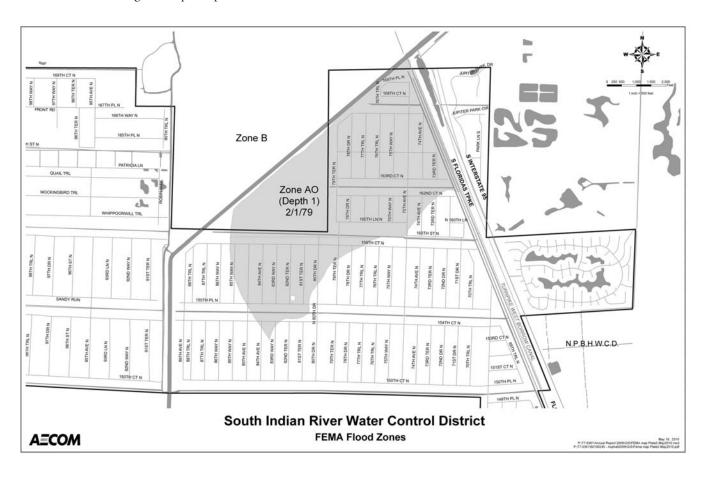
Individual landowners are able to apply for a single-lot LOMR-F zone modification. However, the application fee, fees to request plat records and other property documentation, and an engineer's or surveyor's certification of the lot elevations could result in a cost of at least \$1,000 per individual landowner.

SIRWCD is able to apply on behalf of participating landowners for a multiple-lot LOMR-F zone modification. The costs for this process will depend on the amount of information FEMA requires of the District Engineer, as multiple-lot revisions may necessitate a review of the surrounding drainage system by FEMA. Depending on the number of participating landowners, the District estimates that this process will likely cost approximately \$200-\$500 per landowner. The more landowners who participate, the lower the cost to each participant.

Should there be sufficient support for a multiple-lot application, SIRWCD is committed to providing this service to landowners at absolute cost. The District does not profit in any way from this application process.

SIRWCD did review the costs to change the FEMA maps in this area based on drainage improvements made in 1989. The cost to recertify the system improvements by this method far exceeded the cost of this proposed process. It is the District's belief that the currently proposed procedure is the most efficient and cost-effective method to achieve a flood zone modification and insurance savings for homeowners.

For more information, please refer to the following websites: www.floodsmart.gov www.fema.gov/plan/prevent/fhm/fmc\_loma.shtm







15600 Jupiter Farms Road Jupiter, FL 33478

Best Wishes for a
Happy New Year!

The 20th Annual
Landowners
Family Day
is March 12!

Visit www.sirwcd.org
for news updates!

## 20th Annual Landowners Family Day

