

Florida Association of Environmental Professionals

Florida Beacon

FAEP NEWS

January 2010

Several recent changes with FAEP include the election of new Board Members and Officers, retirement of Board Members, chapter elections, and the selection of the new Association Administrator. The new Board Members and Officers are shown at the right. The elections at the local chapters have provided some new faces on the Board of Directors. Local Chapter representatives are full Board Members, have a vote, and can hold office.

Please give a big thank you to our retiring Board Members Don Dies, Ed Currie, and Nancy Rodlun for their efforts. Each of them will still be around as they are only retiring from their volunteer jobs.

As Shannon Julien transitions into her role as President of FAEP you will see her enthusiasm as an Environmental Professional. She will be working closely with Paul Looney as our NAEP rep to assure that FAEP is well represented with our National organization.

Bruce Hasbrouck
FAEP Past President



FAEP 2009-2010

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Shannon Ruby Julien - President
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Upcoming Conferences and Workshops

Event	Date	Place
<u>2010 Florida Artificial Reef Summit</u>	January 21-23, 2010	Hilton Cocoa Beach Oceanfront
<u>NAEP 2010 Annual Conference</u>	April 27-30, 2010	Atlanta, Georgia
<u>2010 National Society of Consulting Soil Scientists Annual Meeting</u>	March 3 - 6, 2010	Amelia Island, Florida
<u>26th Annual Growth Management, Energy, Climate Change and Environment Short Course</u>	Feb. 23 - 25, 2010	Orlando, Florida

SOFIA Seeks Secrets of Planetary Birth

You don't always have to have a rocket to do rocket science. Sometimes a mere airplane will do – that is, a mere Boeing 747 totting a 17-ton, 9-foot wide telescope named SOFIA.

Short for Stratospheric Observatory for Infrared Astronomy, SOFIA will observe the universe while gliding through the stratosphere at 45,000 feet. When it begins operations next year, it will be the world's biggest, most advanced airborne observatory.

"SOFIA is set to achieve some spectacular science," says project scientist Pamela Marcum. "For instance, this telescope will help us figure out how planets form and how our own solar system came to be."

And as a mobile observatory, it can fly anywhere, anytime. SOFIA can move into position to capture especially interesting astronomical events such as stellar occultations (when celestial objects cross in front of background stars), while ground-based telescopes fastened to the "wrong" geographic locations on Earth's surface miss the show. SOFIA will fly above the veil of water vapor¹ that surrounds Earth to take a wide-eyed look at the cosmos.



NASA's SOFIA infrared observatory 747SP overflies its home, the Dryden Aircraft Operations Facility in Palmdale, Calif. Credit: NASA/Jim Ross.

For more go to: [SOPHIA](#)

GIS and the Environment

Germany's SUN-AREA Research Project Uses GIS

Mapping the Solar Potential of Rooftops

The solar age has dawned in Germany. About 20% of the country's rooftops are suitable for solar power production, according to recent results from the SUN-AREA Research Project. The project aims to determine how solar energy resources can be optimized by placing photovoltaic panels on rooftops around the country.

The SUN-AREA project is sponsored by the University of Osnabrück and the TOPSCAN topographical information company. It is led by geomatics engineer Martina Klärle and researchers Dorothea Ludwig and Sandra Lanig.

Preliminary findings of the SUN-AREA project estimate that, at full potential, solar power could meet the entire energy needs of homes throughout Germany. The team began its work with an examination of the northern German city of Osnabrück.

"We have proven that 70 percent of the city's total demand for electricity can be covered using only the roofs that are already present in Osnabrück," Klärle says. "In other words, if all the roofs that are especially suitable were now fitted with photovoltaic devices, we could meet 70 percent of the electricity needs of all of Osnabrück."

Germany is very well suited to generate electricity using photovoltaic systems. The majority of the population is not concentrated in urban centers, but spread out over rural areas. That means more space per person, and more roof area.

"My vision is to use all suitable roof surfaces to make solar electricity," Klärle says.

Now Klärle is trying to turn the SUN-AREA vision into reality. She gave city officials a solar power potential map of Osnabrück with an exact catalog of all suitable rooftops. The data has been made public and has already received positive response. The city is stepping up efforts to equip public buildings with solar collectors. Osnabrück has doubled its solar energy installations in the past year alone.

"We're at the point where we can't afford to get our electricity from coal-fired power plants, and we don't want to get it from nuclear power plants," she says. "I just won't accept that we have all this potential on our roofs, and we don't use it."

For more information go to: <http://www.esri.com/news/arcnews/fall09/articles/mapping-the-solar.html>



The Tale of Three Detroit Electric Car Programs

Last month, Chrysler Spokesman Nick Cappa said that its in-house team of electric car development engineers had been disbanded and will be folded into the company's org chart. This announcement comes three months after Chrysler took \$70 million in grants from the U.S. Department of Energy to develop a test fleet of 220 hybrid pickup trucks and minivans. It comes less than a year after Chrysler built its case for federal aid—it received \$12.5 billion—by showing flashy designs of electric sports cars, trucks and vans, and promising 500,000 battery-powered vehicles on the road by 2013.

With a swipe of his wrist, Fiat-Chrysler CEO Sergio Marchionne cast aside Chrysler's EV plans—commenting that batteries aren't ready, the market is minuscule, and “electric vehicles are going to struggle.” In an era when green is the new black, the breakup of the company's hybrid and electric car team is a public relations blunder.

General Motors, on the other hand, knows about such blunders—but has learned the lesson too well. After the infamous killing of the EV1, and years of dismissing hybrids as “making no economic sense,” the company is now using its forthcoming star car, the Chevy Volt, as a poster child for all things green and good. GM's Volt program is tremendous and deserves due recognition as a major achievement. Kudos. Yet, the company continues to turn up the brightness of the klieg lights—now reaching a blinding level. For example, GM's recent national Volt advertising campaign—promising 230 miles to the gallon—does more to obfuscate than to elucidate.

The publicity is working. The latest example is news that the company has given a green light to produce the Cadillac Converj, a slick electric coupe unveiled in concept form at the 2009 Detroit Auto Show. As cool as the car looks, the news flash—picked up by major media outlets and the blogosphere alike—is all about marketing. “Cadillac needs as much excitement in its portfolio as possible, so I think it's a good strategy for them,” Rebecca Lindland, director of auto industry research at IHS Global Insight, told the *Detroit News*. Bingo.

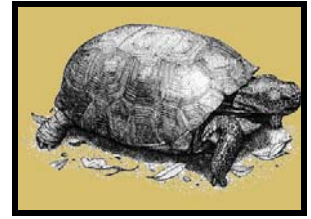
Wouldn't it be cool if there was a Detroit auto company that saw the value of electric-drive vehicles (unlike Chrysler), and (unlike GM) was modestly going about producing common-sense, affordable electric cars and plug-in hybrids on existing global scalable platforms? Maybe something like an electric version of a practical, mild-mannered Ford Focus, or a plug-in hybrid variant of a small crossover Escape? No super fanfare. No rumors of slick, expensive future EVs that may or may not come. No Hail Mary passes. No bloated promises in exchange for handouts from American taxpayers.

That's what Ford is doing, again proving that it's moving in the right direction—not only for consumer value and profitability, but for the future of Detroit, the U.S. economy and Planet Earth.

Read full article: <http://www.hybridcars.com/economics/tale-three-detroit-electric-car-programs-26225.html>

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Student Chapter of Environmental Professionals

-PRESENTS-

THE 2ND ANNUAL SCEP "SPRING RECEPTION 2010"

&

Environment Sciences Career Day

Featuring Guest Speaker:
Fisheries & Conservation Biologist

Dr. Jack Grove

Meet Members of the
Tampa Bay Association of Environmental Professionals
as well as other Environmental Employers from the Tampa Bay Area!

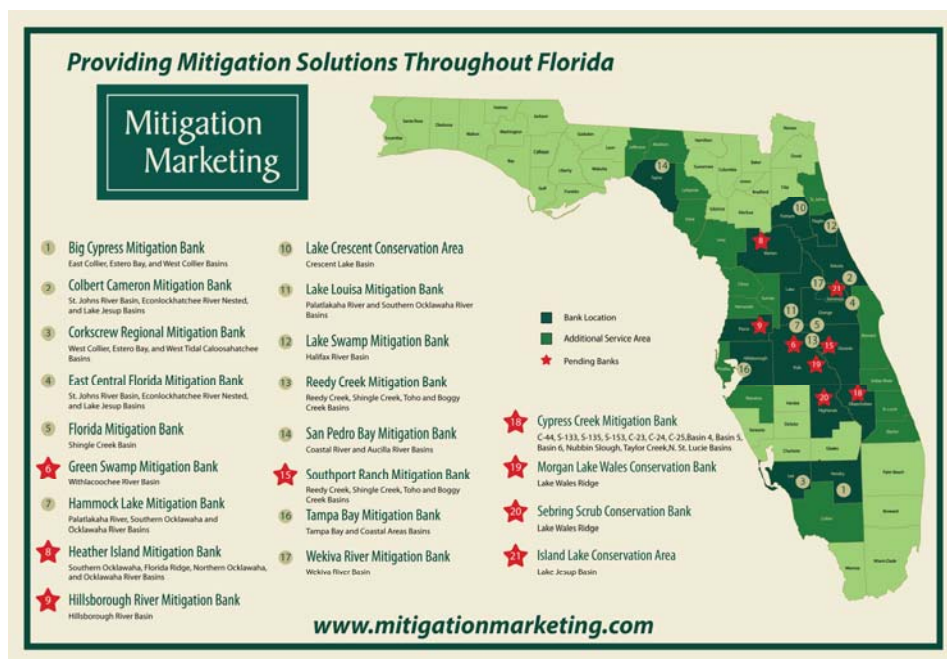
When: Thursday, March 25th

Where: USF St. Pete Campus - Davis Room #130

Career Day Events from 12:00 – 4:00pm

Guest Speaker from 4:30 -6:00pm

Please join us! Refreshments and Hours devours will be served!



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ArcGIS Explorer

Layer packages, new data sources, and presentation tools in ArcGIS Explorer

Take advantage of new ways for sharing data, additional online data sources, and presentation tools available with the new version of ArcGIS Explorer by downloading a free copy today from www.esri.com/arcgisexplorer. This GIS visualization tool provides an intuitive way to explore, share, and present geographic information.

Maps created in ArcGIS Desktop and saved as layer packages can easily be used in ArcGIS Explorer. Layer packages encapsulate ArcGIS Desktop cartography and data in one file that is easily shared as an e-mail attachment; saved on a CD, DVD, or USB device; or made available through a file share.

ArcGIS Explorer is designed to work directly with maps and layers authored using ArcGIS Desktop without conversion. ArcGIS Explorer can also use geoprocessing tools that have been developed using ArcGIS Desktop. Local data - available as map services, geodatabases, shapefiles, KML/KMZ, GPX, JPEG 2000, GeoTIFF, and in MrSID format raster data - can be combined with the continually updated basemaps and layers, shared maps, and tools from ArcGIS Online.

This version of ArcGIS Explorer includes new presentation tools that can be used for creating compelling slide shows within the ArcGIS Explorer environment for briefings, commission meetings, and lectures. These dynamic presentations integrate live GIS data and navigation that a presenter can interact with to illustrate points and answer questions. Titles, pop-ups, documents, photos, and videos can be combined with slides and maps in a full-screen display. In addition to these presentation capabilities, ArcGIS Explorer can change easily between 2D and 3D display.

To download or view video clips about ArcGIS Explorer, visit www.esri.com/arcgisexplorer.

From: ArcUser Fall 2009

SPCC Rule Amended Again, Effective January 14, 2010

EPA has published a new final rule concerning amendments to certain requirements for facilities subject to the Oil Spill Prevention, Control, and Countermeasure (SPCC) rule. The final rule was published in the November 15, 2009, [Federal Register](#). This rulemaking marks the completion of the SPCC action, which was proposed on October 15, 2007, finalized on December 5, 2008, and for which EPA requested public comments again on February 3, 2009.

On November 5, 2009, EPA Administrator Jackson signed a notice amending certain requirements of the SPCC rule in order to address additional areas of regulatory reform that have been raised by the regulated community. This action promulgates revisions to the December 5, 2008 amendments as a result of EPA's review of comments and consideration of all relevant facts.

The [amendments](#) published on December 5, 2008, clarify regulatory requirements, tailor requirements to particular industry sectors, and streamline certain requirements for a facility owner or operator subject to the rule. With these changes, EPA expects to encourage greater compliance with the SPCC regulations, thus resulting in increased protection of human health and the environment.

On April 1, 2009, the Federal Register published EPA's delay of the effective date of the December 5, 2008, Oil Spill Prevention, Control, and Countermeasure final rule. This delay is in response to public comments and the [Office of Management and Budget's January 21, 2009, memorandum](#) regarding regulatory review.

The final rule does not remove any regulatory requirement for owners or operators of facilities in operation before August 16, 2002, to develop, implement, and maintain an SPCC plan in accordance with the SPCC regulations. Such facilities continue to be required to maintain their plans during the interim until the applicable date for revising and implementing their plans under the new amendments.

Go to: <http://www.ercweb.com/resources/viewtip.aspx?id=7507>

Verizon Wireless Voluntarily Discloses Environmental Violations

WASHINGTON – Verizon Wireless has agreed to pay a \$468,600 civil penalty to settle self-disclosed violations of federal environmental regulations discovered at 655 facilities in 42 states.

Verizon voluntarily entered into a corporate audit agreement with the U.S. Environmental Protection Agency and conducted environmental compliance audits at more than 25,000 facilities nation-wide. The Environmental Appeals Board at EPA has approved an administrative settlement resolving violations Verizon found through its compliance audits. Since 1998, 5,400 telecom facilities have been brought into compliance through 35 settlements as part of EPA's enforcement effort to improve compliance in the telecom sector.

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**In 2009, NAEP, FAEP and TBAEP sponsored 3 student's attendance the NAEP Annual Conference.
Read below about the success of one of those students.**

Grad student gets to bottom of lake's problem

Wednesday, October 7, 2009

By STEVE GIBBS Free Press Staff

TAVERNIER -- Tom Harmon, 39, who is working on a masters degree in environmental science at the University of South Florida's St. Petersburg campus, stood calf deep in the murky waters of Dove Lake.

"It smells like a septic tank here," he said as he manipulated a handmade mechanism he was using to drill out a core sample of the silty mud at the bottom.

Harmon's study is to determine the lead content of the sedimentation in Dove Lake so the cause of its demise can be determined. Harmon found a few fish in the lake but no turtle grass, an indication that excess nutrients have hurt the lake's health, he said.

The lake, located near mile marker 93.5 across the highway from a radio station tower, is the terminus of Dove Creek, which winds through an ocean side neighborhood between the Harry Harris Park community and Snappers Restaurant. It is adjacent to a deep borrow pit that was dug out some time after 1935.

Harmon was in town recently to collect core samples to analyze back at USF.

"We will look for a concentration of the lead 210 isotope," he said. "We hope to determine the age of the sediment as well as determine the amount of sedimentation during any given time span. Once we get a clean core sample we can create a core profile by analyzing the sample one centimeter at a time, starting from the bottom up."

The lead content will help him detect changes in the sedimentation so he might compare those changes with corresponding historical events - whether man-made or not - to determine the cause of the lake's collapse.

"For example, if we find that the sediment samples increased during a certain time span, and that the highway was put in then, or a railroad track was laid, or a natural event such as a hurricane occurred then, we can correlate the incident with the sedimentation and draw some conclusions as to the cause of the sedimentation. That method can also lead us to a solution."

Even though he was not fully prepared to take more samples from the middle of the lake where the mud is thickest, Harmon was able to get an 8-inch sample that he said could help solve two mysteries.

"The first mystery is why hasn't the lake changed structurally since 1935? Normally mangroves drop leaves and provide nutrients that build land," he said.

"The second mystery is what has entered the lake that prevents sea grass and other natural organisms from growing? The lake is shallow. The sun penetrates to the bottom. There is some algae, but the lake is dead. Why?"

He speculates that either the tide is washing in something harmful or sewage could be leaching into the lake from nearby septic tanks.

Harmon's mentor, Dr. Jack Grove, whose home is on Dove Creek, has been studying the lake for 15 years. He has long advocated for a restoration of the natural flow of water to the lake, which also used to be connected to Florida Bay before the railroad and highway were built.

"I believe that the research that is being proposed by Tom Harmon and his colleagues at USF will be an integral part of demonstrating to the community and the political decision makers that the proposed restoration of Dove Lake, using culverts to restore flow, is a vital project," Grove stated last week.

Harmon met Grove in Arizona during an Association of Environmental Professionals event where Grove was the keynote speaker. He says he responded to Grove's open invitation to come to the Keys.

"Jack mentioned to me that he had this project to improve the quality of Dove Lake. Ultimately it became my graduate school project," Harmon said.

Published on KeysNews.com (<http://ftevsnews.com>)

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Do You Want to Be a GISP?

Practical advice on how and why to get certified

Although I have been in the GIS profession off and on, it has always been my goal to focus on my career in the GIS realm. That has not always been easy.

After three years away from GIS, I decided to jump back in and get up-to-date. The first obstacle I faced was how to present myself as a professional. While I have a diverse background with strong GIS skills, relying on just a resume, especially in today's economy, didn't seem sufficient so I decided to get involved again. I enrolled in seminars, went to classes, connected with past colleagues, and attended local user group meetings. It was at a meeting of the Inland Empire GIS User Group in June 2009 that I first heard about certification as a GIS Professional (GISP). The Southern California Urban and Regional Information Systems Association (URISA) hosted a lunch immediately after the meeting and following lunch, a GISP certification workshop was held. I was curious enough to stay after the meeting and participate in the workshop.

However, even after attending the workshop, I had lots of questions. I was still unsure about GISP certification and decided to find out more.

Some Questions and Answers

What is a GISP? The official definition: "A GISP is a certified geographic information systems (GIS) professional who has met the minimum standards for ethical conduct and professional practice as established by the GIS Certification Institute (GISCI)." Okay. Now that we know that, what is the GIS Certification Institute? According to the GISCI website (www.gisci.org), it is "a tax-exempt not-for-profit organization that provides the GIS community with a complete certification program." There are four member organizations in the GISCI and the National Association of Counties (NaCo) has given its support for GISCI and recognition of GISP certification. As of May 25, 2009, there were 4,492 GISPs. It sounded legitimate.

The Bottom Line

My next step was to find out if GISPs found certification a benefit. Have employers started recognizing GISP certification? Do employers require or prefer GISP certification when recruiting for a GIS position? The answer to these questions is yes. For many of us, the most significant benefit is in the paycheck.

Although none of the GISPs I asked reported an increase in pay, URISA's most recent salary survey (2007) revealed that employees with GISP certification had higher average salaries than their counterparts who lacked certification. Most GISPs I spoke with reported their employer reimbursed them for the application fee.

In addition, GISPs reported they felt going through the application process was beneficial. Many GISPs have testified that the GISP certification helped advance or redefine their careers. They are proud of the accomplishment and believe certification will continue to become more valuable.

Looking for a Job?

Is GISP certification beneficial when you are looking for a new GIS position? I found GISP certification is just beginning to be integrated into the recruitment process when employers are filling a GIS position. While researching job postings, I found only a small number of employers who use GISP certification as a tool to find qualified candidates. Although it was not the norm, I did find several employers that listed a GISP as a requirement or desirable to qualify for the position.

More Questions (and Answers)

What would I need to do? How much would it cost? How long would it take? Is it a lifetime certification? This is what I found out: To apply for your GISP, you need to put together an application packet containing the Application for GISCI Certification, the GISCI Procedures Manual, the GISCI Code of Ethics & Rules of Conduct Acknowledgement Form, and the Application Packet and Payment Form. Application materials can be downloaded from the GIS Certification Institute web site (www.gisci.org). It costs \$250 to submit your application. In total, I spent 6 hours on the application. Once you have received your GISP certification, you will be required to recertify every five years.

My Experience

It takes patience and dedication to complete the application process. After years of experience with GIS, it is nice to see a certification program that gives GIS professional some kind of recognition. It is a great way for employers to know that an applicant has a certain level of knowledge. In addition, the application process is a journey through your professional past. It was a great experience for me because it was an opportunity to review what I have done and focus on what I want to do in the future. For more details on Christa's experience go to:

www.esri.com/news/arcuser/1009/fall2009.html

From Christa Campbell (ArcUser Fall 2009)



**The National and Georgia Associations of
Environmental Professionals Welcome you to Atlanta,
Georgia for the NAEP 2010 Annual Conference!**

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GIS Subject Matter Recommended By:

- Ryan Hendren, TBAEP Board Member

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