

# the Watershed

*AWRA Florida Section Bi-Monthly Meeting*  
Jupiter Beach Resort  
Friday, September 15, 2006

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**Technical Program:** The Florida Section of the American Water Resources Association will hold its September meeting at the recently refurbished Jupiter Beach Resort in Jupiter, Florida (<http://www.jupiterbeachresort.com/>). The technical session is scheduled for Friday, September 15, 2006, from 1:00 p.m. through 5:30 p.m.

A special program note – Allan Phipps, a magnet school instructor at South Plantation High School's Environmental Science and Everglades Restoration Magnet Program and recent recipient of a J.B. Butler Science Grant, will give a presentation on his students' RARE CORAL (Restoration through Artificial Reef Education, Creating Outreach Reefs through Alternative Learning) project.

Following the technical session there will be a social hour graciously sponsored by CDM. Immediately following the social hour a buffet dinner will be served.

**Student Sponsorship:** You may sponsor a student to attend the event by paying the student registration fee. If you wish to sponsor a student, please fill in the requested information on the registration form. You may choose to sponsor a specific student or simply provide the registration fee and we will have a random drawing to select the student(s).

**Location & Accommodations:** Jupiter Beach Resort, 5 North A1A, Jupiter, Florida. Tel: (800) 228-8810; Fax: (561) 747-3304. A block of rooms has been reserved for those attending the Florida Section, American Water Resource Association meeting. Room rates are \$129 plus a \$5.00 per day resort fee and 10.5% state sales tax. When you call to make your reservation be certain to mention you are with the Florida Section, AWRA to receive the block discount.

**Hotel reservations deadline is August 25, 2006 to receive the block 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*



**Florida Section Bi-Monthly Meeting**  
**Friday, September 15, 2006**  
**Jupiter Beach Resort**  
**5 North A1A • Jupiter, Florida**

- 11:00 – 1:00 p.m. **Board of Directors' Meeting** (Lighthouse Room)  
*Dutch Treat; Section members welcome\**
- 12:30 – 1:00 p.m. **Registration** (Marlin Room)
- TENTATIVE AGENDA (DRAFT)**
- 1:00 – 1:15 p.m. **Welcome and Meeting Overview** (Marlin Room)
- 1:20 – 2:00 p.m. **RARE CORAL Project**  
*Allan Phipps, South Plantation High School Environmental Science & Everglades Restoration Magnet Program; J. B. Butler Science Grant Recipient*  
*(Restoration through Artificial Reef Education, Creating Outreach Reefs through Alternative Learning)*
- 2:00 – 2:40 p.m. **Innovative Reuse Projects**  
*Carlyn Kowalsky, Department Director, Water Supply Department, SFWMD*
- 2:40 – 2:55 p.m. **Break**
- 3:00 – 3:40 p.m. **Hoover Dike: Yesterday, Today and Tomorrow**  
*Richard Bonner, Deputy District Engineer for Project Management, ACOE Jacksonville District*
- 3:40 – 4:20 p.m. **Hurricanes and Water Management Preparedness – Water Levels in Canals and Lake Okeechobee**  
*Bob Howard, Director of Operations, SFWMD*
- 4:20 – 5:00 p.m. **The Structural Integrity of the Hoover Dike**  
*Les Bromwell, Sc.D., P.E., Principal Engineer, BCI Engineers & Scientists, Inc.*
- 5:00 – 5:15 p.m. **Panel Discussion – Question and Answer**
- 5:15 – 5:30 p.m. **Summary and Wrap Up**
- 5:30 – 6:30 p.m. **Reception** (Terrace)
- 6:30 p.m. **Buffet Dinner** (Bonito Room)
- My First Year, Hurricanes and Water Management**  
*Carol Wehle, Executive Director, SFWMD*

\* Please indicate on the registration form if you plan to attend the Board Meeting.





**AWRA NATIONAL NEWS**

*Upcoming conferences hosted by AWRA*

- ◆ Wetlands Restoration Dialogue, September 18-20, Ft. Lauderdale (early bird registration deadline is August 28<sup>th</sup>!)
- ◆ Annual Water Resources Conference, November 6-9, Baltimore, MD (early bird registration deadline is October 16<sup>th</sup>!)
- ◆ Third National Water Resources Policy Dialogue, January 22-23, 2007, Arlington, VA
- ◆ Emerging Contaminants of Concern in the Environment, June 25-27, 2007, Vail, CO (abstract deadline is February 5<sup>th</sup>, 2007!)

**National AWRA Board of Directors Election Closes August 15<sup>th</sup>!**

If you are an AWRA National member, please remember to cast your vote for the 2007 AWRA Board of Directors. Our own Bob Moresi and David Watt are on the ballot. The election is done electronically, and voting members have just been sent an e-mail reminder to logon and vote!

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

**AWRA FLORIDA NEWS**

- Membership Update
- Board of Directors Summary
- Technical Program Summary
- Announcements

**Membership**

The 2006 Membership Directory is out! All Section Members should have received their copy of the directory by now. If you have not received a copy, please contact me or you can pick one up at the registration desk during the Jupiter meeting in September.

If you have not paid dues for 2006, take a minute to complete the application in this newsletter, or the one on our web page at [www.awraflorida.org](http://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!

Since the last newsletter we have had twenty new members join our organization!

*Annette Carter, Membership Services Coordinator  
(772) 781-3403; email: [annette.carter@tteci.com](mailto:annette.carter@tteci.com)*

**Board of Directors Summary**

- by Cathy Vogel

The Florida Section AWRA Board of Directors met in Key West on Thursday, July 13th, immediately preceding the annual meeting. The Board received a preliminary report from Marji Hightower on statistics for this year's Key West gathering: 142 people had registered for the conference, but 260 for the banquet. As always, this meeting generates quite a few sponsorships, and Hightower reviewed them and distributed a roster of meeting attendees.

As you may have noticed while attending the meeting, the Wyndham Casa Marina has been sold and is undergoing a complete renovation and reconstruction. We can expect a spiffy new hotel for the '07 annual meeting. However, the Florida Section's contract with the Casa Marina only extends through our 2007 meeting. John Wehle reported to the Board that he would be meeting to negotiate the future availability of the facility for annual AWRA gatherings.

The Board voted to approve a number of education-related expenditures. Annually, the Florida Section AWRA has contributed to the National AWRA education fund - the Herbert Fund. This year again, the Board supported a \$500 contribution to the fund. Closer to home, it was reported by Rosanne Clementi that the Section had received six applications for JB Butler Awards totaling \$2,900. On review by the Board's Education Committee, it was deemed that all six applications merited funding, and the Board

unanimously voted to award all six requests. The Board also discussed ideas for raising funds for the Sanford N. Young Scholarship...stay tuned; one idea included a Sandy-A-Thon to solicit pledges from Sandy's many friends and colleagues!

Is a Florida Section Board member trying to track you down? If so, it may be because you are delinquent in your membership. Annette Carter, Chair of the Membership Committee, distributed lists of inactive members, with the idea being that Board members should contact those that they know and encourage them to re-join the organization. Lo and behold, many on the list were fairly active participants in Section meetings - including even a few Board members! It appears that folks simply are not remembering to pay their annual dues. This issue is soon to be an agenda item for further Board debate.

Expect to receive the annual ballot for electing Board members this coming month. There is one open seat on the Board, and Section President Bob Higgins is leading the Nominating Committee to develop the final slate of candidates. This will be put before the membership in September. Board members and officers will be named at the November meeting, and officers will assume their responsibilities in the 2007 calendar year.

Remember, Board meetings are always open to any member of the Florida Section. So, please feel free to arrive a little early at one of the bi-monthly meetings and sit in on the lively discussions. We welcome member input.

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### **Education Committee Report** - by Rosanne Clementi

The Section was very busy this July. Lots of wonderful things happen in Key West.

JB Butler Science Grants were awarded to the following teachers/institutions: Sara Charbonnet, Westwood Middle School, Gainesville; Lisa Andrews, Big Cypress National Preserve, Ochopee; Suzanne Hall, Woodlands Elementary School, Longwood; Melissa Henkel, Westwood Middle School, Gainesville; Allan Phipps, South Plantation High School, Plantation; and ZoEllen Warren, Oak View Middle School, Newberry. The total amount awarded to these fine teachers was \$2,812.21. We are able to give these grants thanks to all of you who participate in this incredible organization.

Everyone worked hard to make the Key West meeting very special. Thanks to Marji Hightower for all her help and support and John Wehle for letting us crash his party.

We welcomed four of William Storch's children and one of his grandchildren. We had a wonderful time honoring their father. Two of our Storch recipients were at the meeting, Jehangir Bhadha and Beth Bevc and met the Storch family. This gave them a chance to see how their father's legacy has touched so many.



The Board of Directors approved a policy making the Sanford Young Scholarship an endowed fund so that only investment earnings will be used to provide scholarships. The fund is currently in an interest-bearing account, and alternatives are being evaluated by the Board to increase the earnings. We are very optimistic about seeing the principal of the fund grow through additional donations in the coming months and years. The Board also voted to provide Young Scholarships in the amount of \$2,000. The Education Committee is developing the application process for the Scholarship.

This year we started a new tradition, the Sanford Young Scholarship Wine Tasting Event. Fifteen people participated and had an incredible time learning how to identify different types of wines. This event raised \$450.00 for the SNY Endowment Fund. Thanks again to Ed Finch of Diversified Drilling for his

knowledge and fine taste in wines. We are planning an even bigger wine tasting event next year. Look for the details in the July 2007 Newsletter.

### **Key West Silent Auction**

The committee of Rosanne Clementi, Annette Carter and our new volunteer Sonia Watt plus countless others who pitched in put together a fun silent auction. We had prints, wines, beer, martini baskets, condos, beach houses and fishing. Bubba Docs Royal Table was also a smashing event. Ask the people who were at Table 7! We raised over \$7,000! The final numbers are not in but we will give you the figures in the next newsletter along with a summary of what we have given for education since 2000. One half of the proceeds from the auction will go the SNY Endowment Fund and the other to our other education funds. Thanks so much to the following donors who made this auction possible: John and Carol Wehle, David Moore, Southeast Environmental Solutions, BRA, Integrated Water Solutions, Cognia Carta, Planning and Economics Group, RSH, CDM, Creech Engineers, Black and Veatch, Catalina Group, Johnson Engineering, MacTec, Halcrow, Kristin Bennett, ESI, PEER, Weston Engineering, Tetra Tech, BEM, Littlejohn Mann, David Pyne, Jay Yingling, South Florida Water Management District Employees, Environmental Turf, Jupiter Labs, Lewis Longman and Walker National AWRA and El Presidente, Bob Higgins. Thank you to all who participated and made this event so successful.

If you enjoyed the silent auction and Bubba Docs Royal Table, it is not too early to tell us what you would like to donate for next year!

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### **Technical Program Summary**

- by Doug Durbin

### **AWRA Florida Section Strategic Plan – Bob Higgins, Florida Section President**

The Board of Directors of the AWRA Florida Section has recently developed and approved a strategic plan to better define and guide the major activities of the Section. The plan provides the Mission of the Section: *“to promote understanding of water resources and related issues by providing a multidisciplinary forum for information exchange, professional development, and education”* and its Vision: *“to be recognized as the preeminent organization for information exchange about water resources issues in Florida.”* The plan provides guidance on Member Growth and Development, Comprehensive Meeting Planning, Comprehensive Scholarship and Award, and Cohesive annual Work Plan Development. The plan is scheduled for review and possible revision in 2010.

### **Granulometric and Metal Distributions for Post-Katrina New Orleans Surficial Storm Sediments – Jehangir Bhadha, Graduate Student, Soil and Water Science Department, University of Florida**

A team of graduate students conceived and performed an evaluation of sediment characteristics at several locations around New Orleans after Hurricane Katrina. Sediments transported by floodwaters were hypothesized to be potential sources of heavy metals, which could bring threats of human exposure to toxic materials. Sampling sites were chosen inside and outside of areas that experienced flooding following levee failures. Analyses of the samples comprised a detailed sediment particle size determination, as well as an assay for priority heavy metals. Analytical results showed that areas subjected to flooding after Katrina had sediments with higher levels of copper, lead and zinc than non-flooded locations. A clear distinction could also be made between sediment particle size fractions and associated heavy metals content in flooded areas versus away from flooded areas. Additional work is under way by the students to further evaluate the analytical data. This research effort was conducted by a team of student members of the AWRA Florida Section, and was funded in part by the Florida Section.

### **Stormwater and Lakes Management Planning: Strategies for Water Quality Improvement – Ann Shortelle, Ph.D., MACTEC**

– Stormwater planning has generally focused on water quantity to provide flood protection, but stormwater inputs from developed areas pose a significant threat to lake water quality. To minimize the potential for adverse conditions arising, planning and implementation of strategies for managing inputs of nutrients and other potential pollutants is essential. Urban development increases the rate of water quality decline and decreases open space availability, so it is more important than ever before

to include water quality improvement in the stormwater planning process. Retrofits and upgrades to comply with TMDL reductions for impaired water bodies can be very costly, and it is generally more cost effective and efficient to prevent nutrients from reaching the receiving water bodies than to treat the problems once they have developed. Numerous strategies and best management practices for protecting lake water quality have been developed for regulatory agencies, local governments and lakefront property owners associations. Education of regulators, developers, resource managers and lakefront property owners is a key step in implementing these strategies. Protective measures can include buffers and setbacks, proper management of shoreline activities, as well as control of stormwater inputs through the use of pre-treatment swales and ponds.

**What is the Appropriate WMD Role in TMDL's – Stephen Lienhart, P.E., Vice President, Water Resources, URS Corporation** – Establishment of Total Maximum Daily Loads for potential pollutants in Florida's surface waters is mandated by the US EPA and the day-to-day process is largely being carried out by the Florida Department of Environmental Protection. The process is challenging in terms of data requirements, use of water quality models and interpretation of appropriate needs for water bodies. As managers and regulators of surface water resources, the State's water management districts (WMDs) must also understand, manage for, and regulate with respect to, the established TMDLs. Possible roles for WMDs with respect to TMDLs include (1) acting as regulators of TMDL requirements since Environmental Resource Permits and other approvals issued by the WMDs must consider TMDLs, (2) serving as regional 'integrators' of TMDL planning, and implementation, (3) serving as regional 'visionaries' to provide research, innovation and solutions to resolve TMDL problems, (4) being a regional data repository for information associated with TMDLs, acting as a facilitator to work between FDEP and communities, and (5) collecting new data to refine TMDLs, (6) providing funding for cooperative projects, infrastructure improvement, and public outreach on TMDL issues. Through their combined responsibilities as regulators and water resource managers, the WMDs are major stakeholders in the TMDL process and should use this position to take a leadership role and develop long-term regional solutions.

**The Challenges of Reformation of the Peace River Manasota Regional Water Supply Authority – Doug Manson, Cary, O'Malley, Whitaker & Manson, PA.** – The Peace River Manasota Regional Water Supply Authority is the second largest water supply authority in Florida. The water production facility was originally privately owned and operated by General Development Utilities until the Water Supply Authority was formed and began serving as a water wholesaler. The primary source of water is an intake point and treatment plant on the Peace River in DeSoto County, with surface and underground storage used to provide water when river flows are not sufficient to meet customer demand. The Authority is comprised of Charlotte, DeSoto, Manatee and Sarasota Counties. These counties also serve as the major customers of the Authority, along with the City of North Port. The Authority's structure and its governing documents had become cumbersome and even internally conflicting, so the Authority embarked upon a major reorganization of itself. The reorganization process was logistically challenging and politically complex, and has resulted in a number of significant changes in the planning and management of this water supplier. A key provision of the reorganization was that the new structure would completely supersede all prior provisions and commitments, thus eliminating future confusion resulting from "grandfathering" of certain parties or conditions.

**MFLs and Water Reservations, What is the Difference and Why Should We Care? – Patricia Strayer, BEM** – Water management in Florida includes an array of processes intended to help resource managers distinguish between water available for human uses and that which is to be retained for environmental purposes. Each can be generally associated with a level of expected environmental protection. Water Reservations identify the amount of water from a given source available for human uses after natural systems have been adequately protected. Consumptive Use Permitting is similarly designed to result in "No Harm" to the environment. Minimum Flows and Levels are established to prevent, or reverse, "Significant Harm" to water resources or ecology. The declaration of a Water Shortage by a Water Management District is made to prevent "Severe Harm" to environmental water resources. In general, the distinction of the various levels of "harm" is related to the amount of time required for a natural system to recover from excess human water use. For example, one criterion for "Significant Harm" is an adverse change that will require more than two years for recovery to occur. "Serious Harm" is viewed as

permanent or irreversible change to a water resource. Each of these protective mechanisms has the same general intent – to protect natural systems while providing for human water uses – but the overlap among them is complex and can bring about confusion in their application for specific water resources.

**Price and Single Family Residential Water Demand – Jay W. Yingling, Senior Economist, SWFWMD** – The Southwest Florida, St. Johns River, South Florida, and Northwest Florida Water Management Districts co-funded an evaluation of the relationship between the cost of water and residential water use. A key question addressed by the study was whether block-rate cost structures (where water becomes increasingly expensive as more is used) have any effect on limiting residential water use. A primary tool for this investigation was a large-scale survey of households. Some 7,200 target households were identified across Florida, in areas with and without a block-rate cost structure, and spanning a range of income levels. Surveys were mailed and yielded an impressive 50% response rate. Analysis of survey results indicated that many customers were unaware of the rate structure of their water source. More importantly, many customers in areas with a block-rate cost structure responded that they do in fact attempt to use less water to reduce their water bill, and this effect was more pronounced for higher income homes than low-income homes. While this pattern may partially be due to lower income homes requiring less water to irrigate their property, it also confirms that even higher-income customers are attentive to escalating cost of water and will attempt to reduce use to save money. Irrigation can be the predominant use of water for most residential customers, and although the use of accessories like rain sensors and soil moisture sensors can reduce irrigation needs dramatically (and thus lower water bills), only a minority of homes has such accessories. Little emphasis has been placed on residential irrigation conservation by water management districts and water utilities. A rate simulation model incorporating the results of the study is available, free of charge, to utilities in the participating water management districts.

**Panel – Development of a Refined Regional Dynamic Decision (R2D2) Support System for Water Supply Planning in the Lower East Coast of Florida – Woody Wodraska, PBS&J, Moderator**

Human population growth in Southeast Florida is still dramatic and massive amounts of water are required for public supply (for example, Miami-Dade County alone requires some 350 million gallons of potable water a day). There is limited potential for increasing water quantities from existing sources, as exemplified by the Florida Keys Aqueduct Authority, which has a wellfield on the mainland but has been told it must look to other sources to provide any additional water quantities needed for growth. Desalination is a major potential source, but costs are higher than for conventional surface or groundwater. At the present time, direct reuse of treated wastewater is not an option, primarily due to public perception, but also due to uncertainty of treatment capabilities. However, indirect reuse is already being implemented, where reclaimed water is used to recharge groundwater supplies adjacent to wellfield areas. To continue to meet growing public supply needs, an array of water sources must be evaluated and prepared for use.

**Taking a Break from Traditional Remediation and Reuse Solutions – Bill Fagan, AquaFiber Technologies** – AquaFiber Technologies was founded in 2000 as a remediation firm. The company has conducted research and development on systems designed to reduce nutrient levels and other pollutants in surface waters and now markets products developed through this testing. The primary system design developed by AquaFiber Technologies is very space efficient, using systems of channels to treat water in much less land area than conventional wetland treatment systems. This technology can be applied to final treatment for wastewater, as well as nutrient removal for natural eutrophic water bodies. One focus of the company is the production of reuse water to offset demands for potable water supplies, and some applications of its technology have even shown that treated water can meet drinking water standards.

**What \$400 Million Will Do – The Everglades Agricultural Area A-1 Reservoir – Harold Aiken, Program Manager, Acceler8, SFWMD** – Historic draining of portions of the Everglades has led to environmental impacts and ecological damage. The Comprehensive Everglades Restoration Plan (CERP) was developed to reverse some of the damage through a series of water and land management projects. One of these projects is the construction of the A-1 Reservoir, which will be the largest reservoir in Florida. This reservoir is intended to help protect water quality and improve water quantity management associated with Lake Okeechobee, the Caloosahatchee River and the Everglades. To maximize the safety and

lifetime of the impoundment, rigorous design features were incorporated into the construction specifications. The reservoir will contain up to 62 billion gallons of water. Groundbreaking is scheduled for Summer 2006.

**Update on the Herbert Hoover Dike – Les Bromwell, Principal Engineer, BCI Engineers and Scientists, Inc.** – The Herbert Hoover Dike around Lake Okeechobee was constructed nearly 80 years ago, without modern engineering technology. Lessons learned from levee failures in New Orleans during Hurricane Katrina suggested that the Hoover Dike may pose a serious threat to human safety and property. A scientific review team was assembled to assess the status of the dike and produced a final report in April 2006. The dike, completed in 1938 and extending some 140 miles around the lake, is constructed of a variety of heterogeneous native materials. There was no sorting of the construction materials and no compaction during construction, leading to many seepage and piping problems through the structure. The US Army Corps of Engineers began to notice seepage problems in the 1980's, but only minor repairs were implemented, and a similar pattern of problems and minor repairs occurred in the mid-1990's. While continuous erosion and seepage problems pose a chronic threat, the risk of catastrophic failure associated with a tropical storm or hurricane is predicted to be extremely high under certain storm conditions. In April 2005, Congress redesignated the dike as a "dam" which brings a higher level of safety considerations and greater funding for increasing the integrity of the dam. One section of the dam is already undergoing significant repairs, but renovation of the entire dam could take up to 25 years at the current pace and funding level. The review panel's 2006 report recommended that planning *for* the dam's failure should be done in conjunction with the planning to *prevent* such failure. It was also recommended that the State of Florida, through the South Florida Water Management District, take the lead in emergency planning and public safety preparations.

**Update on the History of Florida Water Management Project – Dave Fisk, St. Johns River Water Management District** – This project was begun three years ago to document and memorialize the key actions and individuals that have led the evolution of water management in Florida. A steering committee guides the accumulation of documents and personal oral interviews that are becoming the project's archive. The archive is maintained by the Proctor Oral History Program at the University of Florida, and will ultimately be available to the public through the University's central library. The majority of the archive items are expected to be available digitally via the Internet.

**Water Management Districts – Executive Director's Panel Discussion – John Wehle, Moderator**

The SFWMD has completed a number of projects ranging from land acquisition, to water control system enhancement, to new in-the-ground projects. Many other projects have been begun and/or are still underway, including CERP initiatives such as the Acceler8 projects, ongoing data collection, hydrologic modeling, extensive exotic species management and general operations and maintenance. A major focus has been alternative water supply planning and implementation.

The SJRWMD is focusing on water supply issues, including cooperative efforts with SWFWMD and SFWMD addressing population centers near the boundaries of these three largest water management districts. TMDL establishment is an area of emphasis, particularly in the lower St. Johns River where dissolved oxygen and nutrient management have been prominent public issues in recent months. The District may begin to take on some projects initiated by the US ACOE, where funding and staff limitations have hindered their completion.

The SWFWMD has seen a strong emphasis on water supply development, including alternative supplies such as Tampa Bay Water's large off-stream reservoir and retrofitting of the desalination plant on Tampa Bay. The Peace River Manasota Regional Water Supply Authority will construct a large off-stream reservoir, and Polk County is considering such an impoundment to augment its water supply. The recently updated Water Supply Plan contains some \$2 billion in projects for the coming years, so funding and allocation is a continuing challenge. Emergency planning and quality staff acquisition and retention are other areas of focus.

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## Florida Section Meeting Notice – November 17, 2006

Mark your calendars for the November 17, 2006 Florida Section meeting in Ft. Myers. The October 2006 issue of the Watershed will provide details of this meeting.

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## FLORIDA ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS

c/o Miller Legg 2005 Vista Parkway, Suite 100 West Palm Beach, FL 33411-2719  
(561) 689-1138 fax (561) 689-8108 [www.faep-fl.org/tcc](http://www.faep-fl.org/tcc)

The Treasure Coast Chapter Florida Association of Environmental Professionals (TCFAEP) cordially invites you to attend our Annual Environmental Networking Reception, **Tuesday, September 19<sup>th</sup>, 2006**; at the Abacoa Country Club in Jupiter, from 5:30 PM to 8:00 PM. All environmental professionals, students, and interested parties are welcome to attend this opportunity network and to celebrate the environmental profession with awards. This year we will be featuring a panel discussion on Green Building. This panel of experts will discuss the movement towards green building, industry trends and what business opportunities might be available. Representatives from a "Green" project right in Palm Beach County will also be present. Come out and learn about these progressive methods!

FAEP is...

- An interdisciplinary association of environmental professionals in Florida.
- A forum in which the state-of-the-art environmental planning, research, and management is advanced.
- A focal point for objectivity, ethical standards, and technical excellence in our diverse profession.
- A vehicle for the growth and advancement of FAEP members around the State.
- A medium of professional contact and information exchange among colleagues in business, government, and academe.
- A foundation for structured career development from student to registered environmental professional.
- A regional chapter of the [National Association of Environmental Professionals](#) founded in 1975 and now having 2,000 members worldwide.

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OUR MISSION: To Further the Practice of the Environmental Professional in Florida



# 2006 Membership Application

## MEMBERSHIP DUES

New  \$20 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)  
 \$ \_\_\_\_\_ 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](mailto:Annette.Carter@ttech.com) or (772) 781-3403.

### Section Use Only:

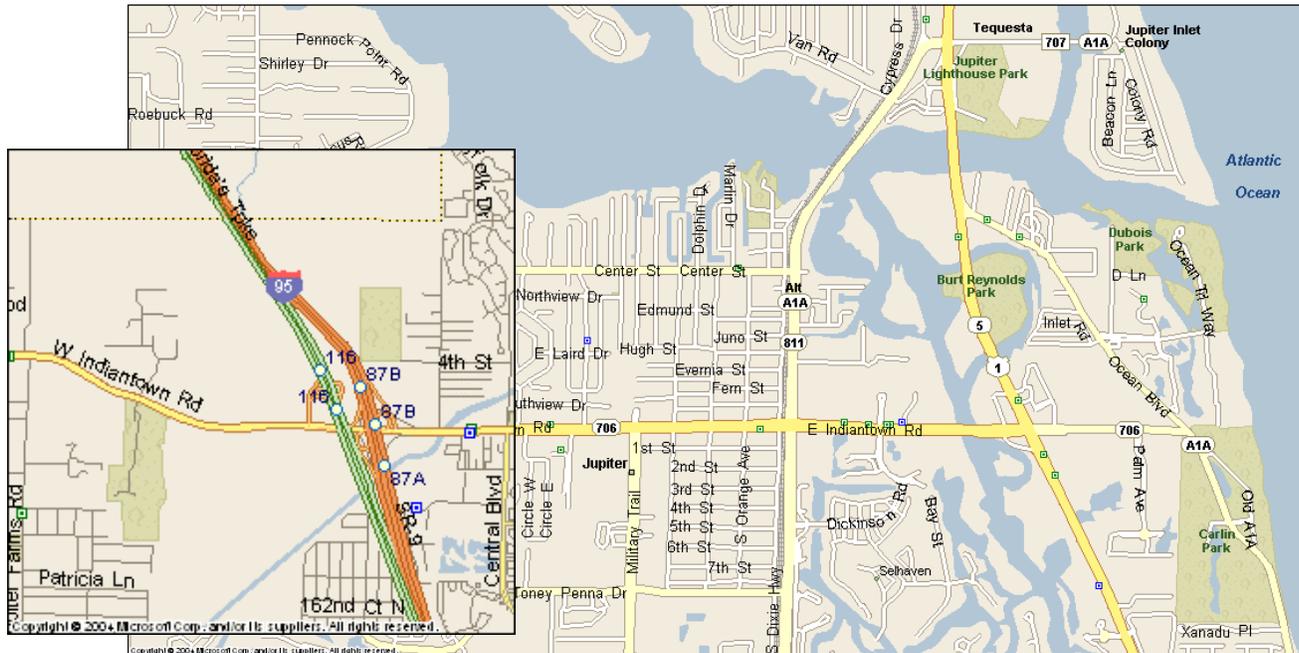
Date Received: \_\_\_\_\_ Check #: \_\_\_\_\_ Amount: \_\_\_\_\_

# Jupiter Beach Resort • 5 North A1A, Jupiter, Florida 33477-5190

Toll Free: (800) 228-8810 • Fax: (561) 747-3304

<http://www.jupiterbeachresort.com>

**Reservation Deadline: August 25, 2006**



## **Directions to the meeting at 5 North A1A, Jupiter Florida 33477**

From Interstate 95 and the Florida Turnpike Exit at Indiantown Road/State Road. Travel east. Indiantown Road leads directly into the Jupiter Beach Resort.



## **Alternative Lodging**

[Best Western Intracoastal Inn](#) (\$89.00-\$110.00)  
810 S US Highway 1, Jupiter, FL  
(561) 575-2936

[Comfort Inn & Suites](#) (\$128.00)  
6752 W Indiantown Rd, Jupiter, FL  
(561) 745-7997

[Fairfield Inn](#) (\$99.00-\$149.00)  
6748 W Indiantown Rd, Jupiter, FL  
(561) 748-5252

[Hampton Inn](#) (\$89.00-\$159.00)  
13801 US Highway 1, Juno Beach, FL  
(561) 626-9090

[Holiday Inn Express](#) (\$116.00- \$175.00)  
13950 Us Highway 1, Juno Beach, FL  
(561) 622-4366

[Jupiter Waterfront Inn](#) (\$89.00-\$129.00)  
18903 SE Federal Hwy, Tequesta, FL  
(561) 747-9085

[La Quinta](#) (formerly [Wellesley Inn](#))  
(\$65.00-\$89.00 gov't rate/\$75.00-\$89.00 AAA)  
34 Fishermans Way, Jupiter, FL  
(561) 575-7201

Prices determined from an internet search and have not been confirmed with the hotels. These hotels have not been visited. No guarantees are made about the quality of the accommodations.

## Recreational Opportunities

Following are web links to several areas of interest in Palm Beach, Martin and Broward Counties. If you have a particular interest that is not referenced here, please ask! We are happy to help you find the information. Also, check out the "about Jupiter Beach" link on the Jupiter Beach Resort webpage for additional opportunities (<http://www.jupiterbeachresort.com/attractions.cfm>).

### Jupiter/Palm Beach and Martin Counties

Jonathan Dickinson State Park (5 miles north of Jupiter on US1 – 16450 SE Federal Highway) 561-746-1466.  
(<http://www.floridastateparks.org/jonathandickinson/default.cfm>)

Canoe Outfitters (<http://www.canoes-kayaks-florida.com/>) (canoe/kayak the Loxahatchee River, Florida's first federally designated wild and scenic river). Guided tours and self-guided tours are available.

John D. MacArthur State Park  
<http://www.floridastateparks.org/macarthurbeach/default.cfm>

Savannas Reserve State Park  
<http://www.floridastateparks.org/savannas/default.cfm>

Loggerhead Marinelife Center (14200 US Highway One Juno Beach Florida 33408.  
561-627-8280. [www.marinelife.org](http://www.marinelife.org)

Hobe Sound Natural Wildlife Center  
Location: the refuge headquarters is located 2 miles south of SR 708 (Bridge Road) on U.S. 1. The refuge beach is located 1.5 miles north of Bridge Road on North Beach Road, Jupiter Island. (772) 546-6141.  
<http://www.fws.gov/hobesound/>

Arthur R. Marshall Loxahatchee Wildlife Refuge  
Biking, observation towers, boardwalk, bird watching  
Location: US 441 between Boynton Beach Blvd and Atlanta Avenue, about six miles west of Boynton Beach. 561-734-8303.

Jupiter Beach Park and DuBois Park (AIA North to Jupiter Beach Road)

Jupiter Inlet Lighthouse <http://www.lrhs.org/htmlPages/directions.htm>

### Ft. Lauderdale/Broward County

The City of Ft. Lauderdale webpage <http://ci.ftlaud.fl.us/leisure.htm> is very comprehensive and includes links to attractions and events (Museum of Discovery and Science and the IMAX Theater, Museum of Art, Bonnet House Museum and Garden), visitor information, performing arts and sports and parks. There also are links to other areas of interest including Las Olas Boulevard (<http://www.lasolasboulevard.com/>) and the Riverwalk Arts and Entertainment District (<http://www.goriverwalk.com/>).

Water Taxi <http://www.watertaxi.com/WaterTaxiHome/WTHome.Asp>.

Great Ft. Lauderdale Convention and Visitors Bureau: <http://www.sunny.org/index.cfm>



# *A Big "Thank You" To Our Sponsors!*



Sponsor List as of Printing (August 8, 2006)  
Please note: Logo sizes determined by print clarity



**AWRA Florida Section Meeting**  
 Friday, September 15, 2006  
 Jupiter Beach Resort  
 Jupiter, Florida

**Registration Form**

Meeting Registration Deadline – September 11, 2006  
**Hotel Reservations Deadline – August 25, 2006**

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

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

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

\_\_\_\_\_

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

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

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

*Registration includes Buffet Dinner*

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

Kristin Bennett	Registration (Includes Buffet Dinner)	_____	X \$45 =	\$ _____
Tetra Tech, EC, Inc.	Guests	_____	X \$25 =	\$ _____
759 S Federal Highway Ste 100	Students*	_____	X \$20 =	\$ _____
Stuart FL 34994-2934			<b>TOTAL</b>	\$ _____
(772) 781-3414				

**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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**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** *✪*

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

**Tarpon Springs**  
 May 19, 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!**

S.L. Berry, Hybrid Consulting, Athens, GA  
 Emily W. Black, ASR Systems, Gainesville  
 David J. Brown, Integrated Water Solutions, Sarasota  
 Angela M. Carmi, MWH Americas, Inc., Cape Coral  
 Rafael E. Frias, Black & Veatch, Tampa  
 James P. Guida, Integrated Water Solutions, Sarasota  
 Tamara L. Mayer, Tellus Consulting, Ponte Vedra Beach  
 Donald G. Munksgaard, CDM, West Palm Beach  
 Ron M. Nunes, East Coast Equity Mgmt Corp., Parkland  
 Srjkanth Pathapati, Univ of Florida student, Gainesville

Alex S. Perez, South Florida WMD, W Palm Beach  
 James Permenter, Sunbelt Constr. Svcs, Seffner  
 Marcy L. Policastro, PBS & J, Jacksonville  
 Miguel Restrepo, Halcrow, Inc., Tampa  
 Paul M. Robinson, Halcrow, Inc., Tampa  
 Robert Rooney, Univ of Florida student, Gainesville  
 Adam G. Schwartz, DEP, Tallahassee  
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 Joseph Weinhouse, Gainesville  
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