

# the Watershed

Bimonthly Meeting Announcement  
The Terrace Hotel, Lakeland Florida  
May 13, 2005

## *Peace Basin Renewal ... Opportunities to Excel*

### BOARD OF DIRECTORS

Allan H. Biddlecomb, P.G.  
President  
Gainesville

Robert W. Higgins, P.E.  
Vice President  
West Palm Beach

Patrick R. Victor, P.E.  
Treasurer  
Jacksonville

Cathleen Vogel  
Secretary  
Miami

Michael D. Mesiano  
President 2004  
Jacksonville

Rand Edelstein, Jr., P.G.  
President 2003  
Fort Myers

Annette F. Carter  
Stuart

Ronald M. Edenfield, P.E.  
Fort Myers

John J. Fumero, Esq.  
West Palm Beach

Ron Hamel  
LaBelle

Carol Hinton  
Gainesville

Gary K. Howalt  
Jacksonville

Donald McEwen  
Havana

Gail L. Murray, P.G.  
Tequesta

Paul W. O'Neil, Jr., P.E.  
Tampa

Stephan J. Nix  
Jacksonville

David R. Watt, P.E.  
Palatka

Jay W. Yingling  
Tampa

Sanford N. Young  
Tallahassee

**Technical Program:** A variety of aspects will be covered regarding the Peace River Basin and its importance to the area. The Peace River and its surrounding areas contribute to the Charlotte Harbor Estuary and are very important not only to the population as a drinking water source, but also for their contributions to the ecology and environment of the area. Some of the topics to be covered are Future Water Needs/Growth, the impact of mining on the river, Dredging and Water Quality, Stream Restoration, and a discussion of the \$10 million restoration of the Upper Peace River. In addition, there will be a discussion of the newest addition to the Lakeland Parks system, Hollis Gardens and Barnett Park. Barnett Park is a progressive, interactive public park on the shores of Lake Mirror.

**Tour:** On Saturday, there will be a guided tour of Hollis Gardens and Barnett Park, with discussion of the mechanics of the system, what the park was intended to do for the citizens of Lakeland, and how it was designed.

**Location & Accommodations:** The Terrace Hotel, 329 E Main Street, Lakeland, Florida 33803, (863) 868-0800. You can also visit their website at <http://www.terracehotel.com/main.htm>. The group rate is available 3 days pre and 3 days post the event based on availability. Rates: \$89 – single/double occupancy; \$169 – one bedroom suites, single/double occupancy; and \$15 per day rental charge for crib, VCR, refrigerator. Rooms are subject to a 12% state/local tax. **Reservation deadline for the group rate is April 14, 2005.** Make sure you mention AWRA for the group rate.



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 Bimonthly Meeting**  
**The Terrace Hotel, Lakeland, Florida**  
**Friday, May 13, 2005**

***Peace Basin Renewal ... Opportunities to Excel***

11 a.m. – 1 p.m.	Board Meeting – lunch provided for Board members *	Lake Mirror Room
<b>1:00 p.m. – 5:00 p.m. – Technical Program</b>		
<b>Peace Basin Renewal ... Opportunities to Excel</b>		
1:00 – 1:30 p.m.	Lake Hancock <i>Discussion of Implementation of New Regulations</i>	Harry Downing, SWFWMD Mike Timpe, BCI
1:30 – 2:00 p.m.	Lakes Education Action Drive (LE/AD) <i>Who, What, How</i>	Johnna Martinez, LE/AD
2:00 – 2:30 p.m.	Future Water Needs/Growth <i>Description to Follow</i>	Jeff Spence, Polk County Natural Resources
2:30 – 3:00 p.m.	Impact of Mining on the Peace River <i>Description to Follow</i>	Eric Evans, Hydrogeologic
3:00 – 3:15 p.m.	Break – <i>Sponsored by Southeast Environmental</i>	
3:15 – 3:45 p.m.	Lake Hollingsworth Dredging & Water Quality <i>Description to Follow</i>	Gene Medley, Lakes & Stormwater, City of Lakeland
3:45 – 4:15 p.m.	Stream Restoration – New Protocols FCGP <i>Discussion of New Technologies</i>	John Kiefer, BCI
4:15 – 4:45 p.m.	Upper Peace River Restoration <i>\$10 Million Restoration, Includes Tenoroc &amp; FWWCC Lands</i>	Alan Jare, BCI
4:45 – 5:15 p.m.	Hollis Gardens/Barnet Park <i>Progressive, Interactive Public Park Design</i>	To Be Decided
5:30 – 6:30 p.m.	Social Hour – Cash Bar & Silent Auction <i>Sponsored by Johnson Engineering &amp; Taylor Engineering</i>	Ballroom
6:30 – 9:00 p.m.	Dinner <i>The Unique Flora &amp; Fauna of the African Southwest</i>	Ballroom John Kiefer, BCI
<b>Saturday</b>		
9:00 – 11:00 a.m.	Guided Tour of Hollis Gardens & Barnett Park	To Be Decided

\* Please note: If you plan to attend the Board Meeting as well as the Technical Program, please indicate that on your registration form. Thank you.





**AWRA NATIONAL NEWS**

The AWRA has received a "non-transferable" invitation from the White House to the "White House Conference on Cooperative Conservation: Strengthening Shared Governance and Citizen Stewardship", August 29-31 in St. Louis. This is a terrific opportunity for the AWRA which is the only organization focusing on community, conversation, and connections across disciplinary lines in water resources! For more information check out the following webpage at: [www.conservation.ceq.gov](http://www.conservation.ceq.gov).

In addition, the Second Water Policy Dialogue held in November is getting good representation. A summary letter was sent to the President and Congress, press releases and CD-ROMS are available, and meetings were held with representatives of many prominent organizations. For more information, check out our Webpage.

The AWRA and the Geological Society of America (GSA) is entering into a Memorandum of Understanding to cooperate and pursue joint meetings and areas of interest. This will allow the AWRA and GSA members to participate at meetings at discounted membership prices.

Remember to visit the national webpage or call the AWRA Headquarters at 1-540-687-8390. Anyone there will be glad to help you. Again, thanks.

-- Bob Moresi, Past President

**AWRA FLORIDA NEWS**

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

---

**Where's the New Membership Directory?**

We had some computer problems, but finally got everything to the printer in March! Hopefully you have received your copy of the membership directory by the time you are reading this. If you don't receive one by the end of April, please contact me, and we'll get one out to you right away. I hope you enjoy using this valuable networking tool. Watch this space in future editions of *The Watershed* for updates to the directory.

David Watt, Member Services Coordinator  
386-329-4355  
[dwatt@sjrwmd.com](mailto:d watt@sjrwmd.com)

***New Members (Continued from back)***

Terri R. Lowery, Jones Edmunds & Assoc., Inc., Gainesville  
Suzanne L. Maurice, Vanasse Daylor, Ft. Myers  
Stuart J. Muller, University of Florida student, Gainesville  
C. W. Musselwhite, Diversified Drilling Corp., Lehigh Acres  
Nicole R. Mytyk, University of Florida student, Gainesville  
Teresa O'Carroll, Pang-Vik Development Corp., Hawthorne  
Daniel L. Reisinger, University of Florida student, Gainesville

Christy L. Sackfield, University of Florida student, Gainesville  
Joe P. Schmidt, Diversified Drilling Corp., Tampa  
Robert F. Schmidt, Diversified Drilling Corp., Tampa  
H. Roger Sharp, P.E., Bergmann Associates, Jacksonville  
Alex R. Wood, Advanced Geospatial, Inc., Tallahassee  
James L. Smoot, Ph.D., P.E., USGS, Lawrenceville GA  
Jason Youngblood, Diversified Drilling Corp., Winter Garden

---

**Board of Directors Summary**

- Carol Hinton

President Allan Biddlecomb called the meeting to order.

- The minutes from the January meeting were distributed and approved.
- The chapter is in good shape financially. Several things have contributed to this, increased sponsorships, silent auction and lowered mail costs.

**Committee Reports**

- Membership – Membership report - 338 active members includes 2003 that haven't paid; this is an increase from last year.
- Public Education – All school superintendents have been emailed information about the Butler award. Applications are due June 5, 2005. Board members were asked to post the announcements at local nature museums and other places teachers frequent.

- Storch award is up again, members were asked to spread the word to students. The applications are due August 31, 2005 and students don't need to be a member of an AWRA student chapter. Discussion was held on starting an endowment fund for education.
- Website – The website is being update monthly.
- Student Chapters – U/F has the only chartered student chapter, but other schools have expressed interest.
- Nominating Committee – No vacancies at the current time.
- PR Committee – A press release template has been developed to send to local papers and statewide environmental papers advertising the bi-monthly meetings.

### Wakulla Springs Wrap-Up

The March 18, 2005 AWRA meeting at Wakulla Springs was a great success with approximately 60 people attending the technical session and the evening dinner and presentation. Dr. Todd Kincaid discussed and showed a video of the extensive karst cave systems in the region. The video was shown on a large screen TV in the lobby of the Lodge. The full afternoon of technical discussions gave all who attended a comprehensive understanding of the research results and on going studies and investigations by many of the public agencies and citizen initiatives to address the water resource issues. Many efforts are underway to scientifically identify sources of pollution to the regions springs. The AWRA again has been successful in helping to inform and educate public and private interests in the management of our water resources. – *Bill Stimmel*



### Technical Program Summary - March 18, 2005

– *Jay Yingling*

**Overview of the Wakulla Springs Basin** - Mr. Stevenson, Coordinator, Wakulla Springs Basin Working Group, highlighted some of the efforts to protect the Wakulla Springs contributing groundwater basin including a protective land use buffer zone over the cave system leading to Wakulla Springs, research on the potential impacts of the City of Tallahassee Wastewater Treatment Plant sprayfield, and raising awareness of Tallahassee citizens and officials of impacts to Wakulla Springs.

**Groundbreaking Characterization of the Karstified Floridan Aquifer in the Woodville Karst Plain of North Florida** - Dr. Kincaid, Vice President, Hazlett-Kincaid, Inc., described the groundbreaking technology of using cave divers to place flow and velocity monitoring devices at discrete points in the cave system leading to Wakulla Springs. The devices are connected to land surface by wells for periodic monitoring. The monitoring has shown velocities to be very high through these preferential pathways and has significantly added to the knowledge of the dynamics of the system.

**Realistic Numerical Modeling of Groundwater Flow Based on Quantitative Site Characterization in the Woodville Karst Plain of North Florida** - Dr. Hazlett, President, Hazlett-Kincaid, Inc., demonstrated how direct quantitative knowledge of flow and velocity characteristics such as that collected by monitoring devices placed by cave divers can be used in the FEFLOW model to significantly improve the accuracy of groundwater flow modeling in Karst environments. The "Karstmod" model incorporating the direct conduit data accurately predicted changes in flow in Wakulla Springs due to storm impulses.

**Nitrate Loading in the Lower St. Marks and Wakulla River Watersheds** - Dr. Pratt, Chief, Bureau of Ground Water Management, Northwest Florida Water Management District, indicated that nitrate loadings increased from 0.3 mg/l in 1971 to a high of more than 1.0 mg/l in the nineties. There is some question as to what is the limiting

nutrient in terms of impacts to the rivers as there is high phosphorus content in the natural rock matrix in the watersheds. Nutrients in groundwater may not be the issue as, even at high spring flow, only about 16% of the water comes from the Floridan. Sources of nitrate input in the vicinity are wastewater treatment plant effluent, atmospheric deposition, wastewater treatment plant residuals and commercial fertilizer.

**Surface/Groundwater Interactions in Karst** - Dr. McGlynn, Technical Director, McGlynn Laboratories, Inc., described a study of the Woodville recharge basin funded by Leon County and the EPA. The basin is only one of three places in the world with all three features of karst hydrology – disappearing lakes, disappearing streams and underground rivers. Nitrates appear to be migrating from the City of Tallahassee sprayfield and being diluted in conduit flow to Wakulla Springs but septic tank loadings are increasing and may be overwhelming the impacts from the sprayfield. The best solution may be to pipe effluents to basins with clay layers.

**Update on the Southeast Farm Collaborative Study Investigating Effluent Movement in the Floridan Aquifer** Mr. Davis, Hydrologist, USGS, discussed a USGS/City of Tallahassee study to trace movement of groundwater flow from the Southeast Farm sprayfield. Nitrate levels in groundwater below the sprayfield are 5 to 6 mg/l and are worse near the center pivots. They will trace the movement of compounds typically coming from wastewater treatment plants, many of which are drug compounds.

**What an Engineer Can Learn** – Ms. Heiker, P.E., Stormwater Management Coordinator, Leon County Public Works. The thrust of Ms. Heiker's presentation was that engineers could use better input from natural science professionals in designing projects that achieve the desired result. Many regulatory standards don't make sense or produce the maximum bang for the buck. Engineers could also use help in describing the intangibles of projects such as potential habitat changes.

**Positive, Successful, Citizen Initiative to Improve the Environment – Blueprint 2000** - Mr. Diestelhorst, Chairman, Capital Cascade Council, described a Tallahassee-area voter approved one-cent sales tax to implement projects to make roadways more environmentally friendly and aesthetically pleasing, acquire conservation easements on sensitive lands and create a stormwater treatment project featuring a multi-use trail, parks and water features including off-line wetland treatment.

**Wakulla Springs Basin Successes: Making a Difference** - The park started out with about 2,400 acres in 1994, is currently 10,000 acres, and is proposed to be expanded to 14,000 acres. Mr. Savery, Park Biologist, Wakulla Springs State Park, Florida Department of Environmental Protection, described an array of biological and water quality studies and surveys aimed at protecting the integrity of the park's natural resources. Several projects have also been implemented to clean up and repair/prevent erosion damage at several sinks and to replace septic tanks with a sewer system in the park.

**Florida Green Lodging Certification Program** - Ms. Moore, Environmental Specialist III, Green Lodging Certification Coordinator, Florida Department of Environmental Protection, indicated that the program in a voluntary program in which lodging facilities commit to water conservation, energy efficiency, waste reduction, clean air practices and communication. Participants conduct environmental self-assessments, demonstrate environmental improvements and, if successful, are certified by trained assessors. Hotels benefit by saving money, marketing and preferential bookings for training and conferences. Certified lodging can be found at [www.floridagreenlodging.com](http://www.floridagreenlodging.com).

---

### Student Chapter News

There are now several universities with Student Chapter activity. Anyone interested in Student Chapters, especially other students or nearby water resource professionals, are encouraged to make contact with the persons listed and get involved. Anyone with additional information or questions regarding Student Chapters can contact Carol Hinton [chinton@treeo.uf.edu](mailto:chinton@treeo.uf.edu) or Allan Biddlecomb [abiddlecomb@jea.net](mailto:abiddlecomb@jea.net).

University of Florida: Gordon Brown [awra@ees.ufl.edu](mailto:awra@ees.ufl.edu), Faculty Advisor: Dr. Jim Jawitz

University of South Florida: no recent activity, Faculty Advisor: Dr. Mark Rains [mrains@cas.usf.edu](mailto:mrains@cas.usf.edu)

University of Central Florida: Marie Romah [sromah@pegasus.cc.ucf.edu](mailto:sromah@pegasus.cc.ucf.edu), Faculty Advisor: Dr. Ola Nnadi

Florida State University: no known activity, previous Student Chapter within Geology Department.

University of North Florida: student chapter in development, Faculty Advisor: Dr. Stephen Nix [snix@unf.edu](mailto:snix@unf.edu)

Marie Romah reports from UCF that they have formed an AWRA Student Chapter recognized by the university as an official student organization. They are combining with FWEA and AWWA since each of those organizations share a large membership base.

The Student Chapter at University of Florida has been very active [ *we may need to nominate them for the 2005 Outstanding State Section ☺ AB* ].

- UF students attended both the Palm Coast and Wakulla Springs Florida Section meetings.
- Dale Helms & Brian Megic of PB Water (Orlando) spoke at a Student Chapter meeting on “Water Resources Engineering Consulting Issues in Central Florida.”
- Assisted with the Environmental Career Expo on campus on January 27<sup>th</sup> (200 students & 25 public/private employers).
- On January 29<sup>th</sup>, we participated in the Air Potato Round-Up, helping gather the invasive species fruit from the woods behind the UF President’s house.
- On February 22<sup>nd</sup> & 23<sup>rd</sup>, we participated at the UF E-Fair to educate K-12 students about water resources. We borrowed ACEPD/SJRWMD/WAV’s surface water Enviroscope and Aquifer models to demonstrate surface and groundwater issues in Florida. Nine members worked with approximately 150 students over the 2 days.
- On March 26<sup>th</sup>, 5 members battled drizzle and rain to participate in the Santa Fe Lakefest & Clean-Up. In 2 hours we collected 50 lbs of garbage and 60 lbs of recyclables.
- On April 2<sup>nd</sup>, we gathered at Gilchrist Blue Spring for a cookout, beach volleyball, swimming, and camping.
- On April 12<sup>th</sup>, UF AWRA co-hosts the 2005 Environmental Research Poster Symposium. The State Section has donated \$150 to be awarded to the best graduate & undergraduate Water Resources Research posters.



Santa Fe Lakefest & Cleanup  
March 26<sup>th</sup>, 2005



UF E-Fair AWRA Table  
Surface and Aquifer Models  
February 22<sup>nd</sup> & 23<sup>rd</sup>, 2005



Camping Trip to Blue Spring  
April 2<sup>nd</sup> 2005

---

### **Time to Renew Your Membership for 2005**

Florida Section membership dues for 2005 were due January 1<sup>st</sup>. Please use the membership application form in this newsletter, or the one on our web page at [www.awraflorida.org](http://www.awraflorida.org). Thank you for your continued support of water resources education through AWRA!

---

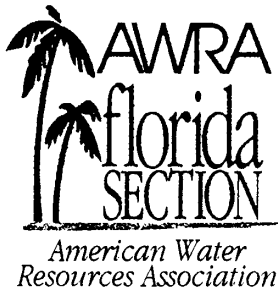
### **Announcements**

#### **J. B. Butler Science Grant**

We have advertised this grant and the due date is 1 June 2005. Please pass the information on to teachers or administrators in your area.

#### **William V. Storch Scholarships**

The 2005 Storch Scholarships are available for a graduate and undergraduate student. Please see the web site for details.



# 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

For membership information, please contact David Watt at (386) 329-4355 or [dwatt@sjrwmd.com](mailto:d watt@sjrwmd.com)

## 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 & 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.

### Section Use Only:

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

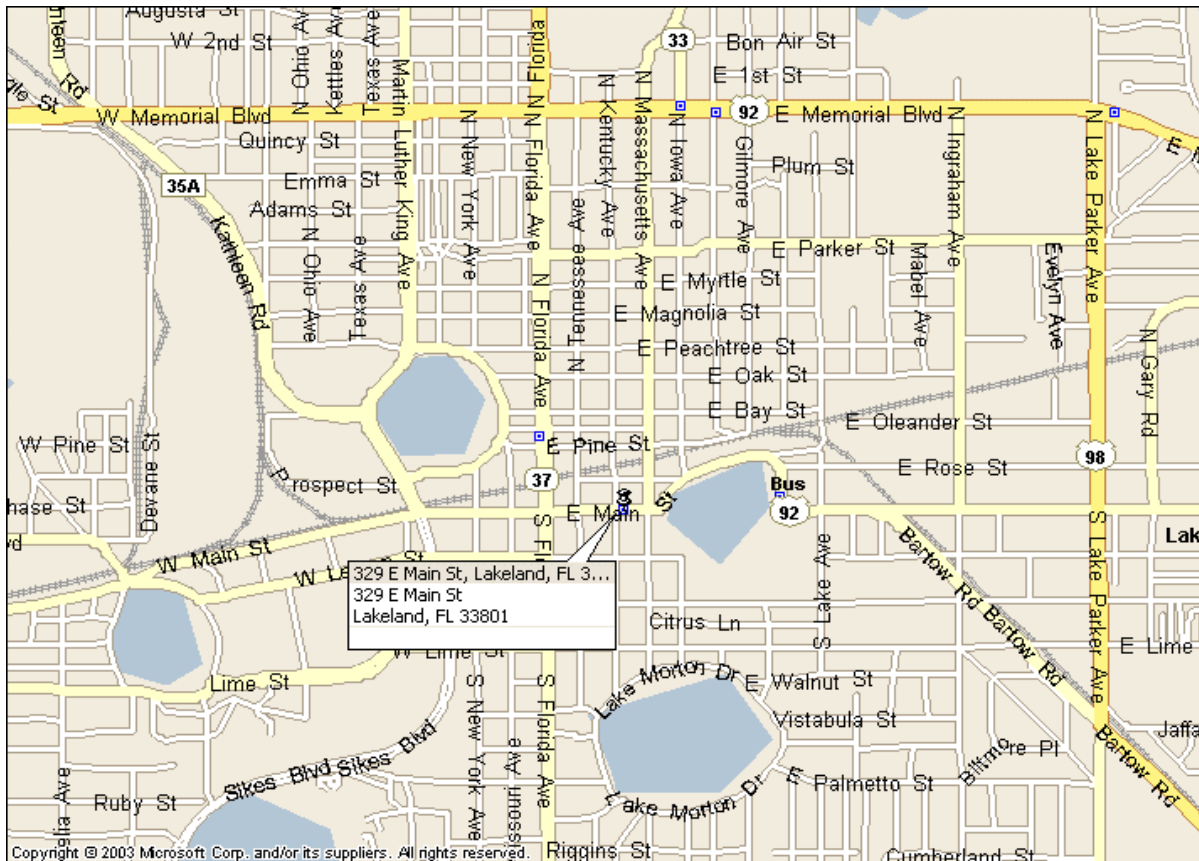
**AWRA Florida Section Meeting**  
**May 13, 2005**  
**Lakeland, Florida**  
***Peace Basin Renewal ... Opportunities to Excel***

The Terrace Hotel  
329 E Main Street  
Lakeland, Florida 33803  
(863) 868-0800

\$89 – single/double occupancy  
\$169 – one bedroom suites, single/double occupancy  
\$15 – per day rental charge for crib, VCR, refrigerator  
<http://www.terracehotel.com/main.htm>

**Reservation deadline for group rate: April 14, 2005**

The group rate is available 3 days pre and 3 days post the event based on availability. Rooms are subject to a 12% state/local tax.



*The Terrace Hotel*

**Meeting Sponsors**  
**Johnson Engineering**  
**Southeast Environmental**  
**Taylor Engineering**

***Thank You!***





**AWRA Florida Section Meeting**  
 Friday, May 13, 2005  
 The Terrace Hotel, Lakeland, Florida

## Registration Form

Hotel Reservations Deadline – April 14, 2005

Meeting Registration Deadline – May 6, 2005

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

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

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

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

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

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

*Registration includes Friday night dinner.*

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

Paul O'Neil, PE, Director SWFWMD - TSV 2379 Broad Street Brooksville, FL 34604-6899 (352) 796-7211, ext. 4336	Registration (Includes Dinner)	\$50	X \$___ = \$_____
	Guests	\$40	X \$___ = \$_____
	Students*	\$10	X \$___ = \$_____
	<b>TOTAL</b>		\$_____
	<b>Number attending Board Meeting</b>	_____	
<b>Number attending Saturday Tour</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**

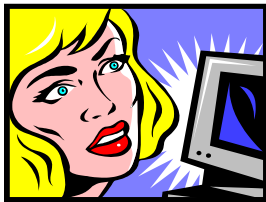
We have been approved by the Florida Board of Professional Engineers (FBPE provider # EX00089) to offer Professional Development Hour (PDH) credit to Florida registered Professional Engineers. You will only receive credit if you attend the entire technical session. Please check the box below and include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



**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  
 Phone (352) 796-7211 • Fax (352) 544-2328  
[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**

<b>Lakeland</b> May 13, 2005 Paul O'Neil/Walt Reigner 863-667-2345	<b>Key West</b> July 28-30, 2004 John Wehle 561-253-4309	<b>Cedar Key</b> September 30, 2005 Carol Hinton 352-392-9570 x109	<b>Ft. Myers</b> November 18, 2005 Ron Hamel/Ron Edenfield 863-675-2180
---	---	---	--

**Welcome New Members!**

Jehangir (Jango) H. Bhadha, University of Florida student, Gainesville  
 Barrie P. Chenea, Diversified Drilling Corp., Winter Garden  
 Ralph F. D'Elia, Diversified Drilling Corp., Lehigh Acres  
 Kimberleigh C. Dinkins, HydroMentia, Inc., Ocala  
 Mary K. Hamilton, University of Florida student, Newberry  
 Tatiana Xiumara Hernandez, TetraTech/HAI, Orlando  
 Robert "Ben" Huss, Jr., Diversified Drilling Corp., Dade City  
 Neil A. Johnson, P.G., Diversified Drilling Corp., West Palm Beach  
 Andrew J. Kaye, University of Florida student, Gainesville  
 Bruce Khosrozadeh, Civil Services, Inc., Deerfield Beach  
 Scott L. Knight, University of Florida student, Gainesville  
 (New Members Continued under Membership Directory Info)

