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President's Message



**ASCE SunCoast
Branch President
Amjid Hussain**

Dear Members and Friends of ASCE

It feels I need to start this message with the most important announcement, and tell you that the 2012 Scholarship Golf Tournament is right around the corner. This year's tournament will be a special event. ASCE and American Water Works Association (AWWA) have joined forces to make the event memorable for you. This joint event means more players and more fun! The tournament will be held on Saturday May 19th at the Stoneybrook Golf Club at Heritage Harbor. Sponsorship opportunities are available! More details and registration forms can be found in the Newsletter and on our website.

The SunCoast Branch contributes every year to causes such as scholarships, West Point Bridge, Toothpick Bridge, Math ACES and many more, and all of those contributions are raised through our annual golf tournament. Please talk to your company about supporting the golf tourna-

ment.

The ASCE SunCoast Branch West Point Bridge Design Contests final rounds will be on May 12th. The six finalists from each category will compete for cash prizes and place for the State Contest held at the ASCE Florida Section annual meeting on July 20th in Orlando.

Updates on Branch awards: The newly formed Branch Awards Committee will be meeting this week to finalize recommendations for the 2012 awards. ASCE SunCoast Branch award winners will then compete for State awards in July at the Section annual meeting.

Finally, an update from Florida Section quarterly meeting, I attended in April. The SunCoast Branch continues to be one of the most successful in the state. Our level of participation is second to none and comparable to some much larger branches. The SunCoast Branch successfully lobbied to bring 2013 Florida Section Annual meeting to Sarasota. We should be proud of our cooperative effort.

Thank you for your continued support.

Amjid Hussain, P.E., M.ASCE

May Luncheon Meeting Details

The May luncheon is an EWRI-ASCE and FWEA joint meeting with **Blake Guillory, Executive Director, SWFWMD** and **Theresa Conner, Executive Director, Environmental Services, Sarasota County** as our guest speakers. Starting at 11:45 am until 1:15 pm with registration starting at 11:15 am.

When: Thursday May 17, 2012
Check in begins at 11:15 AM
Where: Troyer Dutch Heritage

Please RSVP: <http://ascsuncoast.weebly.com/monthly-meetings.html>

EWRI is a Technical Institute with ASCE. PDH credit is being offered.

Upcoming Meeting Information

May 17, 2012

Joint EWRI-ASCE Meeting

Saturday, May 19, 2012

ASCE Golf Tournament

At Stoneybrook Golf and Country Club

June 21, 2012

Greg Illig, Sika Corporation

July 19, 2012

Joe Garrity, P.E.

August 16, 2012

Dr Lawrence Miller

City Manager, City of Arcadia

July 2013

**Sarasota will host
the annual ASCE
Florida Section
Meeting.**

Congratulations to Adnan Javed and Amjid Hussain on successfully lobbying to bring this event to our SunCoast Branch.



Project Profile

Environmental Challenges During Project Construction

By Sandy Scheda, Scheda Ecological Associates, Inc

The percentage of construction projects that will be challenged by environmental issues in Florida will only increase in the future. I say this because as we develop our native habitats into other land uses, water quality and protected species will naturally suffer – it's only common sense. So how can we foresee our construction project challenges in these two areas of concern, so that impacts to project schedules can be minimized? Well, it's easy if we are willing to be proactive. I have worked within many construction teams and I have generally found that these teams are proactive, because attention to schedule is of paramount importance. The individuals within the teams are very good communicators and work diligently to keep all aspects of the project going. If we can pay this same type of early attention to environmental issues, they will not create schedule issues for our projects. Here are some suggestions.

Water Quality in Class I, Class II or OFWs

Check the permits and if a mixing zone was not permitted, you may want to submit a permit modification request. Limits of allowable increase in turbidity provide for zero tolerance in these waters; in other words, your turbidity measurements must equal or be less than background. This is not realistic, and the project is likely to result in a compliance issue. Permittees often overlook mixing zones because they are authorized within a different part of the regulations (Chapter 62-4.224(5) of the Florida Administrative Code). However, mixing zones are very important to contractors and owners because they allow the construction team some flexibility, and they acknowledge that water quality criteria may not be met



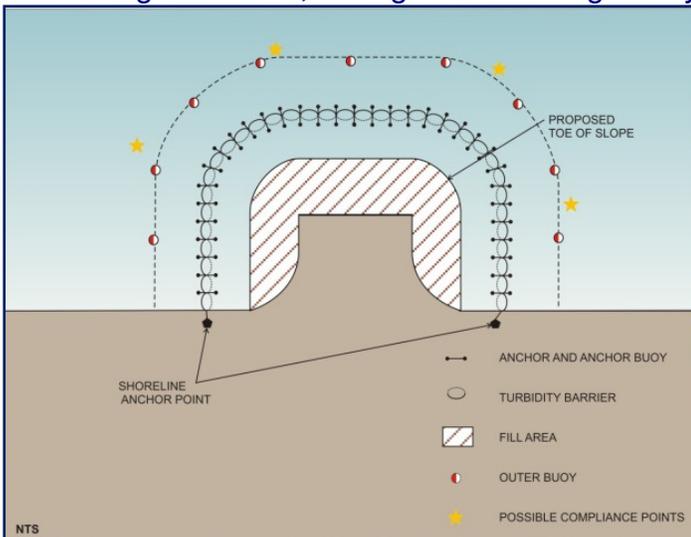
The project owner can apply for a mixing zone within the ERP application process. The applicant will need to propose the dimensions of dredge and fill mixing zones, and include the information needed for agency evaluation. This information should include site-specific biological and hydrological considerations, tide and flow data, and a sketch showing the proposal. The current regulations state that the mixing zone limit can't be more than 150m downstream or in radius from the point of generation of turbidity.

Protected Species

As Florida continues to develop and convert native habitats to other land uses, protected species regulation will be in a continual state of change. Transportation projects can encounter a wide variety of protected species challenges as these long linear projects traverse many different habitats

Project Profile (continued)

and can go for miles, through different regulatory jurisdictions, counties and municipalities. In our construction experience at Scheda, the two most common concerns are gopher tortoises and nests of protected birds. A pre-construction field survey by qualified ecologists will identify both concerns, and then the team can plan proactively to resolve any issues.



Seagrasses

Many permits now require a pre-construction survey, during-construction demarcation, and post-construction survey for seagrasses. If the permits do not require these activities, they are good professional practice and should be undertaken anyway to protect all parties involved – seagrasses, contractors, and owners.

In summary, the old adage ‘a little prevention goes a long way’ is pertinent for construction in our environmentally bountiful Florida. After all, this is why people move here – let’s give them what they came for.

About the Author:

Sandy Scheda, MS is President of Scheda Ecological Associates, Inc. She has 25 years of experience working as a consulting ecologist in Florida. Her career focus has been providing environmental support for transportation planning, design, construction and maintenance projects, and she is well-versed in the requirements of NEPA and various agency permitting processes. She can be contacted at sscheda@scheda.com or 813.989.9600.

Florida 2012 ASCE Honors and Awards

ASCE Headquarters Geographic Services is pleased to announce that Dr. R. Raymond Issa, Ph.D., J.D., P.E., F.ASCE, a member of the Gainesville Branch; Florida Section has been selected to receive the **Computing in Civil Engineering Award**. The award will be presented at the Computing in CE Conference, Clearwater Beach, FL, June 15-17, 2012.

ASCE will be sponsoring a Laws and Rules Session in August 10, 2012 for a nominal fee. Details to follow.

2012 Golf Tournament

BRADENTON, FLORIDA

Saturday, May 19, 2012

ASCE / AWWA Charity Golf Tournament



Stoneybrook Golf Club at Heritage Harbour

8000 Stone Harbour Loop
Bradenton, Florida 34212
Phone: 941-746-2696

[http:// www.golfstoneybrook.com](http://www.golfstoneybrook.com)



17th Annual Charity Golf Outing 4 Person Scramble

This year's event will be held **Saturday, May 19, 2012** at the well-manicured Stoneybrook Golf Club at Heritage Harbour. ASCE and AWWA have joined forces to make this the event of the year. The event details are as follows:

WHEN: Saturday May 19, 2012

WHERE: Stoneybrook Golf Club

REGISTRATION: 7:00 am

SHOTGUN START: 8:00 am

COST: \$320 For Foursome
\$80 For Individual Player

SPONSORSHIP OPPORTUNITIES AVAILABLE!!

Enjoy a complete program of special events, 18 holes of golf (including cart), continental breakfast, lunch, door prizes, silent auction, an exciting awards banquet, and much more...

On-Course Contests:

- Putting challenge on the practice green
- Two longest drive contests (Men's and Women's)
- Closest to the pin challenge
- Longest Putt Contest
- And the \$500 Hole-in-One Shootout

For more information, contact:

Gary Downing (ASCE Golf Chair) 941-342-6212
Pete Putman (AWWA Golf Chair) 941-350-0389
Amjid Hussain (ASCE President) 941-861-0750
Bruce MacLeod (AWWA President) 941-447-0246
Kwamena Sankah (ASCE Treasurer) 941-861-0511
Sonya Fronckowiak (ASCE Past President) 941-270-6103

2012 Golf Tournament Registration

REGISTRATION FORM

ASCE - AWWA SCHOLARSHIP GOLF SCRAMBLE

May 19, 2012 Stoney Brook Golf & Country Club (Heritage Harbour)

Company Name: _____

Mailing Address: _____

Contact Name: _____

(if different from company name)

Please indicate your level of participation by placing an X next to your choice(s):

Sponsorship	Yes (X)	Amount	Total
1. ADMIRAL (Two Foursomes w/ tee & green sponsor)		\$800.00	
2. CAPTAIN (One Foursome w/ tee & green sponsor)		\$500.00	
3. COMMANDER (Foursome w/ tee or green sponsor)		\$400.00	
4. LIEUTENANT (foursome)		\$320.00	
5. CHIEF (Individual Player)		\$80.00	
6. SAILING FLAGS (HOLE SIGN SPONSOR)		\$125.00	
7. CANTINE (BEVERAGE CART SPONSOR)		\$500.00	
8. RIBBONS (PLAQUE SPONSOR)		\$300.00	
9. CHOW HALL (Food Sponsor)		\$1,200.00	
Total Amount			\$0.00

Make checks payable to the ASCE Suncoast Branch

Please fill in the names of your four players and one mailing and e-mail address:

NAMES	CONTACT PERSON
1.	Name: _____
2.	Address: _____
3.	City, State ZIP: _____
4.	Telephone #: _____
E-Mail Address: _____	

If you have more than one team, use a separate form for each.

Please Send via E-Mail Attachment or Fax to:

Gary Downing, PE
Phone: 941-256-5467

E-Mail Address: gary.downing@hdrinc.com
Fax: 941-342-6212

Send payment to:
Kwamena Sankah, PE
Treasurer ASCE SunCoast Branch
c/o Transportation Planning
1001 Sarasota Center Blvd.
Sarasota, FL 34240

E-Mail Address: jsankah@scgov.net
Fax: 941-861-0770

Thank you for your support



Building Our Community

HENDRICKSON DAM REPLACEMENT

City of Punta Gorda, Florida

By Stanley Consultants

The raw water that is treated for use by the residents of Punta Gorda, Florida is impounded in the Shell Creek Reservoir behind the Hendrickson Dam. The reservoir is located east of US 17 and north of Washington Loop Road. The dam consists of 2,000 feet of earthen embankment and 500 feet of sheet pile overflow spillway. In 2006 the City of Punta Gorda's Utility Department engaged Stanley Consultants, Inc., Bonita Springs, to complete an inspection and evaluation of the 40+ year old Hendrickson Dam spillway.



Location of Dam

The first phase of the project included developing an inspection methodology report for this and future inspections. Inspections following the approved protocol were performed. The final phase of this assignment documented inspection findings, including a list of necessary repairs. For the hazard classification, extreme flooding events using HMR 52, HEC-RAS, and FLDWAV software were analyzed, considering probable failure modes and downstream flooding. The results classified the Hendrickson Dam a low hazard structure.



Hole in Spillway

Based upon review of past reports, discussion with dam operating personnel, and results of the inspection, stability and stress analyses of the spillway, a series of recommendations was developed for the maintenance and repair and/or replacement of the structure. The intent of these recommendations was to provide a facility that will continue to function in a safe manner and provide a reliable source of water to the City for many years to come.



Deteriorated Bulkhead

The initial improvements in 2007 included refurbishing the embankment slopes by grading and adding erosion protection, seeding and mulching, constructing gravity walls and replenishing the rip rap on the downstream side of the spillway. While the initial phase was under construction, Stanley Consultants prepared a study which identified alternatives for replacing the spillway. The alternatives included encapsulating the existing spillway in concrete, reinforcing the existing spillway, and completely replacing the spillway. After presentations to the Utility Advisory Board, the City elected to replace the existing spillway. To save costs the designers recommended that the City pre-purchase the sheet pile. The scope of the work also included repairing both sheet pile abutments, rehabilitating the exiting

Building Our Community (continued)



One of the New Segments

boat lift, and upgrading the existing intake structure.

The replacement spillway was designed to be located on the downstream side of the existing spillway making the dewatering plan least complicated. Plus the designers wanted to avoid the remnants of the timber substructure that supported the old railroad trestle that crossed Shell Creek on the upstream side of the existing spillway. However, records discovered just prior to preparing the bid documents indicated that there were pockets of large (18" to 24") rip rap that were expected to be ten to twenty feet deep on the downstream side of the spillway. The design team included an experienced and reputable marine contractor whose role was to advise the designers in constructability and means and methods issues. His concerns for potential delays in driving the new sheet piling became a concern, so it was decided to locate the new spillway on the upstream side of

the existing spillway. While the design documents were updated, the underwater inspection team documented the location of the timber piles that remained from the railroad crossing. The selected contractor chose to do most all of the work from a barge. The spillway was replaced in three segments each dewatered with cofferdams. A concrete slab was poured on the bottom between the new and old spillways and the existing spillway was removed near the mud line.

The project was completed for less than the City had budgeted and without significant construction change orders. The water treatment plant remained operational even though the intake structure was modified as part of the work. The Shell Creel Reservoir is expected to continue as a raw water source for another 40 to 50 years.



New Spillway in Action



Stanley Consultants INC.



Other News of Interest

LEED 2012

By Kevin Wilcox (web article <http://www.asce.org/CEMagazine/Article.aspx?id=25769803912>)

The U.S. Green Building Council works to update LEED regulations with an eye to performance and raising the bar on “green” design.

November 2011-- The U.S. Green Building Council (USGBC) recently concluded a second round of public comments on significant updates to its Leadership in Energy and Environmental Design (LEED) program, which provides engineers and builders with an independent framework for measuring and certifying environmentally responsible (“green”) building design. The updated standards, known as LEED 2012, will replace standards in effect since 2009.

According to a fact sheet from the USGBC, the new standards will “focus on increasing the technical rigor of the rating system, expanding the market sectors able to use LEED and striving for simplicity in terms of usability.”

“LEED must continuously improve to drive change and transform the market,” said Corey Enck, the director of LEED rating system development, who provided written responses to questions from *Civil Engineering* magazine online. “This is especially important as green codes begin to raise the status quo and current LEED requirements become the norm. LEED 2012 has shifted to a performance-based structure that supports recertification and raises the bar to maintain LEED as a leadership tool.”

LEED 2012 for new construction and major renovations maintains the seven categories included in the 2009 guidelines—sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation, and regional priority—while adding three new categories: integrative process, location and transportation, and performance.

Prerequisites, which vary by building type and include such items as pollution prevention during construction and measures to reduce water use in landscaping, must be achieved before USGBC will consider certification. Once the prerequisites are met, projects are awarded points for individual elements of green building and design within each category.

LEED 2009 uses a 100-point scale with 10 possible bonus points. Projects must accumulate at least 40 points to be certified. Projects earning 80 points or more are certified as platinum, 60-79 points earn a gold rating, and 50-59 points earn a silver rating. LEED 2012 will also use a 100-point scale, but with certain “impact categories” carrying more weight.



The conference center board room of the Washington, D.C., headquarters of the U.S. Green Building Council (USGBC), which is certified at the platinum level within the council’s Leadership in Energy and Environmental Design (LEED) rating system, features natural light and blackout shades that can be lowered for presentations. The ceiling tiles are made from locally sourced aluminum and also assist with acoustics. Courtesy of the U.S. Green Building Council



The workstations along USGBC's floor-to-ceiling glass windows were moved back 7 to 8 ft to create an "ecocorridor" of natural light. The lighter carpet acts as a light shelf to bounce the daylight deeper into the space.

Enck said engineers seeking to design and build for LEED 2012 status need to know about important changes to the materials and resources credit category, which includes new credits aimed to transform material use and disposal.

The new credits include:

Responsible Sourcing of Raw Materials—this credit rewards certain origins for materials and includes a larger scope than was previously addressed in LEED.

Nonstructural Materials Transparency—this credit promotes environmental product declarations and transparency of information about materials used.

Avoidance of Chemicals of Concern in Building Materials—this credit encourages LEED project teams to specify materials that do not contain chemicals that are known to negatively impact human health.

Environmentally Preferable Structure and Enclosure—this credit rewards projects that reuse buildings (including historic and blighted buildings) and/or engage in lifecycle assessment to reduce the impacts associated with the materials used to make the structure and enclosure of a new building or addition.

A major change in LEED 2012 will be a recertification process designed to ensure that buildings that

achieve LEED certification perform as designed and are maintained in a manner consistent with the rating.

"One of the most significant changes in the second public comment draft of LEED 2012 is the restructuring of the Existing Buildings: Operations and Maintenance rating system," Enck said. "The requirements for each credit were split into an 'establishment' section and a 'performance' section. The change aligns the rating system with how it's implemented in practice and highlights the ongoing requirements for recertification. This change will help streamline the recertification process going forward."

Enck said the USGBC began work on LEED 2012 shortly after the launch of the 2009 standards. The USGBC is reviewing comments from the second round of stakeholder feedback, and plans a third comment period early in 2012. The USGBC plans to finalize the standards and implement them in 2012.

There are 10,476 LEED-certified commercial projects, and 13,443 LEED-certified residential projects.

2012 ASCE SunCoast Executive Board

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ahussain@scgov.net

941-861-0750



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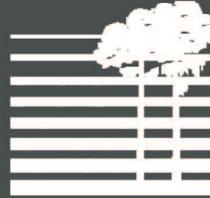


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