

the Watershed

AWRA Florida Section Meeting

March 17, 2006

Challenger Learning Center, Tallahassee

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Technical Program: The Florida Section of the American Water Resources Association will hold its March meeting in downtown Tallahassee, Florida at the Challenger Learning Center (CLC). The technical session will be held inside the CLC planetarium, which provides an unobstructed view of all presentations and speakers. Technical Sessions are scheduled on Friday from 1:00 pm. through 5:00 pm and consist of a variety of topics.

Speakers from FDEP will begin by demonstrating tools developed to help the public as well as staff to more easily find water-related data and information relevant to them. Professors and students from Florida State University will present talks on hydrological modeling in Karst terrain, dune recovery on St. George Island, and velocity asymmetry in salt marsh channels. Black and Veatch will present Integration of Membrane Filtration into Water Treatment Systems. The final talk will summarize hot water topics in this year's legislative session. The dinner speaker is to be announced at a later date.

Location & Accommodations: The location was changed from Wakulla Springs as originally advertised, due to a surge of early bookings last year by wedding parties trying to avoid another disruptive hurricane season. The new location will be the Challenger Learning Center (CLC) in downtown Tallahassee (see location map on page 7). This is an opportunity to experience a revitalizing downtown center that includes a variety of quality restaurants and entertainment – Tallahassee style. The CLC is located at 200 South Duval Street. There is some available parking on the surrounding streets, but you might prefer the underground parking beneath the Kleman Plaza in the same block. The East entrance (from Duval Street) is your best bet, since the West entrance (from S. Bronough St.) may be blocked by construction. Dinner will be catered by Harry's Seafood Bar and Grill. Lodging information is on page 8 – Deadline **February 20** for special rate.



2006 Meetings: January 13 Jacksonville; March 17 Tallahassee; May 19 Tarpon Springs;
July 13-15 Key West; September 15 Jupiter; November 17 Fort Myers



American Water Resources Association

Florida Section Meeting

Friday, March 17, 2006

Downtown Tallahassee at the Challenger Learning Center

11 am – 1:30 pm AWRA Florida Section – Board of Directors Meeting (Classroom B)
Lunch is “Dutch Treat” from the Paradigm Restaurant – Section Members Welcome!

1 pm – 2 pm Registration (Exhibit Hall)

TECHNICAL PROGRAM – TENTATIVE AGENDA (Planetarium)

Program Chairs: Candace Beauvais, Allan Biddlecomb and Don McEwen

2:00 pm Welcome, Section & Chapter Business, Introduction of Technical Program

2:15 pm “Water Data, Coming Soon to a PC Near You” - Latest Website in Development from the Florida DEP; *Don McEwen and Richard Butgereit, Division of Water Resource Management, FDEP*

3:00 pm Hydrogeological Modeling in Karst Terrain
Dr. Bill Hu, Department of Geology, Florida State University

3:30 pm Dr. Sergio Fagherazzi and Students, Dept. of Geology, Florida State University

- *Anthony Priestas* "Morphological recovery of Dune Fields in Barrier Islands after Hurricanes, St. George Island Florida"
- *Muriel Hannion* "Velocity Asymmetry in Salt Marsh Channels"

4:00 pm Integration of Membrane Filtration into Water Treatment Systems; *Johnathan Pressdee, Black & Veatch*

4:30 pm 2006 Legislative Update – Hot Water Topics
David Still, Suwannee River Water Management District

5:00 pm Social and Networking Hour

6:00 pm Dinner – Catered by Harry's Seafood Bar & Grill

Thank you to our meeting sponsors!

Biological Research Associates
Lewis, Longman & Walker, P.A.
Jones, Edmunds & Associates, Inc.
URS Corporation
Mactec Engineering and Consulting, Inc.
Black & Veatch





AWRA NATIONAL NEWS

Upcoming conferences hosted by AWRA

- ◆ GIS and Water Resources IV, May 8-10, Houston, TX
- ◆ Adaptive Management of Water Resources, June 26-28, Missoula, MT
- ◆ Wetlands Restoration Dialogue, September 18-20, Ft. Lauderdale
- ◆ Annual Water Resources Conference, November 6-9, Baltimore, MD

Board of Directors (for terms beginning January 1, 2007) Are you, or someone you know, willing to serve in a leadership position? Are you a hard working, strategic thinker who is committed to providing a balanced, professional approach to solving water resources challenges in a friendly and comfortable atmosphere? Consider nominating yourself or a colleague for service to AWRA. **Deadline for Nominations: April 7.**

Annual Awards

Recognition for outstanding service is important to all of us. Is there someone you know in our profession who deserves such recognition? Our AWRA Annual Awards Call for Nominations includes

descriptions and eligibility requirements for 8 different categories. **Deadline for Nominations: May 5.**

Richard A. Herbert Scholarships

If you are a current AWRA Student Member, you might be eligible to apply for the **Richard A. Herbert Scholarship Program**. These awards are given annually to an undergraduate and graduate student in a water resources program. Are you, or do you know, a deserving undergrad or grad student with an excellent GPA? **Deadline: April 24.**

For more information and to become a member of the National AWRA, go to www.awra.org, or contact David Watt at 386-329-4355 or [dwatt@sjrwmd.com](mailto:d watt@sjrwmd.com).

AWRA FLORIDA NEWS

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

Board of Directors Summary
- by Cathy Vogel

The first Board of Directors meeting of 2006 was held on January 13 at the University of North Florida in Jacksonville. Newly installed President, Bob Higgins, presided over a good turnout of Board members, member guests and a contingent of Student Chapter members from the University of Florida.

It was reported that the election of Board members for 2006 was completed with all ballots counted. The proposed slate of candidates was unanimously adopted by the Section, and three new members have joined the ranks of the Board of Directors: Kristin Bennett and Garrett Wallace - both of West Palm Beach, and Gordon Brown, a student member from the UF Student Chapter. Congratulations! In addition, at the Board meeting the following officers were unanimously elected to serve during 2006: Bob Higgins - Section President; Patrick Victor - Vice President; Jay Yingling - Treasurer; and Cathy Vogel - Secretary.

Also, after eight years of service as the Section's Membership Committee Chairman, Dave Watt gladly relinquished the reins of the Committee to Annette Carter who, in her first membership report, indicated that 50 members - including 5 new members - have already submitted their 2006 dues.

In his last Treasurer's Report, Patrick Victor, who has served in that capacity for the past two years, reviewed financial information from 2005. The Section bank account at year's end had a balance of \$20,534. And, during 2005, the Section distributed education grants and awards totaling \$16,000. In addition, the Sanford N. Young Scholarship Fund has a year-end balance of \$23,000. The Board voted to invest this fund in a higher interest-bearing money market account.

It appears that our new President, Professor Higgins (as he has now been dubbed), is hitting the ground running. With drafting assistance from Kristin Bennett, he presented a new membership policy that the Board will vote on at its March meeting. The policy would create special categories of membership in the Section, including a Fellow

Member and a Life Member. In addition, Bob announced plans to form a Board committee to develop a strategic plan for the Florida Section, AWRA. Looks like the New Year is off to a grand start!

Speaking of the Sandy Young Scholarship...the Board is in the process of reviewing and adopting a scholarship profile that will explain the genesis of the scholarship and criteria and eligibility for award of funds under this newest of the Section's educational programs.

Education Committee Updates

- by Rosanne Clementi

The William Storch Award deadline this year is March 31, 2006. The JB Butler Science Grant deadline is June 1, 2006. The Board has not approved the criteria with which we will award scholarships from the Sanford Young Scholarship Fund. However, they did vote to put the money donated to date in an interest generating/baring account. We look forward to any suggestions regarding the criteria for this scholarship. We would like it to be different than the Storch Award.

The Silent Auction is coming up soon. July is not as far off as you think and planning for the auction does take time. We definitely will have more wine from our dear friend Ed Finch; a condo at a ski resort for a week; time on Gasparilla Island at the Wehle's hacienda; and possibly a wine tasting cruise on Saturday. So if you are interested in donating money or items, please contact me soon at rclementi@sesi.cc.

Technical Program Summary – January 2006

- by Doug Durbin

Beach Renourishment – Overview and Case Study, Dr. Kevin Bodge, Ph.D., P.E., Olsen Associates

Dr. Bodge discussed coastal erosion and sediment transport. These are natural processes, but human activities can alter or exacerbate the process. On Florida East Coast beaches, inlets and jetties cause more than 80 percent of beach erosion and another large factor is improper coastal development. Dr. Bodge presented a number of striking photos showing coastal erosion, as well as the effects of beach renourishment projects in Florida and elsewhere along the Atlantic coast. He discussed the proficiency of coastal engineers at predicting erosion and sediment transport, thus enabling reliable project designs. A continuous challenge for beach renourishment projects is locating a source of suitable sand close enough to use (a project in Miami brought in sand from the Bahamas). As a case study, Dr. Bodge outlined a 30-year beach nourishment program used to maintain Jacksonville Beach.

Beach Renourishment – Economic Impacts, Dr. William Stronge, Department of Economics, Florida Atlantic University

Dr. Stronge has been studying the economics of beaches and beach erosion for about 20 years, as one of the only economists in the world who specializes in this subject area. Most "small scale" solutions to beach erosion (seawalls, revetments) have undesirable effects; therefore, most beach erosion problems must be addressed on a larger scale. Economic impact studies focused on beach nourishment appear to have little effect at the Federal level (apart from influencing members of Congress), but state-level decisions are often influenced by economic impact studies, as are local decisions. The economic impact associated most closely with beaches is tourism expenditures, including "direct" spending by tourists, as well as "indirect" spending by businesses serving tourists, and "induced" spending by owners and employees of those businesses. Surveys show that some 30-40 percent of Florida's out-of-state tourists visit Florida beaches. On an average day, there are more non-residents than residents on the beaches of the state. Peak use of beaches in Northeast Florida and the Panhandle is during summer months, while peak use in much of the Peninsula (Volusia County southward) is during the winter months. A higher proportion of tourists visit beaches in the northern parts of the state than do those in southern parts. Beach nourishment obviously sustains an area's ability to attract tourists, and also maintains or increases the high value of coastline property, generating higher property tax revenues.

Michael Barnett, Bureau Chief, FDEP Bureau of Beaches and Shores

FDEP considers resident and tourist use of beaches, but also uses potential turtle and bird nesting as another primary factor in approving or funding nourishment projects. The Florida Fish and Wildlife Conservation Commission plays a major role in such decisions. Project designs must account for the footprint of sand placed during nourishment, as well as the potential areas where such sand may move as it equilibrates via wave action, and placed material must match as closely as possible the particle-size distribution of the beach being nourished. Prior to approval, a series of surveys must be conducted to identify natural and cultural resources in a project area, and monitoring is also required during and after a project to minimize the risk of impacts. Some projects require

mitigation for unavoidable habitat impacts. Mr. Barnett discussed a number of projects and the constraints that needed to be overcome to allow beach nourishment to proceed. While nourishment projects have some environmental risks, they also can have clear environmental impacts, such as increased turtle nesting, shorebird nesting and beach dune restoration.

Inshore Dredging – Overview and Case Study, John Adams, Taylor Engineering

Dredging technology has been developing since the early days of human civilization. In the United States, dredging is done to support commerce, national security and recreation, and the U.S. Army Corps of Engineers is the largest dredger in the nation. A variety of equipment types can be used based on a series of factors and restrictions. A primary consideration for a dredging project is the spoil disposal site and significant restrictions may exist (e.g., open water disposal is usually not an option). Mr. Adams presented a series of factors that affect the feasibility of a dredging project (cost/benefit relationship, environmental issues, type of material to be dredged). Dredging projects generally require significant data collection, planning, design, permitting, monitoring and, often, environmental mitigation.

Inshore Dredging – Economic Impacts, David Roach, Florida Inland Navigation District

Mr. Roach provided a description of the Florida Inland Navigation District, which partners with the U.S. Army Corps of Engineers to maintain the Intracoastal Waterway along Florida's 12 Atlantic coastal counties. The District also provides funding for a variety of other projects associated with waterway maintenance and improvement as well as aquatic resource protection. The Intracoastal Waterway in Florida was originally constructed around the end of the 19th Century by a private company as a toll canal; Florida took over management of the canal system in 1927, and the canal system, as it exists today, was completed in 1965. The cost for maintaining the system during the next several years includes some \$140 million in spoil disposal area acquisition and preparation, and over \$10 million per year in maintenance dredging costs. Waterway usage provides a substantial economic impact: \$7.3 billion in spending associated with waterways and \$38.4 billion in waterfront property values. A survey conducted by the District suggested that cessation of maintenance of the canal system would result in several billion dollars in lost revenue and decreased property values.

Inshore Dredging – Environmental Impacts, Donald Deis, PBS&J

Mr. Deis discussed two basic types of dredging impacts: Direct (removal of aquatic resources) and Indirect (turbidity or coverage of aquatic resources). Turbidity is often seen as the primary risk for environmental impact. He noted that efforts are always underway to find beneficial uses of dredged material (e.g., beach nourishment, filling of historic dredge holes, and use as upland construction fill). Mr. Deis discussed several projects where dredge spoil was used to create new aquatic habitats in the form of seagrass beds, including one project on Smather's Beach in Key West very near the location of the AWRA Florida Section's July meeting.

Time to Renew Your Membership for 2006

We are in the process of preparing the new membership directory. Members whose dues are not paid through at least 2005 will be dropped from active status and from the directory. A good way to prevent this and assure we have your most current contact information is to take a minute to complete the application in this newsletter, or the one on our web page at www.awraflorida.org. We don't want you to miss out on all the great benefits of belonging to one of the best professional organizations in the State!

Florida Section Meeting Notice

Mark your calendars for the May 9, 2006 Florida Section meeting in Tarpon Springs. The April 2006 issue of The Watershed will provide details of this meeting.



2006 Membership Application

MEMBERSHIP DUES

New \$20 Regular
 Renewal \$ 4 Student

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	<input type="checkbox"/>	No	<input type="checkbox"/>
Are you an AWRA National Member?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If not, would you like information?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Are you interested in sponsorship opportunities?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Would you like to be part of a bi-monthly meeting team?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

SPONSOR/RECRUITER: _____

PAYMENT INFORMATION

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

Return application & your check to:
Annette Carter, Membership Services Coordinator
c/o Tetra Tech EC, Inc.
759 South Federal Highway, Suite 100
Stuart, Florida 34994

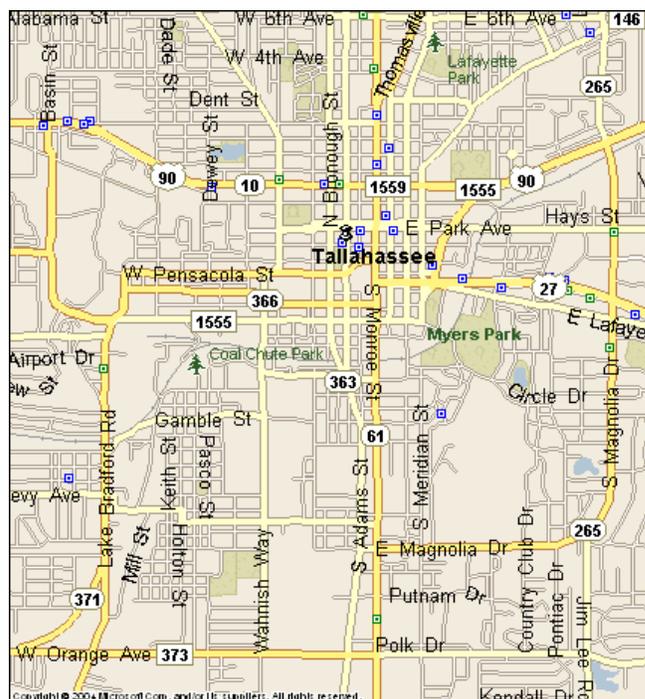
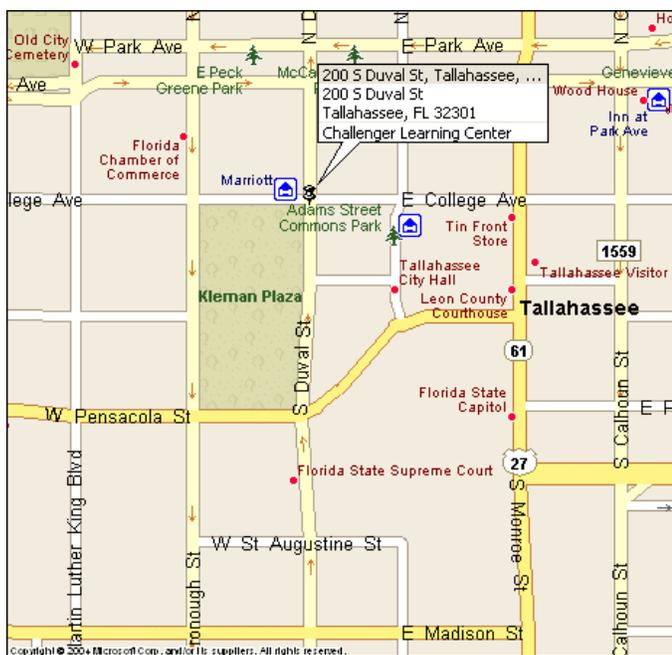
Florida Section membership dues are due January 1 and are good through December 31. Contributions or gifts to the Florida Section are deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as an ordinary and necessary business expense. For membership information, please contact Annette Carter at Annette.Carter@ttech.com or (772) 781-3403.

Section Use Only:

Date Received: _____ Check #: _____ Amount: _____

Directions to the meeting at 200 South Duval Street

The Challenger Learning Center is in the center of Tallahassee in the block diagonally northwest behind the Capitol. From I-10, take US 27 South (also named N. Monroe St.). Turn right on W. Pensacola St. (the last street before the State Capitol complex). Stay in the right lane and turn right at the next block onto S. Adams St. Take an immediate left onto W. Jefferson for one block. (You will “T” into Duval Street and can see the Challenger Learning Center to your right.) Cross Duval Street and into the entrance of the Kleman Plaza underground parking lot. Note the color and letter of your parking level. Take the elevator or stairs up to the plaza level. As you reach the plaza, you will see the IMAX theater slightly to your left (northeast), which is also the west entrance to the Challenger Learning Center.



For the most current details:

Visit the AWRA Florida Section website (www.awraflorida.org); or contact:

Candace Beauvais, (850) 574-3197, Candace_Beauvais@urscorp.com

Don McEwen, 850-566-7453, donald.mcewen@dep.state.fl.us

Allan Biddlecomb, 352-377-5821, abiddlecomb@jonesedmunds.com

Lodging: A block of rooms have been reserved for AWRA at the DoubleTree Hotel at the corner of E. Park Ave. and Duval St., which is the block north-east of the meeting location. The hotel is at the final stage of a \$7M renovation that gutted even the bathrooms and replaced all furniture, fixtures, carpet, wall and window treatment, etc. The negotiated price is \$119 per night in the Thursday through Saturday night window, which is well below the normal price. Parking is \$6.00 per night in the DoubleTree's covered parking garage. Reservations are the responsibility of each individual and must be booked by **February 20** to get the special rate. For reservations at AWRA rates, call:

Doubletree Hotel Tallahassee
 101 S. Adams Street
 Tallahassee, FL 32301
 (850) 224-5000 or (800) 222-8733

See the following URL for additional information:

<http://www.doubletree.com/en/dt/hotels/index.jhtml?ctyhocn=THLAPDT>



Thank You to our Meeting Sponsors!





AWRA Florida Section Meeting
 Friday, March 17, 2006
 Challenger Learning Center
 Tallahassee, Florida

Registration Form

Meeting Registration Deadline – March 13, 2006
 Hotel Reservations Deadline – February 20, 2006

Name _____

Organization _____

Mailing Address _____

Phone _____

E-Mail _____

Guest Name _____

Registration includes Buffet Dinner

Make checks payable to AWRA Florida Section and mail to:

Don McEwen	Registration (Includes Buffet Dinner)	_____	X \$45 =	\$ _____
2617 Tallavanna Trail	Guests	_____	X \$30 =	\$ _____
Havana, Florida 32333	Students*	_____	X \$20 =	\$ _____
	TOTAL			\$ _____

Questions:
 (850) 566-7453

Number attending the Board Meeting _____ **Dutch Treat**

* 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 _____.



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VISIT THE FLORIDA SECTION WEBSITE AT:
www.awraflorida.org

Contact Upcoming Meeting Chairmen Regarding Sponsorship or Assistance

Tallahassee
 March 17, 2006
 Don McEwen
 850-539-9508

Tarpon Springs
 May 9, 2006
 Jay Yingling
 352-796-7211 x4406

Key West
 July 13-15, 2006
 John Wehle
 561-253-4309

Jupiter
 September 15, 2006
 Patti Lodge
 561-254-1792

Ft. Myers
 November 17, 2006
 Ron Hamel
 863-675-2180

Welcome New Members!

- Daniel J. Acquaviva, P.G., Water Resource Solutions, Estero
- Christina Akly, University of Florida, Student, Gainesville
- Subrata Bandy, HDR, Jacksonville
- Ernest (Ernie) L. Barnett, South Florida WMD, West Palm Beach
- Eban Z. Bean, University of Florida, Student, Gainesville
- Rosie Byrd, South Florida WMD, West Palm Beach
- Tom Fallin, P.E., England, Thims & Miller, Jacksonville
- John R. Hall, P.E., Ludovici & Orange Consulting Engineers, Coral Gables
- R. Duane Kent, P.E., England, Thims & Miller, Jacksonville
- Anthony R. Morris, Water Resource Solutions, Ft. Myers
- Eric K. Swanson, University of Florida, Student, Gainesville
- Sharon P. Weske, Taylor Engineering, Jacksonville
- Rick Whalen, Lakeland

