

# the Watershed

AWRA Florida Section Meeting  
Cedar Key, Florida  
September 30, 2005  
**Low Impact Development**

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**Jay W. Yingling**  
Tampa

**Technical Program:** Join AWRA for a look at Low Impact Development (LID), an innovative stormwater management approach that is modeled after nature by managing rainfall at the source using uniformly distributed decentralized micro-scale controls. LID is a versatile approach that can be applied to new development, urban retrofits, and redevelopment projects.

The Tumblin Creek Watershed Management Plan for the City of Gainesville, which is a comprehensive water quantity and water quality study of the watershed, will be presented. In addition, a member of the University of Florida student chapter of AWRA will present his research findings on the Tumblin Creek project. The Water Management District perspective will give a district look at LID. A look at the impact of aqua-culture in Cedar Key will also be given by UF/IFAS. This will be a very informative technical meeting in a quaint Florida coast community.

**Location & Accommodations:** The Florida of years past is tucked away and waiting for you at Cedar Cove Beach & Yacht Club. Peaceful and natural, Cedar Cove's tropical breezes, and unforgettable sunsets provide the perfect vacation you will always remember. Reserve your room now by calling Cedar Cove and Beach and Yacht Club at (352) 543-5332 or (800) 366-5312. You can also visit their website at <http://www.cedarcove-florida.com/>. Don't forget to ask for the AWRA rate of \$100 per night.



2005 Meetings: January 21 Palm Coast; March 18 Wakulla Springs; May 13 Lakeland;  
July 28-30 Key West; September 30 Cedar Key; November 18 Ft. Myers



# AWRA Florida Section September Meeting

Friday, September 30, 2005

## *Low Impact Development*

**Technical Meeting**  
Cedar Cove Beach and Yacht Club  
**Social and Dinner at**  
Historic Andrews House

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Technical Chairs: Jim Heaney, Ph.D., PE, University of Florida, Environmental Engineering  
Brett Cunningham, PE, Jones, Edmunds & Associates

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11:00 a.m. – 1:00 p.m. Board Meeting (Dutch Treat)

### **1:00 p.m. – 5:00 p.m. – Technical Program**

1:00 – 1:30 p.m.	LID Overview	Jim Heaney
1:30 – 2:00 p.m.	Tumblin Creek Watershed Management Plan	Brett Cunningham
2:00 – 3:00 p.m.	Tumblin Creek LID	Ruben Kertesz
3:00 – 3:15 p.m.	<b>Break</b>	
3:15 – 3:45 p.m.	SJRWMD LID Permitting Perspective	David Miracle, PE
3:45 – 4:15 p.m.	BMP Effectiveness	John Sansalone
4:15 – 5:00 p.m.	Urban Impact to Soil	Justin Gregory
5:00 – 6:00 p.m.	Social hour	Andrews House
6:00 – 8:00 p.m.	Dinner Andrews House	Leslie Straum

**September 30, 2005**

**Cedar Cove Beach & Yacht Club**   
A Hotel & Timeshare Resort

[www.cedarcove-florida.com](http://www.cedarcove-florida.com)

192 Second St.  
Cedar Key, FL 32625  
Phone: 352-543-5332 or 800-366-5312  
Ask for AWRA rate of \$100

**Reservation deadline: September 16, 2005**



**AWRA NATIONAL NEWS**

On the National News level, several changes have taken place. First, we will miss Harriette Bayse who left for Charlotte, NC, to be close to her family. She was a great asset to this organization, bringing new energy and ideas that included our new brand, and many promotional ideas. She will be deeply missed. However, we have hired a new Administrative Assistant in the National office named Jacque Towner. If you need anything she will be glad to help you. In addition, we have hired a new Marketing Coordinator named Terry Meyer. She has many years of experience in professional associations and will bring more new ideas to the association.

The first Everglades Restoration Conference held in West Palm Beach in early summer was a great success. It included about 300 registrants. A second Everglade Restoration Conference is being planned for next year in Ft. Lauderdale. Be sure to look for details as the time approaches.

The Annual AWRA Conference is fast approaching. It will be held in Seattle from Nov. 6 through the 9<sup>th</sup>. This, and all other conference information can be found on our national webpage, so check it out.

If you have any questions, call the National Headquarters at: 1-540-687-8390, your local AWRA National Board of Director – Dave Watt with the SJRWMD at 1-904-329-4500, or Immediate Past President – Bob Moresi at 1-813-207-7934.

**AWRA FLORIDA NEWS**

- Florida Section Directory Updates
- Board of Directors Summary
- Technical Program Summary
- Student Chapter News
- Announcements

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**Florida Section Directory Updates**  
- by David Watt

Please incorporate the revisions shown below into your membership directory. If you have not received a directory, or have comments about your listing, please contact me.

David Watt, Member Services, 386-329-4355, dwatt@sjrwmd.com

**Page v and 10**  
Ron Edenfield  
Area code: 239

**Page 4**  
Frederick Busak  
Address: Suite 900

**Page 5**  
Connor Chambers  
Company: Neal Communities

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**Board of Directors Summary – Key West, July 2005**  
- by Cathy Vogel

The Florida Section held its board of directors meeting at Key West on Thursday, July 28. Good news was reported by Treasurer Patrick Victor: The Section's bank balance stood at just over \$41,000 and did not include any expenses from the Key West meeting. Membership in the Section is also on the rise, as reported by Membership Committee Chairman David Watt. Since the last meeting in May, the Section has 12 new members and 17 renewed memberships. Watt also reported that this year's directories have been distributed.

The Board spent a great deal of time discussing the Section's education programs: The J.B. Butler grants for water resource education in the classroom (K-12), and the Storch Awards for scholarships to university students. Despite the best efforts of Rosanne Clementi, Education Chair, there has been no

response from interested teachers or college students this year. The Board agreed to extend the deadlines for the 2005 awards and to do a better job publicizing the availability of these education funds.

Long-standing member Doug Durbin, Biological Research Associates, was unanimously selected as a new board member to fill the seat vacated by the passage of Sandy Young. Two additional new members will be considered for selection in September.

The 2006 meeting agenda was also set as follows:

January 13	Jacksonville
March 17	Wakulla Springs (Suggested)
May 9	Tampa or St. Petersburg
July 13-15	Key West
September 15	Delray Beach
November 17	Ft. Myers

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### Technical Program Summary – Key West, July 2005

- by Jay Yingling

**Florida State Revolving Loan Program Use at Water Management Districts**, *Walter Kulakowski, Citigroup* – Mr. Kulakowski indicated that DEP administered State Revolving Funds (SRF) are federal grants to the states for specific types of projects but are delivered from the states in the form of loans that must be repaid. Repayments fund new projects. Clean Water SRFs are for wastewater, reclaimed water, BMPs associated with stormwater, and estuary protection activities and facilities. Drinking Water SRFs are for contaminated sources, treatment and storage. SB 444 funds are available through WMDs for alternative water sources, TMDL implementation, surface water restoration and disadvantaged small community wastewater treatment. FDEP also can provide money for agricultural BMPs.

**Florida Springsheds: Challenges in Science and Management**, *Kris Esterson, HydroGeoLogic* – Ms. Esterson described advances in the study of springsheds. Springshed delineation techniques include: potentiometric surface mapping, geochemical analysis, cave diving and conduit mapping, GIS vulnerability mapping, hydrologic tracing and hydrological analyses. Significant threats are declining flows and increasing contaminants.

**Setting a Higher Standard: Florida's Dissolved Oxygen and Nutrient Criteria**, *Doug Durbin, Biological Research Associates* – Mr. Durbin described the current criteria and the problems associated with applying those criteria to ecosystem health. He also described the extensive efforts are underway at both FDEP and the USEPA to revise these standards for specific ecosystems and the factors complicating the revisions of the standards.

**Update on the Governor's Committee for a Sustainable Treasure Coast**, *Melissa Meeker, TetraTech* - Ms. Meeker discussed the activities of the 37 member committee in developing visions and goals for this rapidly developing area. A primary focus is on the development of regional infrastructure and creating and maintaining vibrant city centers. Transfer of development rights may be used to preserve agricultural lands.

**Alternative Water Supply Solutions: Desalination Case Study – Trinidad & Innovative Approach to Reuse**, *Philip Waller, MWH* – Mr. Waller described a two RO stage approach to treating high turbidity feed water. Operating costs for the first three years have been \$2.64/kgal – ½ operating and ½ capital. Mr. Waller also described the Tampa Bay Water (TBW) downstream reclaimed water augmentation project to allow TBW to increase surface water withdrawals from the Tampa Bypass Canal and the Alafia River. Multiple funding partners will reduce the cost of the increased withdrawals from about \$3/kgal to \$1.40/kgal.

**Supply & Demand-Optimizing Operations of the Everglades Agricultural Area Reservoir**, *Robert Moresi and Rafael Frias, Black and Veatch* – The objective of the project is to improve the timing of environmental deliveries to the stormwater treatment and water conservation areas, meet agricultural demands and regulate flood waters. They described the inputs and outputs of a water balance model to optimize the competing objectives on a daily basis.

**Design Build in Water & Wastewater**, *Patrick Mullen, MWH* – The objective of the design/build contracting model was to shift risk to contractor but it has had the consequence of limiting the flexibility of the owner to control design quality and places too much risk to the contractors. New contracting models are evolving that provide more flexibility to the owner and assign risk to those best able to control it.

**2004 Hurricane Season – What Really Happened?** – *Richard Kane of the USGS* described the data collection activities of the USGS before, during and after the hurricanes, with particular attention to peak discharges and storm surge. *Gary Kuhl of the SWFWMD* described the multiple storm impacts with particular attention to rainfall distribution of the storms. Mr. Kuhl also emphasized the importance of the State's Tracker System to direct needed supplies. *Bob Howard of the SFWMD* indicated that record discharges were set at most facilities and exceeded the design capacity discharges at many facilities by 10-20% without any significant failures. *Mike Cullum of the SJRWMD* pointed out that while the individual storms may not have resulted in dramatic short term return frequencies, the 60-day rainfall frequency was 1 in 200. These cumulative rainfalls required the District to make difficult choices among industry and ecosystem impacts from floodwater releases. *John Wehle, representing Doug Barr from the NFWFMD* indicated that an estimated 9 ft. storm surge caused major damage at Alligator Point.

**Updates from the Top, EOG, DEP, DACS & WMDs** – Agency representatives described significant accomplishments and challenges faced over the last year and issues to be faced in the coming years. Funding, planning, project management, resource management, electronic permitting and challenges faced by agriculture were discussed.

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### Florida Section Meeting Notice – November 18, 2005

Mark your calendars for the November 18, 2005 Florida Section meeting in Ft. Myers. Please contact Ron Edenfield at (941) 277-0003 or Ron Hamel at (863) 675-2180 if you have any questions. The October 2005 issue of the Watershed will provide details of this meeting.

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## September Meeting Sponsors





**Cedar Cove and Beach and Yacht Club**  
**192 Second St., Cedar Key, FL 32625**  
**Phone: (352) 543-5332 or (800) 366-5312**  
**AWRA Rate: \$100/night**

The Florida of years past is tucked away and waiting for you at Cedar Cove Beach & Yacht Club. Peaceful and natural, Cedar Cove's tropical breezes, and unforgettable sunsets provide the perfect vacation you will always remember.

Scuba diving Seahorse Reef or snorkeling spring-fed rivers that surround Cedar key make for a truly unforgettable day. For the bird enthusiast, The Suwannee Wildlife Refuge is the premiere estuary on the Gulf of Mexico. Weather and tide permitting, boat rides are available for a truly spectacular view of one of only two steel lighthouses remaining in America.

When you're ready to explore the main island, rent a golf cart or bicycle and make your way to the dozens of small boutiques and shops that offer more than the usual tourist souvenirs. Enjoy savory foods, libations and entertainment in many of Cedar Key's fine restaurants. Sports enthusiasts can enjoy tennis on the city's lighted tennis courts or a relaxing round of golf in nearby Chiefland.





# 2005 Membership Application

## MEMBERSHIP DUES

New  \$10 Regular   
 Renewal  \$ 4 Student

## DIRECTORY INFORMATION

Please give us the information requested below, as you would like it to appear in the membership directory.

Name: \_\_\_\_\_  
First Middle Initial Last Suffix (Ph.D., PE, PG, etc)

Company/Affiliation: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
Box, Street or Route Suite or Apartment  
City State Zip Code

Daytime Telephone: \_\_\_\_\_  
Area Code

Facsimile: \_\_\_\_\_  
Area Code

E-mail: \_\_\_\_\_

## MEMBERSHIP INTERESTS

Would you like to receive our newsletter via e-mail? Yes  No   
 Are you an AWRA National Member? Yes  No   
 If not, would you like information? Yes  No   
 Are you interested in sponsorship opportunities? Yes  No   
 Would you like to be part of a bi-monthly meeting team? Yes  No

SPONSOR/RECRUITER: \_\_\_\_\_

## PAYMENT INFORMATION

\$ \_\_\_\_\_ Annual dues (please indicate if you are paying for additional years)  
 \$ \_\_\_\_\_ Florida Section Water Resources Education Fund (tax deductible contribution)  
 \$ \_\_\_\_\_ **TOTAL (Please make checks payable to AWRA Florida Section, THANK YOU!)**

Return application & your check to: **David Watt, Membership Services Coordinator**  
**P.O. Box 1823**  
**Palatka, Florida 32178**

Florida Section membership dues are due January 1 and are good through December 31. Contributions or gifts to the Florida Section are deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as an ordinary and necessary business expense. For membership information, please contact David Watt at [dwatt@sjrwm d.com](mailto:d watt@sjrwm d.com) or (386) 329-4355.

### Section Use Only:

Date Received: \_\_\_\_\_ Check #: \_\_\_\_\_ Amount: \_\_\_\_\_



## Registration Form

**AWRA Florida Section Meeting, September 30, 2005**

*Meeting Registration Deadline – September 23, 2005*

*Hotel Reservations Deadline – September 16, 2005*

**Name** \_\_\_\_\_

**Organization** \_\_\_\_\_

**Mailing Address** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Phone** \_\_\_\_\_

**E-Mail** \_\_\_\_\_

**Guest Name** \_\_\_\_\_

*Menu: Cedar Key Boil (Clams, Blue Crab, Shrimp, Sausage, Corn, New Potatoes), Salad, Roll, and Dessert*  
 Dietary Restrictions or Questions: Contact Carol Hinton (352) 392-9570 ext. 209, fax (352) 392-6910

**Make checks payable to AWRA Florida Section and mail to:**

Carol Hinton	Registration (Includes Dinner)	# _____	X \$50 =	\$ _____
UF/TREEO	Guests	# _____	X \$30 =	\$ _____
3900 SW 63 <sup>rd</sup> Blvd.	Students*	# _____	X \$20 =	\$ _____
Gainesville, FL 32608		<b>TOTAL</b>		<b>\$ _____</b>
Ph: (352) 392-9570 ext. 209				
Fx: (352) 392-3910	<b>Number attending the Board Meeting</b>	_____		<b>Dutch Treat</b>

\* You may sponsor a student to attend the event by paying their registration fee. We will include your name with a thank you in the program brochure. If you wish to do this, please fill in the requested information at the top of the form.

**PDH Credit for Florida Professional Engineers**

We have been approved by the Florida Board of Professional Engineers (FBPE provider # EX00089) to offer Professional Development Hour (PDH) credit to Florida registered Professional Engineers. You will only receive credit if you attend the entire technical session. Please check the box below and include your PE number if you would like to obtain PDH credit.

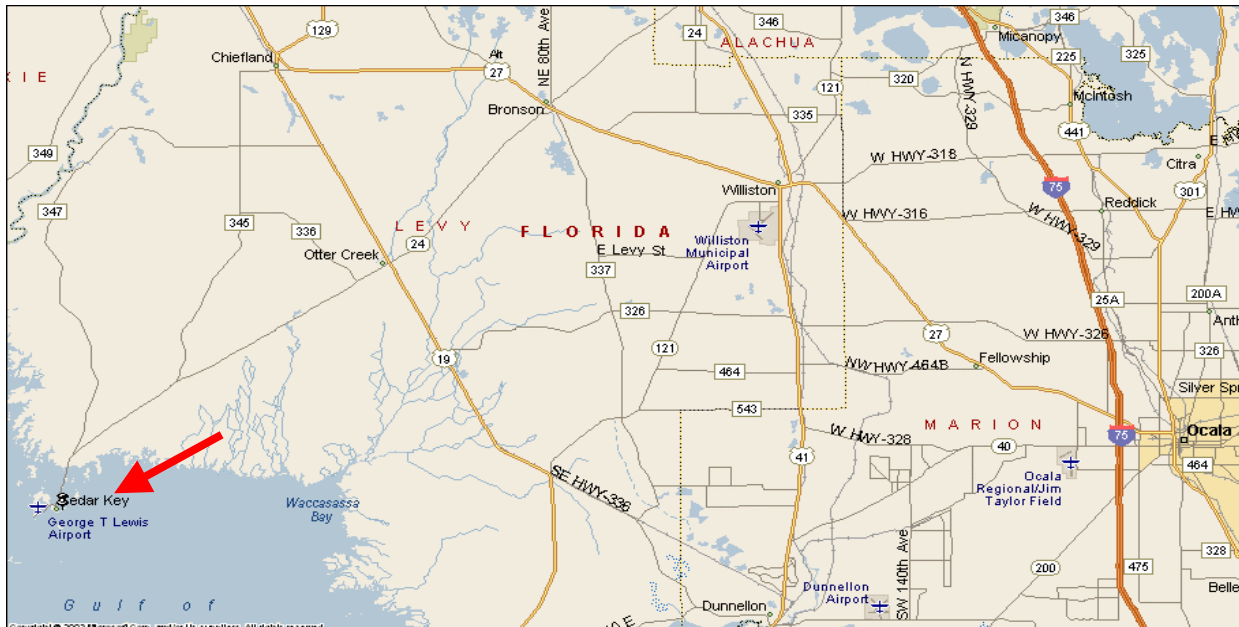
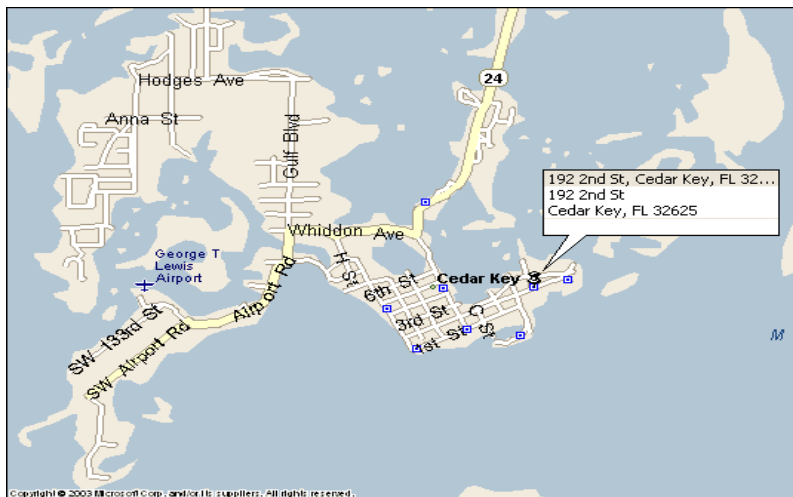
[ ] **I plan to be present for all technical sessions and would like PDH credit.**  
 My PE number is \_\_\_\_\_.



**Cedar Cove and Beach and Yacht Club**  
**192 Second St., Cedar Key, FL 32625**  
**Phone: (352) 543-5332 or (800) 366-5312**

**DIRECTIONS:**

We may be reached by land by going west on Florida State Road 24 until you reach the first stop sign in Cedar Key. Turn left at that sign onto Second Street and go straight until you reach our parking lot (about 4 blocks). Daily, weekly, or monthly rates are available. By air, Cedar Cove is accessible by a nearby, 2,355-foot paved, lighted county maintained runway.





**AWRA Newsletter Editor:**

Paul W. O'Neil, P.E., Director  
Technical Services Department  
Southwest Florida Water Management District  
2379 Broad Street, Brooksville FL 34604-6899  
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[Paul.Oneil@swfwmd.state.fl.us](mailto:Paul.Oneil@swfwmd.state.fl.us)



**VISIT THE FLORIDA SECTION WEBSITE AT:**  
[www.awraflorida.org](http://www.awraflorida.org)

***☞ Contact Upcoming Meeting Chairmen Regarding Sponsorship or Assistance ☞***

**Ft. Myers**

November 18, 2005  
Edenfield & Hamel  
941-277-0003

**Jacksonville**  
January 13, 2006

**Wakulla Springs**  
March 17, 2006

**Tampa/St. Pete**  
May 9, 2006

**Welcome New Members!**

James E. Anaston-Karas, MSCW, Inc., Stuart  
Mark Fulkerson, University of Central Florida student, Orlando  
John P. Kaiser, Aerostar Environmental Services, Inc., Orlando  
Lucia A. Lettie, University of Central Florida student, Orlando  
Richard H. Meeker, Wetland Consulting Services, Inc., Stuart  
Thomas W. Olliff, South Florida WMD, West Palm Beach  
Maria Rizou, University of Central Florida student, Orlando  
S. Marie Romah, E.I., University of Central Florida student, Orlando  
Carl St.Cin, P.E., Tetra Tech EC, Inc., Stuart  
Christopher T. Warn, Weston Solutions, Sarasota  
Kevin L. Wright, University of Florida student, Gainesville

