

Florida Specifier



Happy Holidays

Practical Information For Environmental Professionals

Single Copy Price: \$5

December 2012

Volume 34, Number 12

Pinellas County reorg 6

A major reorganization of key environmental services in Pinellas County is improving the way they do business. The utilities department, public works and portions of environmental management are now part of their new Department of Environment and Infrastructure.

Update on NNC 7

DEP has made significant progress toward establishing numeric nutrient criteria and has developed a state level framework for the regulation and control of nutrient issues. ATM's Steve Peene provides an update.

P3 potential 9

Florida is in need of billions of dollars in funding for public infrastructure. Among other things, repairs to aging water and sewer systems, roads, bridges and stormwater systems are critical. Public-Private Partnerships may be the answer. John Fumero provides some insight.

Consolidated cleanup rule 10

DEP is in the process of blending the rules that have been used for years to assess and cleanup contaminated sites in Florida. In part two of a series, Steve Hilfiker discusses the changes ahead in the new rule with respect to reporting requirements and de minimis conditions.

Departments

Calendar	11
Classified Advertising	15
Federal File	2
Florida Notes	3
Perspectives	10
Water Watch	4

Got a story lead?

Got an idea for a story? Like to submit a column for consideration? Fire away. And don't forget to fill us in on your organization's new people and programs, projects and technologies—anything of interest to environmental professionals in the state. Send to P.O. Box 2175, Goldenrod, FL 32733. Call us at (407) 671-7777; fax us at (407) 671-7757, or email us at info@enviro-net.com.

Address label changes?

If your mailing label is inaccurate or incomplete in any way, please contact us with your current information at P.O. Box 2175, Goldenrod, FL 32733; call us at (407) 671-7777; fax us at (407) 671-7757; or email us at info@enviro-net.com. We appreciate your assistance.



Photo courtesy of Mote Marine Laboratory

Alan Hails, instrumentation system engineer at Mote Marine Laboratory, moves "Waldo," an autonomous underwater robot that carries Mote's BreveBuster™ sensor. The sensor indicates the presence of red tide in Gulf waters off Florida. See story on Page 8.

DEP makes progress with revisions to controversial statewide mercury TMDL

By ROY LAUGHLIN

This summer, the Florida Department of Environmental Protection released a draft proposal to lower Florida's total maximum daily loads for mercury in Florida's marine and fresh waters.

DEP scientists determined that the health of adult Floridians who ate fish in typical quantities would be protected against mercury toxicity if the fish had no more than 0.3 mg/kg mercury. Researchers also established a lower limit of 0.1 mg/kg for pregnant women and

children.

Those target values and data from fish sampling in Florida led to a series of modeling exercises that established mercury TMDLs for Florida waters. The modeling results are proposed for the new rule, and DEP has characterized them as sufficiently protective of both sensitive human populations and wildlife to meet all of its obligations under law and a court-mediated consent agreement.

Their approach is controversial because by setting TMDL values, DEP's strategy focused on the result of a com-

plex process rather than its causes.

Atmospheric deposition of inorganic mercury is the primary source of mercury in Florida's fish. Global mercury emissions, rather than those from Florida, predominantly influence how much mercury enters Florida's freshwater and estuarine waters where it bioconcentrates in food chains.

Local mercury emissions, those DEP can regulate directly, contribute a minor fraction to statewide mercury dynamics. The models imply that up to 85 percent of anthropogenic mercury sources to Florida's watersheds will have to be eliminated to meet the proposed TMDL.

After DEP released its first draft proposal in July, 2012, department officials conducted a series of public meetings and opened a public comment period for the draft proposal. Those comments were reviewed and the draft proposal was revised in response.

Two respondents questioned how well the proposed TMDL will protect wildlife, particularly those with limited foraging ranges that might include a mercury "hot spot."

The revised report noted that hot spots are not geographically or temporally fixed. They often move from one area to another as environmental conditions, such as water level changes and eutrophication, modify mercury dynamics in the food chain.

Officials concerned with increased salinity levels of Jax Harbor project

By MELORA GRATAN

A project that would take the existing channel of the Jacksonville Harbor down an additional 10 feet to accommodate larger vessels could produce environmental impacts to area plants and animals due to increased salinity levels, according to preliminary results of a study underway by federal officials.

"There could be a potential impact from salinity moving upstream, but we are not sure how much," said Jason Harrah, project manager with the U.S. Army Corps of Engineers' Jacksonville District.

"The freshwater eel grasses could be impacted and we are working to iden-

tify species of freshwater fish that could be impacted by the movement of a salt wedge," he said.

A series of complicated models have been run looking at how the salinity levels move up and down the waterway, and how they affect wetlands and specific wildlife while the depth is increased in increments of one to two feet. Preliminary modeling shows that salinity could move upstream at various depths.

"Next, we will analyze the information, run more models and work with all the agencies to address any concerns or issues they have in regards to what the models are showing," Harrah said.

DREDGING
Continued on Page 15

MERCURY
Continued on Page 16

Presorted Standard
U.S. POSTAGE
PAID
ORLANDO, FL
PERMIT 1556

1212

Florida
Specifier
P.O. Box 2175
Goldenrod, FL 32733
CHANGE SERVICE REQUESTED

DOJ settles criminal case against BP for Deepwater Horizon oil spill

Staff report

On Nov. 15, the U.S. Department of Justice announced that BP had agreed to pay a record \$4.5 billion in fines and penalties to settle the criminal case resulting from the Deepwater Horizon oil spill, with about \$4 billion to be paid in installments over five years.

The fines will be divided as follows: \$2.394 billion to the National Fish and Wildlife Foundation for remediation, \$350 million to the National Academy of Sciences and \$1.256 not assigned.

This settlement does not directly affect any civil penalties that could be levied under the Clean Water Act or the Oil Pollution Act.

When DOJ announced the negotiated settlement of criminal charges, it also announced that it would file criminal charges, including manslaughter, against three BP employees for their actions associated with the accident and deaths.

For the remaining civil charges, including those under the Clean Water Act, a negotiated settlement appears unlikely. Some parties to the case, including the state of

Louisiana, did not agree to terms of a proposed settlement.

DOJ now seems to be on a course for a trial, expected to begin in February, 2013.

How a court will assign liability under the Clean Water Act and the Oil Pollution Act now becomes a new source of uncertainty for those awaiting a share of fines and penalties.

Cross-state rule. The U.S. Environmental Protection Agency is asking the full U.S. Court of Appeals for the District of Columbia circuit to reconsider its August ruling of the agency's Cross-State Air Pollution Rule.

In August, a three-judge panel of the court rejected the EPA's rule that was challenged by 14 states and several power companies. Florida was one of the 14 states opposing the new rule.

The rule sets limits on releases of nitrogen and sulfur oxides from coal-burning power plants in eastern states. Its goal is to reduce the release of nitrogen and sulfur air pollutants in up-wind states that causes pollution in down-wind states.

The rule was expected to lead to the short term closure of several coal-powered plants, including one near Pensacola. The EPA noted when announcing the rule that all power plants currently seeking Clean Air Act emission permits qualified under the proposed new rule because most power companies expected tighter standards and planned accordingly.

The EPA also adopted standards attainable by current effective abatement technology.

The new rule has support from nearly as many states as the number that opposed it in the recent court case.

Clean diesel grants. In the next fiscal year, the EPA will fund its Diesel Emission Reduction Act grant program with \$29.9 million. The agency amended its rules this year, increasing the limit for individual grants so that it can effectively fund retrofit and modification of larger diesel engines in ships.

The Clean Diesel Campaign, part of DERA, is an EPA-funded program that supports the redesign and retrofit of older diesel engines still in service that were fabricated before current engine emission standards were established.

The EPA determined that older diesel engines that are fuel efficient, durable and the work horse of many transportation systems are more economically upgraded than replaced prematurely to meet air quality standards.

The program, created in 2005 and first funded in 2008, supported projects to retrofit school buses, mass transit locomotives and other diesel engines in widespread use.

This year, Florida applicants will receive no DERA funding for Clean Diesel Grants. DERA's competitive grants program disperses 70 percent of the program's annual funding.

A second component of the program, DERA State Allocations, sends the remaining 30 percent of annually appropriated funds to states. Florida did not receive any additional funding in FY 2012 from that component either.

Waterway health website. To mark the 40th anniversary of the Clean Water Act, the EPA unveiled a new website with information on the condition of thousands of lakes, rivers and streams across the U.S. The information is accessible from smart phones, tablets and desktop computers.

The app, essentially a skin over the EPA's water quality database, determines the user's location first. Then it presents a list of water bodies within five miles of that position.

Selecting a specific location from the list produces a table that indicates impairments for the water body, and a reference to documentation describing the impair-

ment.

Environmental justice grants. The EPA announced the availability of approximately \$1.5 million in environmental justice grants in 2013.

The grants, with a maximum award of \$30,000 each, are intended to enable nonprofit organizations to conduct research, provide education and develop solutions to local health and environmental issues in communities overburdened by harmful pollution.

The 2013 fiscal year application window will close on Jan. 7, 2013. Grants are available to incorporated nonprofits or tribal organizations that address the issues listed above.

On Dec. 1 and 13, EPA will host two pre-application teleconference calls to inform applicants of grant application details.

The Environmental Justice Small Grants Program, initiated in 1994, has already funded projects in 1300 communities across the country.

Green initiatives agreement. Florida International University and the EPA signed a memorandum of understanding to operate a cooperative campus program focusing on "Greening and Sustainability."

The EPA will enhance FIU's environmental research and science curricula and offer opportunities for students interested in environmental careers.

Projects that might be supported involve water quality, climate change, pesticides and toxins, ecosystems, sustainability and natural resource management. Integrated eco-toxicology and risk assessment, and coastal wetlands and ocean ecosystems were two disciplinary areas emphasized as of primary interest to the two organizations.

The collaboration is expected to include formal mentoring by EPA staff, internships, fellowships and workforce development programs involving FIU students, faculty and staff.

According to the announcement, the EPA hopes to benefit from the agreement because the agency is concerned about what it perceives as a dwindling number of students entering environmental fields of study.

Electronic filing system for reviews. A new on-line database system from EPA, e-NEPA, will enable federal agencies to electronically submit environmental impact statements. Electronic submission will eliminate the need for printing and the costs associated with it, as well as the costs for disseminating hard copies.

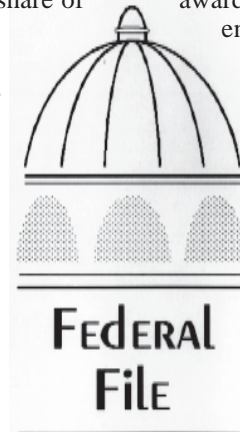
Electronic filing and e-confirmation will take much less time and effort. Furthermore, posting links to EIS documents wherever desired on the EPA's web pages will increase transparency, a goal of the Obama administration.

Environmental impact statements are a component of most federal agency decision-making when subsequent actions have environmental consequences.

Environmental impact statements, required by the National Environmental Policy Act, must list expected impacts as well as reasonable alternatives to avoid those impacts. E-filing will make those documents much more widely accessible.

The requirement for e-filing was effective Oct. 1, 2012, and binds all federal agencies to use the e-NEPA filing system.

Research funding for UF, USF. EPA's Science to Achieve Results program will award the University of Florida and the University of South Florida nearly half a million dollars to fund a four-year research project to develop novel water purification methods.



Check out our NEW WEBSITE to apply

- ... Aerobic Bioremediation of BTEX, TPH, MTBE, etc.
- ... Anaerobic Reductive Dechlorination of PCE, TCE, etc.
- ... Surfactant Recirculation for Enhanced Free Product Recovery

Our amendments and in situ remediation equipment help you:

- ✓ Achieve cleanup milestones faster
- ✓ Maximize hydraulic control & capture of groundwater plumes
- ✓ Deliver large quantities of dissolved oxygen or anaerobic substrates to the subsurface

ETEC offers Performance-Based Cleanup terms that guarantee remediation results!

Apply effective Biological Amendments to Enhance what you're already doing!

Source Removals/Excavations	Air Sparge/SVE Systems
Multi-phase Extraction Systems	Biosparge Systems

Accepted by FDEP for In Situ Application



Environmental Technologies
www.etccllc.com

Brian Timmins (971) 222-3580 x 102 brian@etccllc.com
Eric Bueltel (971) 222-3580 x 104 eric@etccllc.com

ISCO
In Situ Chemical Oxidation

ISCR
In Situ Chemical Reduction

FMC's Environmental Solutions Team:

- Is the global provider of Klozur® Persulfate, EHC® and DARAMEND® Original ISCR Reagents and other field-proven, cost-effective remediation technologies
- Addresses even the most challenging, complex sites impacted by recalcitrant compounds, heavy metals, mixed plumes, NAPL, and more
- Maintains the highest caliber of experienced, trained, and professional staff offered by any technology vendor

FMC
ENVIRONMENTAL SOLUTIONS

SOIL & GROUNDWATER
REMEDICATION
www.environmental.fmc.com

FEDFILES
Continued on Page 13

Contributing writers and columnists

NICK ALBERGO, PE, DEE
President and CEO
HSA Engineers & Scientists
Tampa, FL

JOHN J. FUMERO
Co-Managing Partner
Sundstrom, Friedman & Fumero LLP
Boca Raton, FL

PRAKASH GANDHI
Senior Environmental Correspondent
Orlando, FL

MELORA GRATTAN
Senior Environmental Correspondent
Newnan, GA

LAURA GIMPELSON, PE
President
LG Environmental Engineering
Orlando, FL

BLANCHE HARDY, PG
Environmental Correspondent
Sanford, FL

STEVE HILFIKER
President
Environmental Risk Management Inc.
Fort Myers, FL

ROY LAUGHLIN
Environmental Correspondent
Rockledge, FL

DAN MILLOTT
Environmental Correspondent
Miami, FL

STEVE PEENE, PHD
Vice President
Applied Technology & Management
Tallahassee, FL

SUSAN TELFORD
Environmental Correspondent
Jupiter, FL

The *Florida Specifier* makes every effort to ensure the accuracy and validity of all editorial and advertising content. The newspaper is independent in its views and does not support, endorse or guarantee any data, statements or opinions that appear under any reference or are attributed to or quoted from any known source. The views expressed by authors do not necessarily reflect the views of NTCC Inc. or the *Florida Specifier*.

The *Florida Specifier* (ISSN 0740-1973), founded in 1979, is published each month for \$24.95 per year (\$49.95 for three years) by National Technical Communications Co., Inc., P.O. Box 2175, Goldenrod, FL 32733. Subscription refunds are not provided.

Standard postage paid at Orlando, FL 32862. **POSTMASTER:** Send address changes to the FLORIDA SPECIFIER, P.O. Box 2175, Goldenrod, FL 32733.

© Copyright 2012 by National Technical Communications Co., Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form without the publisher's prior written permission.

ENVIRO-NET

NTCC National Technical
Communications
Company, Inc.

P.O. Box 2175 • Goldenrod, FL 32733
(407) 671-7777 • Fax (407) 671-7757
info@enviro-net.com

Cleanup of lead contamination at Miami-Dade park expected to be complete next spring

Staff report

Miami-Dade County's Olinda Park is still closed to the public more than a year and a half after lead contamination was first found in the park's soil.

There have been a number of delays with the cleanup of the park at NW 51st Street and 21st Avenue. Estimated completion is now May of next year.

The cleanup was originally to focus on a small part of the park, but the discovery of additional pollution expanded the effort to include the entire facility.

Cleanup plans now include renovations, some made necessary when a park building was damaged by excavations associated with the work.

Originally, officials said the cleanup project would cost between \$1 million and \$2 million and take about four months. County funds will pay for the cleanup, now estimated at \$1.4 million.

DEP layoffs. The Florida Department of Environmental Protection's Southwest District office in Temple Terrace has laid off 25 employees and will not fill 14 vacancies, saving the agency \$990,000.

Officials say the cost-cutting measure will trim both management and field staff.

In the Southwest district, permit applications were down 40 percent from 2007 to 2011. During the same time period, staffing dropped only 3.5 percent.

Statewide, the department is cutting its budget by 10 percent. Before the layoffs, the Southwest District office had 150 paid staff members and 14 vacancies.

Additional layoffs are expected at the agency's other district offices and at its Tallahassee headquarters.

Cocoa brownfield. The city of Cocoa will try again to win a \$400,000 federal grant to continue assessing potentially contaminated areas of the city.

Since establishing its brownfield program in 2003, the city has used \$800,000 in U.S. Environmental Protection Agency grant funding to assess 30 sites on 110 acres. But in May, the city failed to win a \$400,000 grant to continue evaluating projects.

The city has 44 leaking underground storage tank sites and 34 small quantity generator hazardous waste sites.

Communities can apply for up to \$200,000 to assess contamination by hazardous substances, pollutants or contaminants, and up to \$200,000 to address a site contaminated by petroleum.

The scoring system for EPA brownfield grant applications relies heavily on community need, with grants going to only about 25 percent of applicants nationally this year.

Haines City brownfield. Elsewhere, Haines City is applying for an EPA brownfield grant. The funds would help willing landowners assess their property for contamination from petroleum or hazardous substance releases.

The city has identified 44 potential sites that might fit the bill for evaluation.

The assessment grant can be used for inventory identification, cleanup planning and community involvement.

There are also follow-up funds of up to \$200,000 for as many as three sites per year available in a separate cleanup grant program for a specific brownfield site.

A third grant program of revolving loans would provide the city with up to \$1 million to loan to landowners who want to clean up their properties.

Manatee preserve expansion. Officials in Manatee County have approved an expansion agreement for Robinson Preserve. About 150 acres will be added to the preserve. The land will be restored as a coastal habitat.

The land under consideration for expansion sits just south of the preserve, northwest of Bradenton. Since 2007, gov-

ernment funds for such environmental acquisitions have dried up.

The preserve hosts more than 300,000 visitors a year.

Waste tire arrest. A Citrus County woman is facing criminal charges for allegedly dumping thousands of tires on her five-acre property.

Sandra Dube, 49, was arrested by a Florida Fish and Wildlife Conservation Commission officer.

Retailers were paying Dube, a registered waste tire hauler, about \$1.25 per tire to transport the tires to a permitted facility for proper disposal, according to Dube's arrest affidavit.

Dube admitted to keeping the money and dumping the tires on her wooded property, pocketing about \$3,750 in the process, according to the affidavit.

She also reportedly dumped large piles of solid waste on her property.

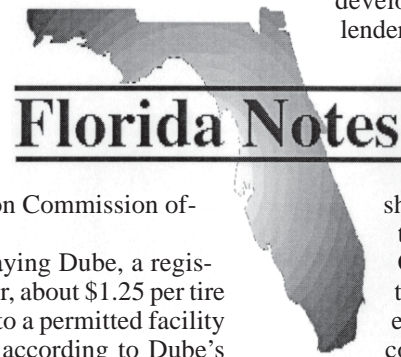
Dube faces charges of dumping more than 500 pounds of trash and failure to obtain a permit.

Names in the news. Anna Long has joined the law firm of Sundstrom, Friedman & Fumero LLP in their Central Florida regional office in Lake Mary. She will continue her practice in environmental law, land use, zoning and administrative law.

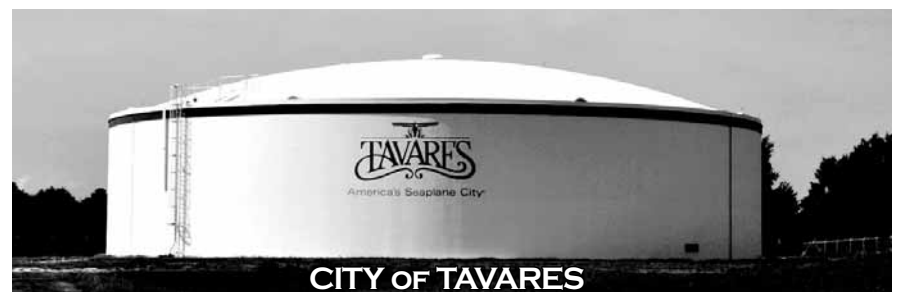
For over 30 years, Long has assisted developers, property owners and lenders in resolving environmental permitting and compliance issues among various local governments and regulatory authorities.

Prior to joining the firm, she served as the environmental manager for Orange County's Environmental Protection Division, a director of environmental and safety compliance in the semiconductor industry, and as an environmental consultant and manager for a major electric utility company.

The Orlando office of PSI added Adam Wells and Jonathan Thrasher as staff engineers. Wells is a graduate of the University of South Florida and Thrasher is a graduate of the University of Alabama-Huntsville. Both graduated with a bachelor of science degrees in civil engineering.



Prestressed Concrete Tanks



CITY OF TAVARES

5.0 MG RECLAIMED WATER TANK

CONSULTING ENGINEERS:

MALCOLM PIRNIE, INC.

GENERAL CONTRACTORS:

E. T. MACKENZIE OF FLORIDA, INC.



CITY OF WINTER SPRINGS

3.0 MG WATER STORAGE TANK

CONSULTING ENGINEERS:

CPH ENGINEERS, INC.

GENERAL CONTRACTORS:

BEACH CONSTRUCTION COMPANY, INC.



EASTPOINT WATER AND SEWER DISTRICT

0.5 MG WATER STORAGE TANK WITH 1900 GPM AERATOR

CONSULTING ENGINEERS:

WILSON MILLER, INC.

GENERAL CONTRACTORS:

ROYAL AMERICAN CORPORATION CO, INC.

**High Quality • Long Life
Virtually Maintenance Free**

THE CROM CORPORATION

Builders of Water and Wastewater Tanks
250 S.W. 36TH TERRACE • GAINESVILLE, FL 32607
PHONE: (352) 372-3436 • FAX: (352) 372-6209 • www.cromcorp.com

West Palm Beach commissioners reject \$24 million pelletizer plant

Staff report

The city commission of West Palm Beach voted 3-1 against funding a \$24 million "pelletizer" plant.

Palm Beach County and the cities of West Palm Beach, Lake Worth, Riviera Beach and Palm Beach oversee the East Central Regional Water Reclamation Facility. The ECRWRF Board is issuing \$115 million in bonds to update the decades-old wastewater treatment plant at Roebuck Road and the Florida Turnpike.

One component of the plant would convert sludge cake into pellets that can be used as fertilizer.

The Solid Waste Authority of Palm Beach County has its own pelletizer plant three miles away, built in 2009 for \$37 million. The ECRWRF has been pumping its sewage to the SWA plant.

But SWA is planning to shut down its compost operations. This move prompted the new pelletizer plant idea.

ECRWRF's consultants, Hazen and Sawyer, said the county and cities could save \$200,000 a year over 20 years by building their own plant.

In voting against the plant's funding, the commission indicated they needed more information before reconsidering approval.

Destin water quality. Results from a series of water quality tests in the Destin area have raised concerns from city leaders.

The Okaloosa County Health Department conducts tests at four locations within the city on a weekly basis. During several weeks this fall, samples tested high for enterococci, which normally inhabit the intestinal tracts of humans and animals. The bacteria can cause disease, infections and rashes in humans.

A spokesperson for the Okaloosa County Health Department said the presence of enteric bacteria indicates fecal pollution that could have come from various sources including stormwater runoff, human sewage, pets or wildlife.

The city plans to watch test results closely in the coming weeks.

IRL brown tide. Scientists are hunting for the sources of an algae bloom at the northern end of the Indian River Lagoon system.

The bloom began to appear in the Mosquito Lagoon in southern Volusia County last summer and then spread to the northern part of the IRL.

Scientists from the St. Johns River Water Management District, the Florida Fish and Wildlife Conservation Commission and the University of Florida are collaborating to monitor the bloom and investigate its potential consequences.

The bloom is dominated by a single-celled brown tide algae species. St. Johns district scientists say it is similar to a brown tide species that plagued coastal lagoons in Texas for nearly eight years in the 1990s.

The species reached exceptionally high levels in August, but died back sharply in early September when Tropical Storm Isaac passed through.

That die-off caused low oxygen levels in the water that led to a widespread fish kill in early September.

Troy Rice, director of the Indian River Lagoon National Estuary Program, said the

blooms can decrease the productivity and biomass of some other algae species and sea grass beds, and may decrease filter feeding by shellfish.

The brown tide blooms are associated with high chlorophyll concentrations, can grow over a wide range of salinities and favor high summer water temperatures, according to Rice.

Avon Park study grant. The city of Avon Park was awarded a \$101,000 grant from the Florida Department of Environmental Protection for planning upgrades to the city's wastewater treatment system.

City Manager Julian Deleon said that improvements recommended by the study will be funded through grants or low interest loans.

While no specific project is proposed, Deleon said there are four possibilities. One idea is a reclaimed water treatment process that converts wastewater to irrigation-quality water.

Other ideas are the purchase of additional land to expand the treatment plant's percolation system, improvements in water transmission or rehabilitation of the master lift station.

Suwannee district ag funding. The Suwannee River Water Management District will provide \$1.5 million in cost-share funds to assist farmers in conserving water and protecting water quality.

The funds will pay for projects that increase irrigation efficiency and water conservation, and assist with nutrient management technology.

Those interested in the program could apply beginning in October either through the district's website or in person at the SRWMD headquarters.

Funding will be awarded through a ranking process based on various criteria. A major consideration is the effectiveness of the proposed project to protect, conserve and restore water resources.

Priority will be given to operations within a water resource caution area and to those who have enrolled, or are in the process of enrolling, in the Florida Department of Agriculture and Consumer Services Best Management Practices program.

Applicants must also have an active water use permit and volunteer for the district's Water Use Monitoring program.

Marineland drainage study. The Flagler County Commission has approved \$449,000 for the design and permitting of stormwater management improvements for Marineland Acres and the surrounding area.

Marineland has long experienced flooding problems after heavy or extended rainfall events.

Study costs will be covered by a combination of gasoline taxes and disaster recovery initiative funding as part of DRI obligations for improvements related to the Malcompra Canal.

Engineering firm England, Thims & Miller will conduct the study and propose solutions to the Marineland Acres drainage problems.

County Administrator Craig Coffey told commissioners that the county will still have \$150,000 left after paying for the study. That money will be available to start work on stormwater projects.

He said additional funds will be sought from the Florida Department of Transportation, the Florida Department of Environmental Protection and other agencies.

Activists threaten lawsuit in Miami-Dade. Environmental group Biscayne Bay Waterkeeper notified local, state and federal environmental agencies that they intend to file a lawsuit in 60 days over Miami-Dade County violations of several provisions of the Clean Water Act.

The group hopes the action will spur the agencies to implement fixes to Miami-Dade's aging water and sewer systems.



Flowers Chemical Laboratories

What's Sampled in Florida...

Stays in Florida

- ADaPT Reporting
- Environmental, Waste and Drinking Water Analysis
- PhD Chemist on Staff
- Field and Courier Services



For all your environmental analytical testing, call Deena Patsourkos
Cell: 407-460-2236
Office: 407-339-5984, ext 216

Visit our Florida facilities in Altamonte Springs, Port St. Lucie, Madison, and Marathon in the Keys.

For all your drinking water and wastewater analytical testing, call John W. Lindsey, Jr.
Cell: 863-412-3950
Office: 407-339-5984, ext. 217

55 years of service to the environmental industry



407•339•5984
www.flowerslabs.com

WATCH
Continued on Page 5

DEP issues permit for discharge of GP wastewater to St. Johns

By SUSAN TELFORD

The Florida Department of Environmental Protection announced that Georgia-Pacific LLC will be allowed to discharge industrial wastewater from its plant in Palatka into the St. Johns River.

The Georgia-Pacific mill has been manufacturing paper tissue products there since 1947.

Last month, the agency issued a draft permit that served as a renewal of the permit issued in 2002. The permit requires GP to discharge directly into the St. Johns River instead of Rice Creek.

The DEP has allowed Georgia-Pacific to discharge over 23 million gallons of wastewater a day into Rice Creek without a wastewater discharge permit for the past seven years.

In 2002, GP signed an agreement to clean up its discharge. The company said it has made \$200 million in plant upgrades prescribed by the state and the U.S. Environmental Protection Agency since then to meet environmental regulations that protect the health of downstream waterbodies.

Negotiations regarding the wastewater permit were separate from the issue of the four-mile pipeline from the GP paper mill directly to the St. Johns. The construction of the pipeline was part of a 2002 administrative order that directed the company to build the pipeline by October 2012 if the company could not meet water quality standards in Rice Creek.

The pipeline will allow GP to eliminate the discharge of pollutants into Rice Creek, a much smaller waterway where the mill

WATCH

From Page 4

The county has been negotiating with the U.S. Environmental Protection Agency and U.S. Department of Justice since May when the federal agencies said Miami-Dade was violating the Clean Water Act and proposed a consent decree.

The county has 13,000 miles of decaying water and sewer pipes. Also on the critical list are six treatment plants.

Miami-Dade Mayor Carlos Gimenez said he expects work to begin soon. He indicated that \$100 million is already available for the work with another \$300 million in bonds to be sold to cover additional costs.

Crystal River sewer project lawsuit.

A group of residents sued the city of Crystal River and Citrus County to halt work on a controversial wastewater project.

A nonprofit group called Freeholders of Service Area 112-113-114 filed suit in September. They are asking a judge to invalidate the interlocal agreement between the city and county that initiated the sewer project.

Work in areas 112 and 113 is already complete.

The \$3.4-million job was approved by city council last June. The Florida Department of Environmental Protection is covering 85 percent of costs with a grant.

Work on Area 114 was due to be let in October and according to Crystal River City Manager Andy Houston, the 114 project will proceed unless they are legally told otherwise. Work would begin early in 2013.

Homeowners in areas 112 and 113 where work has been completed have already been placed on tax assessment rolls.

Bay County plant award. The Bay County Water Plant received the Operations Excellence Awards for Public Water Supply Facilities in the Northwest Florida Water Management District, the second year in a row the plant received the award presented by the Florida Department of Environmental Protection.

According to DEP, organizations that win the award "demonstrate excellence in operation, maintenance, innovative treatment, waste reduction and pollution prevention."

violated clean water standards. The newly constructed pipeline was the state's answer to GP's mantra that "the solution to pollution is dilution."

"It's never a win for the St. Johns or any river when there is a new pipeline discharging pollutants directly into a waterbody," said St. Johns Riverkeeper Lisa Rinaman.

"However, this permit is much better than the permit that was on the table two years ago" she said. "So I think we've made improvements by working together. We wish it would go further."

One of the newly added permit conditions requires the paper mill to close a large industrial pond that may still contain dioxin from manufacturing processes used before 1998 that used chlorine for bleaching. Dioxin is well documented as a human carcinogen.

Dioxins are a group of hundreds of chemicals that are highly persistent in the environment. The most toxic compound is 2,3,7,8-tetrachlorodibenzo p-dioxin, or TCDD. Dioxin is formed as a by-product of many industrial processes involving chlorine such as waste incineration, chemical and pesticide manufacturing, and pulp and paper bleaching.

The EPA has reports dating as far back as 1994 that describe dioxin as a public health threat. In 1997, the International Agency for Research on Cancer announced that the most potent form of 2,3,7,8-TCDD, is now considered a Group 1 carcinogen.

Scientific studies dating back to the 1990s document high toxicity levels of dioxin. Several species were found to have indications of hormone problems, including bass and alligators, along waterways from Jacksonville to Central Florida.

The most drastic effect was seen on the mosquito fish, *Gambusia affinis*. It showed the most obvious external changes. The female mosquito fish, whose lower fins are normally fan-shaped, grew pointy, finger-like fins. Male fish use fins like this during mating.

Scientists suggested the changes happened because steroid-like chemicals, which occur naturally in trees, washed into creeks along with wastewater from the mill and caused a bizarre chemical effect that caused some female fish to grow male-like organs.

Scientists and environmentalists have since argued that hormone imbalances could impact humans and large animals that depend on smaller prey. Other scientific studies have shown higher levels of cancer of the liver, gallbladder, ovaries and uterus occurring in humans in areas where there is a higher concentration of industrial wastewater runoff.

GP has since changed its manufacturing process so it no longer produces dioxin, but the plant's wastewater still flows through the dioxin-laden pond. GP will divert the flow of water from the most contaminated parts of the pond within one year.

DEP Secretary Herschel Vinyard said that closing the pond will eliminate the potential that dioxin could end up in the river.

However, GP has another year to close the most contaminated parts of the pond

and two more years until the entire pond will be sealed off. Until then, the wastewater will continue to flow through the polluted pond, into the pipeline and directly into the river.


Rinaman wrote on the St. Johns Riverkeeper blog that they are asking the DEP to require the contaminated pond to be iso-

GP


Continued on Page 15



ST. JOHNS RIVERKEEPER®



*The St. Johns Riverkeeper
Lisa Rinaman*



PROTECTION AND ENFORCEMENT

GOOD FOR OUR RIVER.
GOOD FOR YOUR BUSINESS.

ST. JOHNS RIVERKEEPER
FOR THE RIVER. BY THE PEOPLE.

JOIN
ST. JOHNS RIVERKEEPER®
stjohnsriverkeeper.org/join



**LEWIS
LONGMAN &
WALKER | P.A.**
ATTORNEYS AT LAW
See Things Differently®

The Definition of
"Clean Water" is Changing.
When. Not If!

How will you respond to the new rules? Do you have an implementation plan? That you can afford? That the agencies accept? That will get the job done?

While others have been fighting, Lewis Longman & Walker has been planning and positioning their clients to meet the new criteria efficiently, effectively, affordably.

We are lawyers, but we are much, much more.

www.llw-law.com

TALLAHASSEE 850.222.5702 WEST PALM BEACH 561.640.0820 BRADENTON 941.708.4040 JACKSONVILLE 904.353.6410



**Sawgrass
Matting & Co.**

Sawgrass Matting & Co. gives our clients the ability to access environmentally sensitive areas and provides temporary roads and staging areas where load stabilization or surface protection is needed. We offer rental and installation of Dura-Base® HDP mats. These mats have a usable surface area of 91 sq ft (7' x 13' x 4.25" thick) and weigh 1,050 lbs each.

Contact us today for pricing and information.

Sawgrass Matting & Company, Inc.
Dade City, Florida
(813) 997-1675 or (352) 437-4388
jeanne@SawgrassMatting.com
SawgrassMatting.com

"Standing firm on any ground."

WHY CUSTOM DRILLING...

because more than 97% of our annual sales are from repeat clients and we would very much like to include you.



CUSTOM DRILLING SERVICES, INC.

800.532.5008 | WWW.CUSTOMDRILLING.NET

Terracon is a proud partner on two national and six regional Phoenix Award teams based on our Brownfields work.

- 1999 EPA Region 5 National Phoenix "Top Ten" Award: John Deere Commons/The Mark, \$275 million investment.
- 2001 EPA Region 6 Phoenix Award: Victory Redevelopment/American Airlines Center, \$475 million investment.
- 2005 EPA Region 7 Phoenix Award: Ice Harbor/Port of Dubuque Redevelopment, \$288 million investment.
- 2006 EPA Region 6 Phoenix Award: Heifer International World Headquarters, \$17.5 million investment.
- 2007 EPA Region 7 1st National Runner-up Phoenix Award, Regional Phoenix Award: Iowa River Landing Redevelopment, \$266 million investment.
- 2010 EPA Region 6 Phoenix Award: City of Oklahoma Landfill/Dell Center, \$62 million investment.



Offices Nationwide (407) 740 6110
terracon.com/winter-park

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

Major departmental reorganization pays dividends for Pinellas County

By PRAKASH GANDHI

Officials in Pinellas County believe that a major organizational reshuffle of some key environmental services is improving the way they do business.

The old utilities department, public works and parts of environmental management have come together in a new Department of Environment and Infrastructure to provide critical programs and services.

The DEI has nine program areas including water, sewer, surface water management, vegetation and mosquito control, streets and bridges, transportation management, landfill and site operations, waste-to-energy and waste reduction.

"Things are going very well," said DEI Executive Director David Scott. "By combining public works, environment and utilities, we are now responsible for much of the operations of the county."

"All of the facilities are working together to provide a continuance of the services. These include water, sewer, reclaimed water, watershed management, transportation and stormwater, among others."

Before the merger last year, the individual departments of utilities, public works and part of environmental management had already started eliminating some positions.

From the adopted FY 2010 budget to the proposed FY 2013 budget, a total of 107 positions were eliminated and operating capital budgets were reduced to save \$59.5 million.

Mining companies seek to market reservoirs, water capacity

By DAN MILLOTT

Recent downturns in road building and other construction work have forced rock mining companies to seek new revenue streams. One approach they are actively pursuing is to market their reservoir capacity and source water to utility systems.

In September, Palm Beach Aggregate in western Palm Beach County and Lake Point Restoration in western Martin County went before the West Palm Beach City Commission at their invitation to test the waters of interest.

Elliot Cohen, director of communications for West Palm Beach, said the September presentation was preliminary; no

decisions were made. The commission asked both firms to return with cost estimates on what the city would pay for the use of their reservoirs and the water they could provide. No specific time frame was established for the companies' return.

Cohen noted that West Palm Beach Mayor Jeri Muoio backed a plan last year for the city to dig 10 additional drinking water wells and to secure additional water sources for a backup system.

Last year during a severe drought, conditions were so bad that the city's reserve water supply was down to just 60 days.

Because the city's water system is so antiquated, companies like Palm Beach Aggregate and Lake Point Restoration view West Palm Beach as a prime candidate for a water deal.

But since the drought, the area has experienced record rainfall, so concerns about water shortages have subsided.

An indication of the change is reflected in the water level of Lake Okeechobee. As of mid-October, the South Florida Water Management District reported level of the lake at 15.86 feet. A year ago the level logged in at 11.79 feet.

West Palm Beach draws its source water from Lake Okeechobee and uses gravity to draw it along 20 miles of canals to Lake Mangonia and Clear Lake, and then to their drinking water plant.

Just before the commission workshop appearance of the two firms, Jim Andersen, PG, a hydrologist and president of JLA Geosciences in Jupiter, told commissioners that the plan could provide enough water through 2032—even in the event of a one-in-a-hundred-year drought.

Ernie Cox, president of Family Land Remembered, is working with Palm Beach Aggregate as project manager for the reservoir project.

"We are now working on phase one of the project. Lower east coast utilities have been working on this (reservoir) concept since 2006," Cox said.

Cox said it is up to Palm Beach Aggregate and himself as project manager to for-

JAE E



Environmental Service, Inc.

A Full Service Water Well Contracting Company

Specializing in Geoprobe® soil and groundwater sampling, bioremediation injections, monitoring well construction and abandonment.

Fleet of 13 Geoprobe® Machines serving all of Florida
(5400 Truck Mounted, 54LT Track Mounted, 6600 Track/Truck Mounted, 6610/6620 Track Mounted)

Call or email for services today!

Phone: (954) 476-8333 Fax: (954) 476-8347

E-mail jaee@bellsouth.net or visit us on the web at www.JAEEnv.com

WATER
Continued on Page 15

Implementing statewide numeric nutrient criteria: Are we there yet?

By STEVE PEENE, PhD

In May of 2009, the *Specifier* published an article entitled “Numeric nutrient criteria: A difficult road ahead.” The image of a family traveling down the road with storm clouds looming wasn’t a bad one, and I guess this is the point where the parents start hearing that question from the back seat: “Are we there yet?”

The article was published just four months after the U.S. Environmental Protection Agency submitted a letter to the Florida Department of Environmental Protection outlining an expedited time frame for completion of numeric nutrient criteria.

In the letter, EPA stated that criteria for freshwaters would be done in 12 months and estuaries (marine waters) in 24 months. Well it’s been nearly four years since EPA’s letter, and a lot has happened. But statewide NNCs have yet to be implemented in any waters in Florida.

So where are we today?

To understand that, you have to look at it from the point of view of the two key players, EPA and DEP. The two agencies have been working in parallel on developing NNCs since that letter was issued, and who will ultimately define Florida’s NNCs is still up in the air.

To present all that has happened through the past four years would take more room than we have here but hopefully the following will give a reasonable summary of the key events leading up to where we are today.

We’ll start by discussing where the two agencies are with the state’s freshwaters—lakes, rivers, streams and springs. EPA’s efforts are titled the “Inland Rule.”

The Inland Rule, published as final on Dec. 6, 2010, covers the freshwaters throughout Florida except for what EPA calls the Southern Inland Flowing Waters. These are basically the wetland and canal systems of South Florida below Lake Okeechobee.

The finalization of the rule occurred despite significant comments and concerns voiced by many stakeholders and officials with cities, counties and state agencies—even DEP itself.

As expected, the rule was challenged in federal court and on Feb. 18, 2012, the U.S. District Court issued an order to EPA remanding portions of the rule. The two parts that were sent back to EPA were the criteria for the streams and a portion of the rule that sets NNC values upstream of unimpaired lakes.

As I write, EPA has not yet provided revisions for the portions that were remanded. The due date is Nov. 30, 2012.

As EPA worked through their rule, DEP worked to prepare its own rule following similar methodologies but with some key differences. Those differences were focused on trying to alleviate concerns that were raised on specific aspects of EPA’s Inland Rule.

Some highlights were the inclusion by DEP of biological indicators for streams to aid in defining if the system is impaired, and the recognition that extensive efforts have occurred—and will continue to occur—in the development of site specific total maximum daily loads for nutrients. These should take precedence over more regionally based numbers.

DEP then successfully maneuvered through the Florida rulemaking process and recently adopted legislative requirements. On Feb. 16, 2012, DEP’s freshwater NNCs became law.

Of course, as with the EPA rules, DEP was challenged in state court. But on June 7, 2012, DEP prevailed on all parts of its rule and submitted its rules to EPA for approval. As an aside, the June 2012 ruling is on appeal.

So where do we stand on the freshwaters?

EPA could simply approve DEP’s rules and move forward from there or they could propose revisions to their own. That determination will come by Nov. 30, 2012.

It is important to note that, throughout the Florida rulemaking process, canals (i.e. man-made waterbodies) in the state were exempt as part of the streams criteria. This was not the case for the EPA rules that did not exempt canals from the stream criteria.

The story for marine waters is somewhat less dramatic but that is mostly because those rules have not been proposed by EPA yet, and have not hit the federal court system. EPA titles this rule the “Coastal Rule.”

It is important to note that EPA includes the Southern Inland Flowing Waters as part of these efforts. The dates for EPA to submit draft rules have gone through numerous extensions starting from the original date based on the 2009 letter.

At present, a final drop dead date of Nov. 30, 2012, has been established for EPA to propose NNC rules for all estuaries throughout Florida, with a deadline for final rulemaking of Sept. 30, 2013.

Once again, DEP has been working in parallel to propose rules for the estuaries. Their work has focused on using local re-

sources and information to define site-specific numbers for each waterbody.

Numerous groups and institutions have participated in this effort including many of the National Estuary Programs, universities, local cities and counties, and other state agencies.

Some of DEP’s work has already gone through state rulemaking. NNCs for Gulf Coast estuaries between St. Joe Sound north of Tampa down to Naples were included as part of the freshwater NNCs adopted into law on Feb. 16, 2012.

These rules, along with the freshwater NNCs, were part of the package that was challenged in state court and for which the court ruled in favor of DEP on June 7, 2012. These rules have been submitted to EPA and are awaiting approval.

The remaining estuaries throughout Florida have been broken up into two groups, the Panhandle estuaries and all others not completed under the first two efforts, mostly along the East Coast.

In the rules passed by the state Environmental Regulation Commission back in

December of 2011, dates were established for DEP to finish the two groups. The dates are June 30, 2013, for the Panhandle estuaries and June 30, 2015, for the remaining water bodies.

To date, the Panhandle estuaries have made it through ERC approval process and appear to be on their way to legislative approval. The final group is still some years off.

It’s clear that DEP has made significant progress toward establishing NNCs and, more importantly, has developed a state-level framework for the regulation and control of nutrient issues.

There have been numerous groups and individuals who have petitioned EPA to allow DEP to set Florida’s NNCs and it feels as if that is the way it is going. But again, the final answers have not come and the ball is now in EPA’s court.

As this article will come out after the Nov. 30 deadline, some of the key determinations may have already been made. So, as of the writing of this article, the answer from the front seat is “No, we’re not there yet. But we’re close.”

Steve Peene, PhD, is vice president of Applied Technology & Management in Tallahassee. He can be reached at speene@appliedtm.com.

It’s been four years since EPA’s letter to DEP outlining Florida’s NNC development time frame. But statewide NNCs have yet to be implemented in any Florida waters.

Clark
ENVIRONMENTAL.COM

Cleaning Earth
One Ton at a Time

FDEP Permitted Facilities
Thermal Treatment
& Waste Solidification

Solids • Liquids • Sludges
Bulk • Drum

MULBERRY | 800.276.2187 | CLARKENV.COM

MARINCO BIOASSAY LABORATORY
The Aquatic Toxicology Specialists

4569 Samuel Street
Sarasota, FL 34233
TEL: (941) 925-3594
FAX: (941) 922-3874
www.biologylab.com

NPDES Toxicity Testing
NELAC/IP Accredited #E84191
Samples Accepted 7 Days a Week
Dedicated Support Representatives

We are the only toxicity testing laboratory in Florida to exclusively use in-house cultures. That translates into low stress test organisms and more reliable results for our clients.

Call 1-800-889-0384

How do you keep up with all that’s going on in Florida?

The *Florida Specifier* provides monthly news coverage of the environmental issues that matter the most—water resources, supply and distribution; soil and groundwater remediation; wastewater treatment and reuse; hazardous waste management; stormwater management; air quality and much more. There’s just no better way to keep up with what’s happening in your industry.

Subscribe today!

Name: _____
 Title: _____
 Company: _____
 Address: _____
 City: _____ St: _____ Zip: _____
 Phone: _____

Send \$24.95 for one year (12 issues) or \$49.95 for three years to: NTCC Inc., P.O. Box 2175, Goldenrod, FL 32733 or call (407) 671-7777 with your credit card number. (NTCC Inc. Federal Tax ID: #59-3036689)

Mote Marine Lab robot monitors red tide in real time off Florida's coast

By ROY LAUGHLIN

Mote Marine Laboratory is now using a yellow, torpedo-shaped robot to conduct weeks-long monitoring forays at red tide outbreaks along Florida's Gulf Coast.

The robot, dubbed "Waldo," carries a

small spectrophotometer specifically optimized to detect the presence of red tide cells. The detector, the BreveBuster™, is named after the red tide protist, *Karenia brevis*.

The device can remain in service for weeks because it moves by pumping water in and out of a storage tank, thus changing

its density. A full tank causes it to sink, while evacuating it allows it to float.

Fins on the sides of the torpedo allow the gliding motion horizontally as it moves vertically. By using changes in buoyance to move water across the fins, energy use is very modest and the machine can be deployed for up to 30 days.

The device has a depth altimeter so that it can avoid the bottom, but does not have sensors for objects coming from any other direction. It has been struck once by a boat, but was only superficially damaged.

The BreveBuster is a straightforward split path spectrophotometer and data logger with the ability to periodically inject cleaning solution into its sample chambers to control biofouling on optical surfaces.

The robot has a satellite communications link to Mote's Sarasota office of the Coastal Oceans Observation Laboratory. Periodically, Waldo surfaces, sends its data to shore and then submerges to continue data collection.

Dr. Gary Kirkpatrick, manager of Mote's Phytoplankton Ecology Program and BreveBuster's inventor, says the robot and sensor offer two big advantages for red tide monitoring.

"The ability to look at the entire water column for several weeks is a big advantage," he said. "And it can do that in any kind of weather."

Kirkpatrick said that Waldo was in the Gulf at the end of August when Hurricane Isaac skirted Florida's Gulf Coast. The patchy red tide outbreak that Waldo monitored just prior to and during Isaac's passage later became a substantial bloom.

Mote Marine Lab has been using this kind of robot for remote sensing since 2003 and was one of the early adopters. Kirkpatrick said they have two of them now.

The original device, which is ready for refurbishment after nearly a decade of productive use, and Waldo, now in use for three years, comprise Mote's fleet. Kirkpatrick said they could use another one if they had it, but economic prospects for purchase are not likely.

The robot's long-term capabilities make uniquely useful contributions to Florida's red tide monitoring because outbreaks typically begin away from shore, adding to the cost and effort of ship use for monitoring.

The data Waldo sends to shore provides useful information about the location, size and movement of a red tide bloom over days and weeks, and makes a valuable contribution to science and public advisory.

Kirkpatrick said that red tide outbreak warnings are important to people with asthma and other pulmonary conditions because they are able take action to avoid breathing the toxin.

On the Gulf Coast, he noted, aquaculture has become an important industry. Shellfish cannot be harvested during an outbreak because they accumulate a toxin released by dying *K. brevis* cells.

"If they (aquaculturists) get a warning, they can relocate their stocks or harvest them," explained Kirkpatrick to illustrate the contribution monitoring makes to aquaculture.

Waldo and BreveBuster are simple in design and operation, but that belies their usefulness.

"The issue is that red tide is a complex phenomenon, said Kirkpatrick. "We're doing our small part trying to provide information about where it is and when. We're one group among many scientists and agencies that are putting effort into reducing the harmful effects that red tide causes. We are all working together."



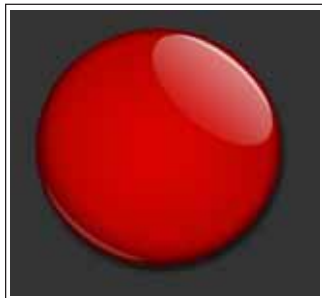
From \$3 per square foot ...
Call to place your order.

(386) 428-8578



3637 State Road 44, New Smyrna Beach, FL 32168 • www.beemats.com • beemats@gmail.com

Now available on Enviro-Net:



Full Access

to monthly issues of the *Florida Specifier* on-line for paid subscribers and clients.

Check it out.
www.enviro-net.com

Advocacy group claims DEP dropped ball on Key Largo contamination

By PRAKASH GANDHI

State environmental officials are under fire again from an environmental advocacy group. Public Employees for Environmental Responsibility is accusing the Florida Department of Environmental Protection of failing to notify the public that the grounds of Key Largo Hammock Botanical Park are contaminated.

The group also accuses officials of blocking efforts to monitor and remove contaminated soil.

"Our basic complaint is that the DEP has not followed its own rules," said PEER Florida Director Jerry Phillips. "It has not identified the extent of the contamination

and the steps that are needed to remediate the contamination."

PEER has requested the state inspector general to find out why DEP has allegedly violated its own rules.

The park is located on grounds that once belonged to the Key Largo Air Force Station.

One of the contaminated areas is near the former site of an underground storage tank that was part of a missile launch site. The other contaminated area was once a former skeet shooting range.

Around 2005, the DEP brought in a consulting firm to investigate the sites for industrial waste. About a year later, the consulting firm reported that soil samples contained too much lead and arsenic.

PEER alleges that after getting the news, DEP blocked the consultant from installing any monitoring wells or removing contaminated soil.

PEER says that DEP is required by state law to analyze the contaminated area, notify the public and come up with a plan to clean up the site. But Phillips said the state is trying to cover up the arsenic problem rather than clean it up properly.

PEER claims that prior land uses left a toxic legacy. The group wants DEP to publicly announce the arsenic findings and post warning signs, fully investigate the arsenic and execute a plan to clean the area.

He said a whistleblower recently tipped his group off to the arsenic and other contaminants which prompted their public records investigation.

He said that when the state bought the property, it knew the contamination was present. "The problem is that it is hazardous material," he added. "DEP said they needed to do extensive studies to determine the extent of the contamination. Instead of that, the agency simply threw up their hands and said it is not going to pursue this any more."

Phillips said PEER has sent a letter to the state inspector general's office asking

PEER
Continued on Page 12



Advanced Environmental Laboratories, Inc.

AEL wishes everyone a *Merry Christmas* and a busy, busy, busy New Year!



Jacksonville: 904-363-9350
Gainesville: 352-377-2349
Miami: 954-889-2288
Orlando: 407-937-1594
Tallahassee: 850-219-6274
Tampa: 813-630-9616

It's time to adopt public-private partnership legislation to facilitate public infrastructure financing, development

By JOHN J. FUMERO

The time has come. By January, a fresh contingent of elected officials will take the reins of power throughout the state and country. Nearly all of them will have won by promising to create jobs and cut government spending.

Florida, like many areas throughout the U.S., is in need of billions of dollars in funding for public infrastructure. Among other things, repairs to aging water and sewer systems, roads, bridges and storm-water systems are critical. State and local governments remain under serious budgetary constraints.

There is a growing consensus that our economic recovery is hampered, in part, by the poor condition of our infrastructure and our congested roadways, ports and airports.

In 2011, the American Society of Civil Engineers estimated that \$1.5 trillion is needed beyond what is available over the next five years.

Now, private sector funding sources are available, expanding and interested in investment in public infrastructure projects.

The *Wall Street Journal* has reported that over 30 major investment funds with more than \$180 billion in capital are seeking to invest in long-term public infrastructure projects.

Voters—overwhelmingly concerned with the economy—want their elected officials to explore nontraditional means of addressing fiscal problems. The method they favor most, according to a poll conducted by Lazard, is private investment in public infrastructure.

Simply stated, major investment and public pension funds are looking to invest in public infrastructure projects. This represents an untapped revenue source that could help jump-start the economy, create jobs and improve the quality of life for all Floridians. The question is how to take advantage of private entrepreneurship, innovation and capital.

The answer is “Public-Private Partnerships.” P3s are globally proven models. During the past two decades, more than 1,300 such partnerships valued at over \$250 billion were signed in the European Union, Canada, South America, Australia and Asia.

P3s mean different things to different people and are perceived by some as privatization. Not so. A P3 is simply a cooperative, contractual means by which the public and private sectors undertake a project in a manner that will benefit both parties.

There are various models and case studies that can be utilized by state and local governments. P3s have been successfully used for highways, bridges and railroads in the past and present. P3s have been used for airports and seaports, water treatment plants, power generation and transmission lines, jails and correctional facilities, hospitals and more.

P3s provide private sector skills and benefits to the public sector through shared risks and rewards, efficient project management and access to private capital for project financing. Through performance-based contracts and conditions, local governments and state agencies retain project control and oversight, while transferring risk to the private partner, thus, guaranteeing an open political environment with local stakeholder support.

Experience dictates that P3s must operate under a clearly articulated vision, reduced to a written document; must be based upon a mutual understanding of the needs of the parties and include enforceable, performance/outcome-based written agreements to insure that each party will meet the needs and concerns of its stakeholders.

Europe and other regions throughout the world have substantial experience with P3 for urban redevelopment, as well as for creative ways to provide public infrastructure.

The U.S. has had an evolving, and at times mixed, experience with P3s. The current fiscal crisis has brought renewed pub-

lic and private interest to better understand and evaluate the appropriate use for this collaborative approach to project development and implementation.

It is widely reported that rating agency Standard & Poor's expects capital market financing for U.S. infrastructure projects to double in the next two years as banks cut back on lending due to regulatory requirements to hold more capital. As banks pull back from infrastructure financing, P3 equity is moving in.

In July, investment firm BlackRock agreed to acquire Swiss Re Private Equity Partners, a European private equity and infrastructure fund, as part of its expansion into private equity. According to the *London Economic Times*, the deal increases BlackRock's ability to invest money into public infrastructure.

The Florida P3 Act

Florida has considered a legislative approach to P3. HB 337/SB 576, filed during the 2012 Legislation Session creates the Florida Public-Private Partnership Act in Chapter 287, Florida Statutes, and provides legislative findings to support the use of public-private partnerships in Florida. At least six other states have P3 legislation in place today.

The bill provides for definitions to be used in the P3 Act. Included are terms such as “public entity,” defined as a state and any agency or authority thereof; any county, city or town, and any other political subdivision of the state, any public body politic and corporate, or any regional entity that serves a public purpose.

In addition, a “qualifying project” means any public-purpose facility or project, including, but not limited to, buildings, stadiums, a building or facility that meets a public purpose and is developed or operated by or for any public entity, and water/wastewater utilities and facilities.

The bill provides that the financing of the qualified project may be in such amounts, or on such terms and conditions, as agreed upon by the responsible public entity and the private entity. The private entity and the responsible public entity may propose to use any funding resources that may be available and may issue debt, equity or other securities or obligations; enter into leases; access any designed trust funds; borrow or accept grants from any state infrastructure bank; and secure any financing with a pledge of, security interest in, or lien on, any or all of its property, including all of its property interests in the qualifying facility. The responsible public entity may take any action to obtain federal, state or local assistance for a qualify-

ing project that serves the public purpose of the act and may enter into any contracts required to receive such assistance.

The bill sought to create the Public-Private Partnership Advisory Commission. The commission would review and report on the implementation of the P3 Act, and provide recommendations and revisions to further the P3 opportunities in the state.

Procedurally, upon receipt of a proposal, the responsible entity would, under the proposed legislation, determine whether to accept the proposal for consideration. The responsible public entity could charge a reasonable fee to cover the costs of processing, reviewing and evaluating the request. The responsible public entity could reject any proposal initiated by a private entity at any time.

Under current state law, the Florida Department of Transportation enjoys P3 options. FDOT may receive or solicit proposals and, with legislative approval, enter into agreements with private entities, or consortia thereof, for the building, operation, ownership or financing of transportation facilities. If FDOT receives an unsolicited solicitation or proposal, it is required to publish a notice in the Florida Administrative

Weekly stating that FDOT has received the proposal and will accept other proposals for the same project. In addition, FDOT requires an initial payment of \$50,000 to accompany any unsolicited proposal to cover the costs of evaluating the proposal.

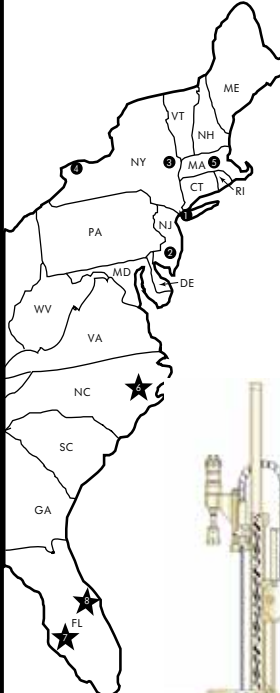
The 2013 Florida Legislature should take up P3 legislation and add Florida to the growing list of states that have adopted P3 legislation to facilitate public infrastructure development and financing. Initiatives to empower local and state agencies while tapping into private sector ingenuity, risk tolerance and financing can help jump-start our economy. The ability and interest is here; what we need is the legal and statutory framework.

To learn more about P3 infrastructure development opportunities and options, take advantage of the wealth of information from firms offering these services.

John J. Fumero, a former general counsel of the South Florida Water Management District, is a co-managing partner of the statewide law firm of Sundstrom, Friedman & Fumero LLP, with offices in Boca Raton, Lake Mary and Tallahassee. He can be reached at jfumero@sfflaw.com or (561) 982-7114.

ZEBRA Environmental Corp.

Subsurface Sampling, Injection, and Data Collection for Environmental Professionals Since 1992



NEW OFFICE IN ORLANDO!

ZEBRA has opened a second office in Florida to better serve our clients in the Central and Eastern markets.

ZEBRA provides the widest range of DPT sampling, injection and data collection (MIP, HPT, CPT, EC, LIF) available anywhere.

<p>ZEBRA - Tampa</p> <p>1020 South 82nd St. Tampa, FL 33619 P: (813) 626-1717</p>	<p>ZEBRA - Orlando</p> <p>1310 Central Florida Parkway Orlando, FL 32837 P: (407) 438-1212</p>
--	---

www.teamzebra.com

-One Stop Shop for Site Services
-Top Health and Safety Program



JOINS FORCES WITH...



- Remedial Trailer Rental, SVE/AS/DPE/Water Treatment
- New Remedial Systems
- Site Construction/Installation
- Dewatering Treatment Equipment
- ISCO and ex-situ AOP Capability (HiPOx®)

GWTT has added a PulseOx® P-1000 trailer to its rental fleet of remedial systems

www.gwttinc.com
www.aptwater.com

(941) 342-6585
bbaize@gwttinc.com

FRC 2012 rewind:

Opportunities available overseas for those firms up to the challenge

By NICK ALBERGO, PE, DEE

I would like to thank all of you who attended the 18th Annual Florida Remediation Conference held in Orlando in October. I was again honored to have the opportunity to provide the opening remarks. For those in attendance, you will recall that I mentioned some of the more important changes on the environmental regulatory front.

This year, the Florida Legislature funded Florida Forever with \$8.4 million dollars to buy land; provided \$30 million dollars more to cleanup the Everglades; removed the water management district caps on revenues and gave legislative oversight to their budgets and, in some cases, their millage rates; and attempted to streamline many environmental permit provisions with House Bill 503. In general, these efforts represent improvements and opportunity for our industry.

HB 7003 addressed environmental resource permitting, requiring the state Department of Environmental Protection to work with the water management districts to create statewide environmental resource permit rules that will govern any stormwater management system, be it a dam, impoundment, reservoir, appurtenant work and so forth. And HB 7051 exempted the DEP from the ratification requirements of Florida's Legislature regarding nutrient regulation.

DEP submitted its version of the nutrient rule for U.S. Environmental Protection Agency review in accordance with the Clean Water Act and proposed its own numeric nutrient criteria to address nitrogen and phosphorus pollution. The result will likely generate new revenue sources and opportunities for our industry as well.

I spent the remainder of my time discussing environmental opportunities abroad and was surprised by the number of people who approached me over the course of two days, inquiring as to how they and their companies could get involved in similar efforts. I'm certainly happy to offer my thoughts but I must caveat this column by first mentioning that HSA Engineers & Scientists is in its infancy regarding its own overseas attempts. Secondly, there are immense personal, professional and logistical challenges to working abroad.

That said, the development of resources is driving the growth and opportunities for the environmental consulting profession all over the world. In emerging economies from Asia to Africa and Latin America, the middle class is growing and seeking a higher standard of living with the elevated consumption that goes along with such growth. So the demand for "stuff" has sustained a decade-long high in commodity prices, and mining activity has accelerated to suit this demand throughout the world.

Many of the larger engineering consulting firms are aggressively chasing global mining, oil & gas and other extraction and production operations. In fact, the \$866 billion global environmental market grew four percent in 2011 amidst slow economic recovery in the developed world precisely for this reason. And it is this global quest for resources and the need for supporting infrastructure that continues to spur environmental growth domestically and worldwide.

The resource boom in Latin America, for example, is generating solid opportunities for environmental consulting and engineering firms, driven both by increasingly stringent environmental regulatory regimes in the leading regional economies and, as is the case around the world, by our multinational clients who maintain their own high environmental standards, even if their investments abroad have no such regulatory drivers or enforcement locally.

This boom is spurring activity in infrastructure development, notably power (emerging economies need energy to support their infrastructure, power their growing industrial activity and fuel their vehicles), transportation and water works. And what I have observed is that environmental issues have become increasingly interwoven into the economy and all functions of its key actors in developed and developing nations. Our industry does benefit

from development and growth as the ability to pay for water, then waste services, then wastewater, then air quality usually follows.

So among the business sectors most relevant to the environmental services and technology providers, keep an eye on renewable energy, water reuse, recycling and green building initiatives—all of which are growing at rates higher than the economy in most nations. Specifically, there is a lot of effort going into protecting agriculture and water supplies, which is what I've been most involved with.

The natural gas boom is also a global phenomenon, not limited to the unconventional gas bonanza taking place in this country. New gas finds have popped up in a broad swath of locations from Poland to East Africa, the Middle East and elsewhere.

Another critical market segment to watch both domestically and on a global basis is disaster response and prevention. Whether the cause is climate change or not, it's impossible to deny that natural disasters have been more frequent in recent years with increasingly destructive impacts. In fact, the 2000 decade was the highest loss-event period in recorded history, and 2011 was the highest year for losses ever, with the tsunami in Japan as a large contributor.

Finally, especially for government-led programs, whether on a federal, state or local level, outside sources of funding remain necessary. And while the U.S. does not enjoy as many domestic sources, we remain heavily involved in supporting overseas environmental markets, particularly as they present opportunities for export by U.S. environmental technology and service firms.

And don't discount the opportunities represented by multilateral lending institutions, such as the World Bank and its International Finance Corp., the Asian and African development banks, the European Bank for Reconstruction and Development and the Inter-American Development Bank. Backed by their nations, these entities are the "go to" sources for grants, long term loans, very long term loans at below margin interest rates, and professional ad-

vice for water, power, transportation and communications infrastructure projects. Collectively, they invested \$280 billion in 2011 on such initiatives.

So why isn't everyone doing it?

In short, the planning of a job or project overseas is far more complicated. Many of the most fertile markets have huge corruption issues and a large illegal labor market. Be especially weary of reliance on agents to obtain contract opportunities. You must also monitor the political cycle, especially in emerging markets, as projects can start and stop without notice. In fact, an early decision in the process of obtaining work abroad is deciding the manner in which you enter the market, for example, via government contracts or via a major multinational corporation, maybe one that is already a client. It's also important to pay attention to the work "type" ("specialized" services offer the best opportunities).

Which countries offer the most attractive opportunities?

While Europe is by far the safest, opportunity is currently limited. Generally, the north holds better opportunity than the south (outside of London) where economic pressures have substantially dried up public spending. Eastern Europe, particularly Poland and Ukraine, are holding their own with mostly infrastructure-related opportunities. The bottom line is the projections for European economic growth over the next five years is flat and thus it's probably not the best place to start.

The so-called BRICS countries of Brazil, Russia, India, China, and South Africa are all hot. These countries represent 18 percent of world gross domestic product—expected to be 47 percent by 2030. Minerals and oil & gas are hot markets in South America, Western Australia, China and Indonesia, but oil & gas can be volatile due to pricing fluctuations. China is cash heavy and huge, but a difficult country to work in outside of following multina-

ALBERGO
Continued on Page 14

A look at discharge reporting, de minimis conditions under new DEP consolidated rule

Part two of a series

By STEVE HILFIKER

The Florida Department of Environmental Protection is in the process of blending the rules that have been used to assess and remedy contamination on sites in Florida for many years. The Petroleum Contamination Site Cleanup Criteria that began as Florida Administrative Code Chapter 17-70 in the 1980s will soon be repealed and concurrently merged into Chapter 62-780, together with the dry cleaning and brownfield rules.

DEP notification requirements for petroleum discharges and dry cleaning solvents are clear in 62-770 and 62-782. However, immediate notification to DEP of contaminant discovery in the existing 62-780 is not specified, with the exception of emergency response actions.

The lack of specificity on this matter is due to one of the most reasonable rules in the Florida Administrative Code—de minimis discharges (Rule 62-780.550, FAC).

The level of contamination discovered on a site is often insignificant. Small quantity contamination is common at agricultural sites, mechanical operations and industrial properties, and could exist on virtually any site. If every soil stain observed during a Phase I ESA was sampled, many financially sound commercial real estate transactions would fall apart. Superfund was prompted by the Love Canal, not by thousands of insignificant impacts that exist on sites where chemicals are used. The rule allows the property owner to resolve a manageable pollution discovery with specific time constraints without opening the regulatory process. This is fair.

Proper regulatory enforcement is needed on sites that could cause harm to people or to the natural resources that we all enjoy, but not on sites where an insignificant, small quantity release impacts the wallet of hard-working people. Unless a site meets one of the criteria for regulatory notification, the regulatory agencies need not get involved.

This column is intended to discuss the most common reporting circumstances in Florida, more specifically, 62-780. It is not intended as an exhaustive and definitive procedure for the timing or necessity of regulatory reporting.

In general terms, immediate DEP notification of a contamination discovery is required in four circumstances: 1) upon discovery of a petroleum discharge (per 62-770.250); 2) upon discovery of a dry-cleaning solvent discharge (per Section 376.3078(9)(c), Florida Statutes); 3)

upon the violation of a permit condition; and 4) when observing an actively occurring discharge of hazardous materials. It is interesting to read the definition of "discharge" in 62-780.200(16). All of the terms in the definition are active verbs, implying that a discharge is an observed event at the time of release.

Remember that 62-780 does require DEP notice of field activities on contamination assessment of discharges that are not de minimis. DEP notice is also required within ten days of an off-site discovery of impacts per 62-780.220(2), but such discoveries are typically made during the assessment of known impacts on a subject property. Also, reportable quantities under RCRA, potential imminent health risks and other site-specific circumstances may exist that prompt other regulatory notification requirements, so there are exceptions to the general statement made in the prior paragraph. Refer to paragraph 62-780.210(4) in the new rule for more circumstances that might require notification.

The definitions in the rules for discharges at petroleum and dry-cleaning facilities, and the procedures for reporting them are clear. A "Discharge Report Form" is a standard form that is required to be submitted by the owner, operator or discharger based on FAC rule 62-770.250 if a "discovery" of "petroleum contamination" is made. The definitions for these terms are provided in FAC rules 62-770.200(16) and 62-770.200(9), respectively. Depending on the circumstances, the DRF must be submitted within 24 hours or 7 days.

Similarly, Section 376.3078(9)(c), FS, states that the owner or operator of a dry-cleaning facility or wholesale supply facility at which there is a spill of more than one quart of dry-cleaning solvent outside of a containment structure shall report the spill to the state through the State Warning Point immediately upon the discovery of such spill. In each case, the time frames for reporting and the party responsible to report are stated.

But what about arsenic, other metals, pesticides and other contaminants regulated by 62-780?

The current rule is designed to regulate the cleanup of sites contaminated with impacts other than petroleum and dry-cleaning solvents. As described above, the de minimis Section 62-780.550 enables a prompt remedy with no discharge notices in specific circumstances. However, if a site does not meet the de minimis criteria, FAC rule 62-780.600 states that a site assessment report must be initi-

HILFIKER
Continued on Page 16

Florida Specifier

P.O. Box 2175
Goldenrod, FL 32733

Michael R. Eastman
Publisher/Editor
Goldenrod, FL
mreast@enviro-net.com

The Florida Specifier welcomes columns, articles and letters to the editor on any subject or issue pertinent to the environmental, regulatory and technical areas the newspaper covers. We reserve the right to edit all submissions for newspaper style and publish submissions on a space-available basis.

Calendar

December

DEC. 1 – Course: Backflow Prevention Recertification Review, Jacksonville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 2 – Course: Backflow Prevention Recertification Exam, Jacksonville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 3 – Course: Backflow Prevention Recertification Review, Lake Buena Vista, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 3 – Course: Backflow Prevention Recertification Review, Altamonte Springs, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 3-6 – Course: Asbestos: Worker, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 4 – Seminar: Innovative Operational Improvements, Tallahassee, FL. Presented by the Big Bend Chapter of the Florida Water Environment Association. Contact Tony Holley at (850) 222-3975, ext. 101.

DEC. 4 – Course: Backflow Prevention Recertification Exam, Altamonte Springs, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 4 – Course: Backflow Prevention Recertification Exam, Lake Buena Vista, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 4 – Course: Backflow Prevention Recertification Review, Fort Myers, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 4-5 – Course: Sequencing Batch Reactor Operation, Make it Work for You, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 5 – Course: Backflow Prevention Recertification Exam, Fort Myers, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 5 – Course: 4-Hour Refresher Course for Spotters at Landfills, C&D Sites and Transfer Stations, Tampa, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 5 – Course: 8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations, Tampa, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 5-6 – Course: Initial Training Course for Transfer Station Operators and Material Recovery Facilities - 16 Hour, Tampa, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 5-7 – Conference: 2012 Winter Conference of the Florida Stormwater Association, Tampa, FL. Call 1-888-221-3124 or visit www.florida-stormwater.org.

DEC. 6 – Course: Backflow Prevention Recertification Review, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 6-7 – Summit: 9th Annual Manufacturers Summit and Marketplace, Orlando, FL. Presented by the Manufacturers Association of Florida. Call (850) 402-2954.

DEC. 7 – Course: Backflow Prevention Recertification Exam, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 7 – Course: Laws and Rules for Florida Engineers, Eastpoint, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 7-15 – Course: Backflow Prevention Tester Training and Certification, Venice, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 8-16 – Course: Backflow Prevention Tester Training and Certification, Jacksonville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 10 – Course: Backflow Prevention Recertification Review, Destin, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 10-12 – Course: Backflow Prevention Assembly Repair and Maintenance Training and Certification, Gainesville, FL. Presented by the University

of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 11 – Course: Backflow Prevention Recertification Exam, Destin, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

DEC. 11-13 – Course: Activated Sludge Process Control & Troubleshooting, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

January 2013

JAN. 7-11 – Course: Backflow Prevention Assembly Tester Training and Certification, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 7-11 – Course: Backflow Prevention Assembly Tester Training and Certification, Lake Buena Vista, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 7-11 – Course: Wastewater Class A Certification Review, Lakeland, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 8-11 – Course: Wastewater Class B Certification Review, Lakeland, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 9-10 – Course: Introduction to Building Energy Modeling, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 10-19 – Course: Backflow Prevention Assembly Tester Training and Certification, West Palm Beach, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 10 – Course: Backflow Prevention Recertification Review, Kennedy Space Center, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 11 – Course: Backflow Prevention Recertification Exam, Kennedy Space Center, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 14-16 – Course: Backflow Prevention Assembly Repair and Maintenance Training and Certification, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 15-17 – Course: Train the Trainer: How to Design & Deliver Effective Training, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 15-18 – Course: Environmental Awareness Bootcamp, Orlando, FL. Presented by EPA Alliance. Call (713) 703-7016 or visit www.epaalliance.com.

JAN. 16-17 – Course: Underground and Above-ground Storage Tank Management, Orlando, FL.

Presented by EPA Alliance. Call (713) 703-7016 or visit www.epaalliance.com.

JAN. 21 – Conference: Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. Contact Mike Carron, Gulf of Mexico Research Initiative at (228) 688-2687 or michael.carron@gomri.org.

JAN. 22 – Course: Lead Refresher: Risk Assessor, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570.

JAN. 24 – Seminar: Reuse Seminar, Altamonte Springs, FL. Presented by the Florida Water Environmental Association. Contact Lisa Prieto at (407) 366-9443 or visit www.fwea.org.

JAN. 24 – Course: Green Globes Professional (GGP) Certification Course, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 24 – Course: Backflow Prevention Recertification Review, Kennedy Space Center, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 25 – Course: Backflow Prevention Recertification Exam, Kennedy Space Center, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 25 – Meeting: American Water Resources Association Florida Section Meeting, Ft. Myers, FL. Contact Kristin Bennett at (727) 781-3414 or visit www.awraflorida.com.

www.awraflorida.com.

JAN. 28-30 – Course: Asbestos: Inspector, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570.

JAN. 28- FEB. 1 – Course: Water Class A Certification Review, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 29 - FEB. 1 – Course: Water Class B Certification Review, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 29 – Course: Unidirectional Flushing Workshop, Marianna, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570.

JAN. 30-31 – Course: Initial Training Course for Transfer Station Operators and Material Recovery Facilities, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570.

JAN. 30 – Course: 4-Hour Refresher Course for Spotters at Landfills, C&D Sites and Transfer Stations, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

JAN. 30 – Course: 8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

Florida Specifier

Help us keep our readers informed

Every month we publish this calendar of environmental industry events...have been for well over 30 years. It's the most comprehensive calendar available of both local events here in Florida and regional/national events of interest to Florida's environmental professional community.

Folks contact us every month with these calendar listings...

But we haven't heard from you yet about your event. Don't be shy—send us the particulars!

Send notices of conferences, seminars, courses, workshops, meetings, expos and other events of interest to environmental professionals working in Florida **at least 45 days in advance of event** to Calendar, *Florida Specifier*, P.O. Box 2175, Goldenrod, FL 32733-2175; fax, (407) 671-7757; e-mail info@enviro-net.com.

Train the Trainer: How to Design & Deliver Effective Training

January 15-17, 2013 Gainesville, FL \$695

This course provides:

- Fundamental training competencies
- Techniques to enhance your skills and capabilities
- Tips to help you develop, deliver, evaluate and manage training
- Practical application exercises
- Presentation skills practice
- Preparation for the CET exam

Excellence in Environmental Training

Register online: www.treeo.ufl.edu or contact Randy Foli rfoli@treeo.ufl.edu or 352/392-9570 ext. 212

Coordinator: Laurel Brown, lbrown@treeo.ufl.edu or 352/392-9570 ext. 231

www.treeo.ufl.edu

UF TREEO Center
UNIVERSITY OF FLORIDA

Water restoration efforts moving faster with completion of basin plans

By MELORA GRATAN

With total maximum daily load allocations in place, state environmental officials are pushing for quicker approval and implementation of basin management action plans to restore impaired waterways with specific nutrient cuts within specific time frames.

The Florida Department of Environmental Protection recently announced the completion of the BMAP for the Middle St. Johns River Basin. This is the 11th

BMAP adopted by the agency and the fifth in less than two years, which collectively include 89 waterbody segments. In addition, there are nine more basin plans under development that cover 61 segments.

"The state of Florida has always been a leader in water quality assessment and restoration, but we are now insisting on a sense of urgency in identifying solutions to restore our impacted waterways," wrote DEP Secretary Herschel Vinyard in a prepared statement about the latest BMAP that includes Lake Harney, Lake Monroe, the

Middle St. Johns River and Smith Canal.

The new plan partners DEP with other state agencies, seven cities and two counties who have committed \$22 million to achieving the goals of reducing nitrogen by 37 to 39 percent and phosphorus amounts by 26 to 33 percent.

The target for the first five years is to achieve at least half of these reductions, with some entities required to do more based on their contributions to the watershed.

However, when you look at the list of projects included in the BMAP, there are only a few outstanding projects remaining that aren't street sweeping or educational efforts. For instance, the city of Deltona has a wet detention pond under construction and catch basin maintenance listed as ongoing, and the state Department of Transportation has numerous wet detention ponds and BMPs listed as planned.

"A lot of the cities and counties are familiar with the process. We had them submit projects since the TMDLs have been done and they are conscious of the nutrients," said Samantha Budd Fillmore, basin coordinator for DEP's Bureau of Watershed Restoration, Watershed Planning and Coordination Section.

"They have done so many projects, we are already 80 percent there for the first five years, which is unusual," she said. "Some are already planning ahead for the next phase."

After the first five years are implemented, stakeholders evaluate progress and make any changes necessary to stay on track to meet TMDLs. Then, another BMAP is developed for the next five years until the process is finished in 15 years.

For the Lake Harney, Lake Monroe and MSJR plan to be effective, reductions in upstream sources must also occur since roughly 96 percent of the total nitrogen loading and 95 percent of the total phosphorus loading comes from sources upstream, according to the BMAP.

Fillmore agrees that this plan goes hand in hand with others such as the BMAP

adopted for the Lake Jesup basin, which is in its third year of implementation.

"Two boundary conditions for the new BMAP include Lake Jesup and upstream from Lake Harney. The next actions will target upstream," she said.

In addition to numerous small-scale projects, the partners involved in the Lake Jesup BMAP are nearly ready to break ground on the Black Hammock Creek water quality improvement system.

DEP is providing \$2 million for the project that will rehabilitate the pathway to the lake so the water doesn't flow through so quickly.

"The pathways will be a little longer and provide more treatment for all that water close to the lake," Fillmore said.

Fillmore said the Jesup BMAP efforts are making significant headway in nutrient reductions. The target for reducing total phosphorus per year in five years is 6,200 pounds and they have already achieved a little over 9,000 pounds for the first two years, she said.

The process for determining reductions uses a model developed by the water management districts that Fillmore calls both amazing and intricate. The model takes into account factors such as land use, ground cover and distance from the waterbody, and builds in natural attenuation so that the amounts are reasonable and accurate.

The anticipated outcomes for implementing the Lake Harney, Lake Monroe and the MSJR Basin plan are improved water quality trends in the watershed tributaries and Smith Canal; decreased loading of total nitrogen and phosphorus; increased coordination between state and local governments in problem solving for surface water quality restoration; determination of effective projects through stakeholders, enhanced public awareness and corresponding corrective actions; and enhanced understanding of basin hydrology, water quality and pollutant sources.

Fillmore anticipates more projects in the next phase of the new BMAP that could include a larger regional project.

Environmental Services



TAMPA FL: (813) 626 - 1717 WWW.TEAMZEBRA.COM ORLANDO FL: (407) 438 - 1212

Geophysical Surveying Services

- Environmental/Brownfields Investigations
- Karst/Sinkhole Studies
- Utility Designation/Vacuum Excavation
- Rebar/Post Tension Cable Identification
- Geological Characterization
- Archaeological/Water Resources
- Concrete/Pavement/Bridge Deck Evaluation
- Marine Surveying

"Experience is What Makes Us Different"

Offices Throughout Florida | Since 2002 | MBE / SDB / DBE Certified
www.geoviewinc.com | 1-888-832-6436

ENVIRONMENTAL DRILLING SERVICE inc.

Celebrating 23 Years of Service
1989 - 2012

Auger, Rotary, Sonic, Geoprobe Truck
and ATV-Mounted Services Statewide

Phone: (407) 295-3532 • E-mail: Doug@edsenvironmental.com
www.edsenvironmental.com

GEOLOGIC & ENVIRONMENTAL TESTING

- Geoprobe Services
- Geophysical Services
- Environmental Drilling
- Geotechnical Drilling

David Harro
Florida Licensed Drilling Contractor #9204
(727) 647-2758 • david.harro@geo3group.com

Certified Florida MBE

Michael G. Czerwinski, P.A.
ENVIRONMENTAL CONSULTANTS

- Permitting
- Phase 1 ESA's
- Wetland Delineation
- Water Quality Studies
- Gopher Tortoise Relocation
- Environmental Impact Assessment
- Listed Species & Habitat Assessments & Mapping

(877) 249-1012
www.MGCenvironmental.com • Lecanto, FL 34461

LAKELAND LABORATORIES
Prompt. Accurate. At a Fair Price.

- Solid & Chemical Materials
- Non-Potable Water
- Hazardous Waste
- Pesticides & PCBs
- Petroleum Waste
- Chapter 62-713, FAC
- EPA Method 18
- and more...

(863) 686-4271
www.lakelandlabs.com

Clear Solutions for
Remediation Professionals

Innoeva Technologies

Susan Bostian, P.E.
susan@innoveatech.com
(919) 342-2944
www.innoveatech.com

KNOW BEFORE YOU DRILL

ASR & Deep Injection Well Site Characterization

Hydroseismic imaging can map hazardous fault zones, karst collapses, and fractured confining units where migration of effluent to underground sources of drinking water is highly probable

WALKER MARINE GEOPHYSICAL CO.
Call 561-251-5352
www.walkermarinegeo.com • info@walkermarinegeo.com

Providing quality drilling services with quality people and equipment

HD Huss Drilling

Environmental drilling • Exploration
Geotechnical drilling • Wire line coring
All terrain and barge rigs

(352) 567-9500 • Toll-free: 1-800-487-9665
www.hussdrilling.com
Offices in Dade City, Bonifay and Monticello

URS
A leader in Florida
and around the
World in...

FLORIDA OFFICES	ENVIRONMENTAL	WATER RESOURCES
Bartow	Assessments	Stormwater
Bradenton	Mitigation Design	Groundwater
Boca Raton	Remedial Design	Water Quality
Chipley	Brownfields	TMDLs
Ft. Lauderdale	Permitting	Potable Water
Jacksonville	Industrial Hygiene	Wastewater
Lake City	Health & Safety	Reclaimed Water
Miami		NPDES
Naples		
Orlando		
Tallahassee		
Tampa		

www.urscorp.com

Environmental Remediation Services, Inc.

760 Talleyrand Ave.
Jacksonville, FL 32202
(800) 718-5598 • (904) 791-9992
www.ersfl.com

- 24/7 Emergency Spill Response
- Site Remediation Contractor
- Industrial Cleaning
- Vacuum Truck/Tanker Transportation
- Hazardous/Nonhaz Waste
- Drum Disposal
- Roll-Off Transportation
- Licensed UST Contractor
- PCC 048415

SORA, NESC release national nutrient regulation survey results

Reducing nutrient pollution in waterways has become a concern across the country.

Onsite wastewater systems are one way that nutrients—nitrogen and phosphorus—are introduced into receiving waters. Because these systems are overseen by state and local authorities, rules vary geographically.

Recently, SORA, in conjunction with the National Environmental Services Center, released the results of a national survey

assessing the level of state regulation of nitrogen and phosphorus.

Highlights include: 25 states have existing rules for nitrogen and 10 have rules for phosphorus; 18 states have local rules addressing nitrogen, seven have local rules addressing phosphorus; and databases for tracking permits related to nutrient-reduction units are found in fewer than 10 states.

Survey results are available at <http://www.nesc.wvu.edu/sora/forms/soranutrientsurvey.pdf>.

HCR
HANDY CONSULTING & REMEDIATION, LLC

Handex Consulting & Remediation, LLC

Celebrating over 40 years of service in:

- Consulting & Remediation
- Construction & UST Removals
- Site Assessments / Brownfields
- System Design, Installation, O&M
- Sludge Dewatering
- Mobile Remediation / Drilling
- Health & Safety / Mold Remediation
- Emergency Response / 365-24-7
- LSSI / Pre-Approval Program Support

New Orlando Headquarters:
1350 Orange Avenue, Suite 101
Winter Park, FL 32789
Phone: 321-441-9801
Fax: (321) 594-2710
iheath@handexmail.com
www.hcr-llc.com

www.hcr-llc.com

World skills on your doorstep

amec

AMEC is a leading supplier of consultancy, engineering, and project management services to our customers in the world's oil and gas, minerals and metals, and environment and infrastructure markets.

We provide local access to our skills across the world.

amec.com

SWFWMD proposes MFLs for Chassahowitzka, Homosassa river systems

By PRAKASH GANDHI

Southwest Florida Water Management District officials have developed proposed minimum flows and levels for the Chassahowitzka and Homosassa river systems.

The plan calls for up to a nine percent reduction in flows in the Chassahowitzka River system. Because existing withdrawals have reduced flows by one percent, this new minimum flow would allow an additional eight percent reduction.

The district's proposal for the Homosassa River system calls for up to a three percent reduction in flows. Because existing withdrawals have already reduced flows by one percent, this new minimum flow would allow an additional two percent reduction.

In October, the district's governing board agreed to initiate rulemaking and approve adopting a rule to establish minimum flows for the Chassahowitzka and

Homosassa river systems at 97 percent of natural flows.

The board also agreed to reevaluate MFLs for both systems in six years. In addition, district staff has been directed to develop a framework for a water use caution area for Hernando and Citrus counties, including options with costs.

District staff has also been directed to develop a summary of all current and future activities and funding regarding the springs and rivers in the area. A report will be presented to the district's governing board in January.

The levels are directly related to whether the district issues permits for water systems and wells in the future.

District Spokeswoman Robyn Felix said the agency held or attended nearly 30 public meetings to discuss the proposed minimum flows and gather additional input. She said the district conducted additional analyses based on public comments.

Felix said the revised flows are more

restrictive as a result of the additional analyses. The recommendations are based on a maximum potential 15 percent loss of habitat.

Water district scientists have determined that anything more than a 15 percent loss of habitat would be harmful to the ecosystem.

The nine percent minimum flow reduction for Chassahowitzka would be much greater than current conditions.

The district spent \$1.4 million on studies before making their recommendations. Even then, the district continued to study the rivers because some residents said the recommended minimums allowed too much potential water withdrawal.

Felix said multiple scientific peer re-

view panels have determined that the district has taken a reasonable approach to establishing minimum flows.

The proposed minimum flows for the Chassahowitzka and Homosassa systems are consistent with others that have been set by the district, she said.

The district planned to hold an additional public meeting in October to present the revised minimum flow recommendations.

"As a result of an extensive public input process with stakeholders and additional analysis, our revised minimum flows are more restrictive and will provide greater protection for the river systems," said Doug Leeper, the district's chief environmental scientist.

Lake O discharges continue to create ecological problems downstream

By DAN MILLOTT

Tropical Storm Isaac dumped 11 inches of rain on Lake Okeechobee in August, following the already high amounts from the rainy season. For Mark Perry, executive director of the Florida Oceanographic Society, that just served to shine a brighter light on an ongoing problem for the St. Lucie and Caloosahatchee estuaries.

When the lake water is too high, the U.S. Army Corps of Engineers—charged with controlling the water levels—opens the gates and discharges water into the two major inland waterways.

The resulting torrent then makes its way to both coasts. And it's not a drop in the bucket. Perry said that about 1.7 million gallons of water can be discharged per day. He said the ecological problems this creates are immense. Over the last couple of months, the excess fresh water dumped over the oyster beds in the St. Lucie Estuary is a real threat.

"If there is too much fresh water introduced into the oyster beds and the condition lasts for 28 days, the oysters die."

The oyster and seagrass beds are nurseries for 300 species of shrimp, lobster and fish including grouper and snapper.

The current critical ecological conditions date back 100 years to when the swamps south of Lake Okeechobee were drained. As part of the effort to drain the swamps, the St. Lucie Canal was built.

And over the years, both the St. Lucie

Canal and the Caloosahatchee River have been deepened and widened.

The draining of the swamps south of the lake created a vast farming area with over 130,000 acres devoted to agriculture dominated by sugar farming.

Perry and environmental activists have proposed a solution: Buy the land now being farmed by U.S. Sugar and Florida Crystal. That would amount to between 20,000 and 30,000 acres from each.

Perry believes that the land can be purchased by the state using bonds. He noted that 76,000 acres south of the land in question were already acquired that way. The Everglades Restoration program might also channel some federal dollars into the land purchase, he said.

Before the network of canals was constructed south of the Lake, the water from the Kissimmee basin flowed slowly over the ground, through the Everglades.

"It took 24 months for it to (flow through)," he said. "We have to rehydrate the Everglades and this is one way to do it. It will help the Glades and also recharge the aquifer."

He said that dumping 1.7 million gallons a day into the canals and rivers doesn't make much sense, noting that South Florida's eight million people consume 1.3 million gallons of water per day.

If farm lands could be purchased, the corps would have another option for releasing excess water. Perry wants that water to move at a snail's pace south through the Glades, just like it did over 100 years ago.

The evaluation software has an unusual rubric: the 60 items evaluated are referred to as credits. The tally of points as a proportion of the total that could be earned yields a rating that may qualify the infrastructure project for awards such as "acknowledgment with merit, silver, gold or platinum."

In comparing Envision to other rating systems available, ISI noted that envision is holistic. It is suitable for any type of infrastructure project of any size, and makes comparison of infrastructure in one traditional category comparable to one in another traditional category.

Prior evaluation schemes ranked projects based on regional criteria or sector type (roads, dams, airports).

ISI is a collaborative effort of the American Society of Civil Engineers, the American Public Works Association and the American Council of Engineering Companies. It is a nonprofit entity that provides sustainable infrastructure design, construction and operations.

The value of Envision, according to ISI, is that the tool will help a design team evaluate the costs and benefits over a project's lifetime, including environmental benefits.

A higher level of sustainability is one of the environmental benefits.

PEER From Page 8

for an investigation into the DEP's handling of the case.

"We want DEP to do its job," he said. "We know this contamination has existed for at least a decade. There are endangered species in the area that are supposed to have the highest levels of protection. And there is potential for harm to the public."

DEP spokeswoman Reena O'Brien said the agency has monitored the former skeet range at the park since it took ownership

of the parcel.

She said that the department followed the recommendations of the assessment together with evaluating environmental impacts from any act of remediation.

"The department's scientists confirm that excavation of this sensitive area would negatively impact about 60,000 square feet of coastal mangrove forest that is protected in Florida," O'Brien said.

"Also, due to the site's extreme remoteness and lack of human access, there is no risk to human exposure."

Environmental Services

A full service law firm, including the areas of land development law, environmental law and local government law.

**COBB
COLE**
since 1925

Offices in Daytona Beach and Deland, Florida
Michael.Woods@CobbCole.com | 1-386-736-7700

For additional information or questions regarding this message please contact Michael Woods, Partner, Cobb Cole.

SPOTLIGHT GEOPHYSICAL SERVICES

Providing subsurface imaging with land and shallow marine geophysical tools
Experienced and licensed geophysicists based in Miami, Florida
www.spotlightgeo.com

FRC has a little brother...

Join us this May in Ft. Lauderdale!

LANZO

8 million feet of installed CIPP in sizes ranging from 4 through 144 inches

Fred Tingberg, Jr.
www.Lanzo.net
125 S.E. 5th Ct.
Deerfield Beach, FL 33441
Office: (954) 973-9700
FredT@Lanzo.org
28137 Groesbeck Hwy.
Roseville, MI 48066
Office: (586) 775-5819
Cell: (954) 931-4430

FILTER MEDIA

Leaders in...

Filter Media Removal, Disposal & Installation

Suppliers of...

- Filter Media to all levels of Government, Industrial and Commercial Plants & Installations
- Anthracite Filter Media—Sands & Gravels, Garnet, Ilmenite, Activated Carbon, Green Sand
- Filter Media which meets or exceeds AWWA Specifications

One Source for...

QUALITY • VALUE • SERVICE



AnthraFilter Inc.

TEL: 1-800-998-8555 FAX: 727-865-0905
www.anthrafilter.net

Greenway Electrical Services, LLC

Lift Station Specialist

Orlando, FL

License #: EC0001094 • (407) 532-2778
cduffield@greenwayelecscv.com
www.greenwayelecscv.com

A Veteran Owned Company

www.ceuplan.com

CEU Plan® is approved for wastewater and water-related continuing education credits

- approved for pdh's — professional engineers
- approved for ceu's — DW and WW operators
- over 150 courses to choose from starting at \$9.95
- largest online in USA — approved in over 40 states for your multiple state licenses

HAZEN AND SAWYER

Environmental Engineers & Scientists

Providing customized solutions to environmental challenges

Offices in Florida & nationwide

Boca Raton • Coral Gables
Fort Pierce • Hollywood • Jacksonville
Orlando • Sarasota • Tampa

www.hazenandsawyer.com

Hudson

PUMP & EQUIPMENT
A Division of Tencarva Machinery Company

**PUMPS • PUMP STATIONS
CONTROLS • REPAIRS**

NASH VACUUM
GORMAN-RUPP
THERMOFISHER
ITT GOULDS PUMPS
LIGHTNIN MIXERS

ITT A-C PUMP
JOHN CRANE
ALLWEILLER
MILTON ROY
WILDEN

3524 Craftsman Blvd., Lakeland, FL 33803
Phone: (863) 665-7867 Fax: (863) 667-2951

E-mail: NGeiger@tencarva.com
Web address: www.HudsonPump.com

Deltona wrestles with funding for much-needed wastewater plant

By **BLANCHE HARDY, PG**

The city commission and citizens of Deltona, Volusia County's largest city, have struggled over the last few months to hammer out a mutually agreeable compromise to the city's water and sewer rates. Construction of the long-proposed Eastern Water Reclamation Facility hangs in the balance.

The estimated \$25 million wastewater treatment plant will be located on property near 11th Avenue east of State Road 415 near Osteen.

Pensacola-based Baskerville-Donovan Inc. designed and permitted the proposed wastewater plant.

Lee Lopez, the city of Deltona's public information officer, confirmed the proposed plant with a capacity of 1.5 million gallons per day utilizing membrane bioreactor technology.

Membrane bioreactors combine activated sludge treatment with a membrane liquid-solid separation process. The membrane component uses low pressure microfiltration or ultrafiltration membranes, eliminating the need for clarification and tertiary filtration.

One of the key benefits of MBR is that it effectively overcomes the limitations associated with poor settling of sludge in conventional activated sludge processes. It permits bioreactor operation with consid-

erably higher mixed liquor suspended solids concentration than CAS systems.

The wastewater treatment plant will handle both residential and industrial waste and will generate reclaimed water for irrigation to serve Wal-Mart along with various schools and nurseries in the area, said Lopez.

The city executed a rate study and adopted a viable plan to fund capitol improvements for water and sewer in 2008. The plan included raising rates, previously frozen for over a decade, by 17.25 percent per year for five years and securing a low-interest \$20 million state loan to begin construction of a new plant sometime in 2013.

Unfortunately like many municipal governments, Deltona then suffered a number of financial challenges related to the economic downturn.

In 2009 and 2010 during the height of the foreclosure crisis, estimates indicated nearly one in ten homes within the city were empty resulting in a reduction in water and sewer use and a decline in corresponding revenues.

Anticipated construction starts and redevelopment in both the residential and commercial sectors in the city also declined curtailing the growth in new revenue-generating customers.

The city's existing utility consumers, most of whom are residential, fared no better. The lack of job growth, layoffs, flat lined pay rates and retiree fixed incomes combined with rising household and consumer goods costs to leave many customers in a tenuous financial position.

A number of Deltona's residents have attended recent city commission meetings and workshops to make the commissioners aware they lack the ability to pay any more than they are already being billed for

water and sewer services.

Over the course of meetings held in October and November, the commission moved from raising, to freezing, to reducing then back to raising the water rate, but lowering the sewer rate.

During all of these considerations, the commission expressed concern about how their decision might adversely impact the city's eligibility to secure the loan needed from the state to construct the WWTP.

Much needed commercial development was already occurring in the vicinity of the proposed Eastern plant when the economy stalled.

Now that development is reawakening in the area and the state is in the process of completing a \$75 million widening of State Road 415, the plant is sorely needed to attract new businesses to Deltona.

The existing Western WWTP doesn't have the capacity to handle any appreciable growth.

The city has completed or is undertaking previously funded projects meant to support the plant.

Lopez noted that design and permitting is complete for a \$2.2M road to the plant for which construction will begin in late November or early December of this year. In addition, he said that the wastewater conveyance system is "already in place, except for the 11th Avenue."

The city is undertaking another rate study that they hope to use to support completion of the Eastern WWTP loan agreement with the state, as well as support implementation of a final city rate structure.

If all goes well, Deltona will begin construction on the new Eastern plant in 2013 and go on-line with it 24 months after ground is broken.

Environmental Services



Golder Associates

Jacksonville 904.363.3430
Gainesville 352.336.5600
Tampa 813.287.1717

GROUND ENGINEERING & ENVIRONMENTAL SERVICES

www.golder.com



28 offices throughout the Southeast

Environmental Services • Natural & Cultural Resources • Occupational Health & Safety • Water Resources
Solid Waste Engineering • Geotechnical Engineering • Construction Materials Engineering & Testing

Tampa 813-623-6646 Orlando 407-327-9537



Environmental Services

- ✓ **Sonic Drilling:** Truck Mounted (2) • Track Mounted (3)
Angled wells and low clearance (14')
- ✓ **Geoprobe Direct Push Technology**
• 66 series (3) • 77 series (1) • 78 series (1) • 420M Indoor Rig
- ✓ **Auger/Mud Rotary**
• Diedrich D-120 (2) • Diedrich D-50 (2)
- ✓ **Well Abandonments**

Environmental and Geotechnical Applications
Horizontal Well Installation and Rehabilitation
Remediation System Piping and Vault Installation

(407) 426-7885
2300 Silver Star Rd.
Orlando, FL 32804


www.groundwaterprotection.com
Charles@drillprollc.com
Brian@drillprollc.com

Short Environmental Laboratories

Analytical Testing and Support Services

Specializing in:
Water and Wastewater Analytical Testing
Analytical Consulting
Sample Collection and Support Services

(863) 655-4022 • 1-800-833-4022
shortlab@strato.net



A national provider of tank and container rentals for the storage of hazardous and non-hazardous liquids and solids.

Specializing in frac tanks, weir tanks, vacuum tanks, dewatering and roll-off containers.

Rob Blakely
rob.blakely@adlertankrentals.com
(727) 639-2564

www.adlertankrentals.com



Multiple Mobile Laboratories

- FDOH/NELAC certified for up to 80 compounds by EPA Method 8260C analysis
- Instrumentation includes Agilent 5975C, 7890A GCMS system

Analytical Laboratories of Florida Inc.
PO Box 349
Cape Canaveral, FL 32920
(321) 258-1355
www.alf1992.info
info@alf1992.info

Services available nationwide

Mobile Labs • MIP Services

- GCMS/GC (8260, 8021) Volatiles • Pesticides/PCBs

Membrane Interface Probe (MIP)
FDEP Required Individual Mobile Lab
NELAP Certification
WMBE Certified

Phone: 352-367-0073 www.kbmobilelabs.com

Quality work with a 3-day TAT

NELAC Certified, ADaPT
W/MBE, SBE, SFWMD,
PBC, WPB, School boards

Palm Beach Environmental Laboratories, Inc.
(561) 689-6701

ENVIRONMENTAL RISK MANAGEMENT, INC.

Assessment, Remediation, Insurance,
Tank and Forensic Services

Stephen F. Hilfiker • steve@ermi.net
1-888-ENV-MGMT • 1-888-368-6468
www.ERMI.net

ALBERGO
From Page 10

tional clients. The top 50 cities in China have a GDP equal to Germany and have consistent 10 percent annual growth. But I would offer several words of caution. First, it's difficult to retain Chinese staff and there is no authority granted to manage local contractors.

The Indian marketplace is very desirable due to a population that speaks and works in English. However, the workforce is becoming more expensive. Still, India has huge water technology and infrastructure needs, but like China, governance is weak for public sector prospects.

Brazil is its own market and does not like to be grouped as "Latin." Did you know that 50 percent of the Brazilian population remains unconnected to public sanitation?

There is a huge run on natural resources in Africa and Indonesia. Vietnam has excellent market opportunities due to a large coastline and 87 million people. There are also substantial opportunities in Chile and Columbia. Australia/New Zealand is a relatively small market of only 27 million people but the resources are huge (minerals and oil & gas). It's also a very tough market to enter due to high costs (the dollar is strong), a competitive market and strict employment laws.

The Middle East is very competitive with easy access to oil and gas but you have to have world class expertise (because they can afford to be picky). They have massive port, airport, infrastructure and tunnel projects underway and they are very experienced at managing outside contractors.

Iraq has great promise with significant growth and opportunity. Turkey is also a very attractive market (74 million people), but you better have a strong balance sheet because this part of the world routinely "drags" paying their bills. South and East Africa are doing fairly well. West Africa is another area, however, with significant corruption issues. Still, the resources are tremendous and the demand in areas such as food scarcity, environment and water are driving international aid. Still, the politics can be very tricky. "Black equity" remains an issue but, interestingly enough, social problems drive infrastructure opportuni-

ties. Lastly, there are our friends to the north. The Canadian transportation and resources sectors, especially in Alberta, are strong—there is a lot of pressure to get the shale gas out. There are many public-private partnership opportunities as well. The strong tax base generates spending opportunities. Specialization is important. It's also an export-friendly country.

I can't tell you where to invest in an overseas initiative, but I can tell you that it's all about staying ahead of the continued growth curve in a maturing industry and finding the niche markets. It's about selecting—indeed targeting—these markets in an effective manner and remaining cost competitive while retaining the capability to develop new technologies for alternative remediation strategies.

I also believe that the current backlog in redevelopment, the wealth of resource industries, the globalizing economy and the resourcefulness and passion of the remediation and redevelopment industry itself promise a measure of security in the market that will propel us into the future.

And, as I mentioned in my closing remarks at FRC, we can't always tell, but wonder how much difference one person makes in the world. We look inside ourselves questioning if we have the capacity for heroism and greatness.

But the truth is that every time we take an action we make an impact. Every single thing we do has an effect on the people around us. Every change we make sends ripples out into the world. Our smallest acts of kindness can cause a chain reaction of unforeseen benefits for people we've never met. We might not witness those results, but they happen all the same, be it through the effects of a small firm working on a gas station cleanup, a mid-size firm like mine working abroad on crude but meaningful water and waste cleanups, or the 45,000- person firm providing global professional technical and management support services.

Nick Albergo, PE, DEE, is the president and chief executive officer or HSA Engineers and Scientists, a 275-person environmental and engineering consulting firm with fifteen offices throughout the South-east U.S., headquartered in Tampa.

GP

From Page 5

lated from GP's waste-stream within six months, and that additional sampling for dioxin take place after the isolation plan has been completed.

"We need to put an end to dioxin dumping in our rivers, and we need to know that the efforts to do so have been successfully accomplished," wrote Rinaman.

Another environmental requirement of the permit involves how wastewater samples are collected for testing. The samples must come from the end of the pipeline, not from the area of the river after the wastewater has been diluted by the river known as the mixing zone.

The requirement means the testing will not be affected by the dilution that occurs

WATER

From Page 6

mulate a proposal for West Palm Beach.

"West Palm Beach is potentially a candidate for a part of the project," he said. "But I don't know if the city has determined that it has a need."

The reservoir envisioned by Palm Beach Aggregate could be utilized by numerous utility systems, according to Cox.

In his meeting with the city in September, Cox said the first phase of the reservoir project would not begin until enough water systems had signed up to use the 35 million gallons per day the reservoir could produce. So far, no utilities are on board.

Earlier this year, Palm Beach Aggregate had a proposed reservoir plan with a \$755-million price tag shelved after numerous Palm Beach and Broward county utilities determined that they wouldn't need the reservoir for decades.

Lake Point Restoration operates a 1,005-acre mining operation near Lake Okeechobee and they, too, are looking for new opportunities. They purchased the parcel in January, 2008, for \$29.5 million but since that time the property's value has plunged and is now assessed at \$6.2 million.

DREDGING

From Page 1

The project is examining taking the channel along the St. Johns River from 40 feet to a maximum depth of 50 feet from river mile 14.7 to mile 20.

Currently, vessels that use the Jacksonville Harbor must wait on tidal advantage in order to move into or out of the harbor. This practice, known as light loading, increases transportation costs, according to corps documents on the project.

The goals of deepening the channel include decreasing the time and money involved in light loading and identifying the optimum course for minimizing environmental impacts while better accommodating existing and projected larger commercial ship traffic.

Some of this larger vessel traffic is projected once the Panama Canal expansion is complete in 2015. In addition, the project has been included in an initiative of the Obama administration to fast-track infrastructure projects that could boost the country's economy.

Due to this designation as a national priority project, Harrah said the study's time line has been accelerated by about 14 months. "We are still doing everything we were going to do originally, but we are doing some of the elements, such as the reviews, at the same time instead of back to back."

The agency's plans are to have the draft report done next April followed by public review in May. A finalized report could be ready to go to Congress by April 2014.

The agency has already conducted some public meetings on the preliminary findings and plans to hold more between now and May.

"The environment is of the utmost concern for us and the public," Harrah said. "We want to make sure it is vetted and we know the exact impacts so we can sit at a table and come up with a plan that we can all live with."

He encouraged people to view the regularly updated information on the agency's website at www.saj.usace.army.mil.

in the mixing zone and will create a higher standard for measuring contaminants.

The draft renewal permit also requires the assessment of fish populations to monitor for any potential effects from the relocation of the effluent discharge to the St. Johns River.

Vinyard recently told the *Florida Times-Union* editorial board that he considers the permit, with newly added environmental stipulations, a "big win for the river" because it has some requirements beyond what the state can mandate.

However, environmental activists consider it a great loss for the river. One group of citizens has filed a lawsuit against the state's Board of Trustees for not obeying the Florida Constitution, which requires a public interest test before giving away state resources/submerged lands for private use.

They already have most of the canals in place needed to move the water to West Palm Beach. They have a plan to partner with American Water, Palm Beach County's largest investor-owned water and wastewater service provider.

Lake Point Restoration officials indicated they need more data from West Palm Beach on the workings of their water system and future demands before they can project the reservoir's cost.

Classified Advertising



Project Manager & Phase I/Field Technician - 2 Positions

ERMI seeks a project manager experienced in the assessment & remediation industry, and an experienced field technician for soil and groundwater sampling and Phase I ESA support in Ft. Myers. At least one year of direct experience sampling in accordance with FDEP SOPs will be required. Knowledge of ASTM E1527-05 and Phase I experience preferred. Please send resumes to steve@ermi.net. EOE.

Environmental Lab Supervisor

PotashCorp - White Springs, FL

Experienced scientist sought to serve as the Supervisor of an on-site environmental laboratory for a major North Florida manufacturer. Our lab will be a NELAC certified laboratory accordingly all qualified applicants must meet Technical Manager requirements, specifically they must have a 4-year degree or higher in an appropriate scientific field, 24 semester hours of chemistry and 2 years experience in environmental analysis. Duties include all lab management functions for a certified lab, supervision of field and lab technician staff, operation of electronic lab information management systems, and planning & scheduling of all lab/technician work. Salary dependent on experience and qualifications. Excellent benefits package.

To apply:

Email resume to: whitespringshr@potashcorp.com

or

PotashCorp

Human Resources

P. O. Box 300

White Springs, FL 32096



May 9-10, 2013
Ft. Lauderdale

Last year's first-ever FRC-South (the Florida Remediation Conference's kid brother) was a big success. So we're taking FRC on the road again in 2013—this time to the Embassy Suites Hotel in Ft. Lauderdale.

We plan to serve up a day and a half of technical sessions on soil and groundwater cleanup, with emphasis on the unique geology and regulatory framework of South Florida.

We have started accepting 250-word abstracts on the subjects listed to the right.

E-mail abstracts to Mike Eastman, FRC-South conference manager, at mreast@enviro-net.com.

Questions about the technical agenda? E-mail the above address or call us at (407) 671-7777.

2013 Booth Availability

Booths will soon be available...If you exhibited at last year's conference, you will have first shot at space for the 2013 conference. If your firm did not exhibit at FRC-South last year and you are interested in doing so in 2013, contact Mike Eastman.



Embassy Suites, Ft. Lauderdale

Call for Papers

Anticipated technical sessions include:

- Sustainable/green cleanups
- Brownfield redevelopment in South Florida
- Emerging cleanup techniques and technologies
- Petroleum cleanups
- Regulatory policy and initiatives
- Others

Deadline for abstracts: Jan. 15, 2013



EMBASSY SUITES



2013 FRC-South • www.enviro-net.com • (407) 671-7777 • mreast@enviro-net.com

HILFIKER

From Page 10

ated by the person responsible for site rehabilitation within 60 days of the discovery of a discharge.

Table A of 62-780 outlines applicable time frames for deliverables and other responsibilities of the responsible party. Review these notification requirements carefully, and inform your client of them, if a discharge is not de minimis.

There will be no significant changes to petroleum or dry cleaning solvent notifications, based on the draft version of the new rule posted in September. The same specific requirements for the reporting of petroleum and dry-cleaning solvent dis-

charge reporting in the new rule will simply be merged into 62-780.210. De minimis sections 62-780.550 and 62-780.560 will be applicable at some sites, depending on the quantity of material released.

Consultants should take the time to learn Sections 210, 550, and 560 of the new rule and guide their clients wisely and realistically at sites where the de minimis rule is applied.

The DEP has provided a fair and reasonable way to manage small quantity discharges. Let's not abuse the rule by applying it in conditions that are not truly de minimis.

Based on the draft version of the new rule, de minimis discharges of dry clean-

ing solvents shall not be exempt from the reporting requirements that will be in Section 210 of the new rule. This will stick because such reporting is statutory, as referenced above.

So as the various rules are merged into one, remember which chemical of concern you are dealing with and the quantity that has been released, and read the definitions carefully. Might the discharge be de minimis? Is notification required?

The evidence associated with potential contamination discoveries, the land use, timing and the person responsible for a discharge can be complex and difficult to define. The facts on these matters may not be clear. Diligence, knowledge and documentation of the circumstances at each site are the keys to properly managing risk. Consultants should understand these rules and communicate them clearly to their clients.

Remember that reporting is the duty of the owner, operator or discharger, not the consultant or a prospective purchaser. In real estate transactions, when impacts are discovered during due diligence conducted for the prospective purchaser, these mat-

ters are quite sensitive and can impact economically significant decisions, so the information pertaining to reporting should be confirmed and communicated through legal counsel with experience in these matters.

This column focuses on DEP notification requirements as I understand them based on experience on sites regulated by Florida Statute 376 and the four administrative codes referenced in this article. It is not intended to be a guide for decisions about whether or not a discharge should be reported. Please rely on the rules for that, not on this column.

Regarding the effective date of the new rule, early 2013 appears to be the current projection. The DEP is posting rule developments as they occur on their Waste Division website at <http://www.dep.state.fl.us/waste/>.

Steve Hilfiker is president of Environmental Risk Management Inc., a licensed Engineering & Geology firm that focuses on site assessment, remediation, forensics and risk management. He can be reached at steve@ermi.net.

MERCURY

From Page 1

The report now includes a discussion of mercury exposure to foraging wading birds, and focuses a specific discussion on wood storks. The report concludes that the proposed TMDL will be adequate to protect wildlife.

Tom Messer, plant manager at Suwannee American Cement LLC, sent in one of the lengthiest responses to the proposal. His comments criticized the science and discussed public opinion and legal aspects of the DEP's proposal.

He reiterated a criticism that many in the regulated industries support: If most mercury in Florida's ecosystems comes from atmospheric deposition with global sources contributing, then regulating local sources will be of limited success, particularly since the regulation of local sources has already produced dramatic reductions.

According to Messer, "data presented in the TMDL shows that these regulations have reduced mercury emissions in Florida over the past 20 to 25 years by approximately 98 percent and anthropogenic mercury emissions in the U.S. by approximately 70 percent."

Messer also asserted that Clean Air Act regulated air emissions of mercury are exempt from the TMDL.

His response letter also discussed several recent legal cases illustrating that courts often have a starkly different view of the application of mercury regulations than do the agencies that promulgate them.

Regardless of the scientific rigor supporting a standard finally adopted, Florida's TMDL could be subject to judicial review.

Messer's letter has a subtext throughout that is typical of regulated industries' criticism. They want a rule that gives them a clear and achievable path to compliance with a standard that will be effective without being overly strict. In this case, there is a great deal of skepticism that the proposed regulation provides that clear path.

DEP officials, including Jan Mandrup-Poulsen, administrator of DEP's Watershed Evaluation and TMDL Section, and Thomas Frick, chief of the DEP's Bureau of Watershed Restoration, conducted a series of meetings across the state to refine the proposed rule. The meetings occurred from July through September. The draft proposal survived largely intact.

"There were not significant changes ... but there were clarifications," said Trina Vielhauer, deputy director for the DEP's Division of Environmental Assessment and Restoration.

In the concluding paragraph in the chapter describing modeling results, the report states the basis of the new rule as succinctly as possible: "Once the 0.3 mg/Kg fish tissue concentration target is achieved, there is a 95 percent probability that the ambient total mercury concentration in freshwater systems in the state of Florida would be lower than the 12 ng/L ambient total mercury criteria for freshwater systems. This demonstrates with a high

confidence level that the statewide mercury TMDL will be protective of the ambient water quality criteria. The same mercury load reduction will also be protective of Florida marine waters, which has a total mercury ambient target of 25 ng/L."

As of the end of October, the final draft of the proposed rule was available on DEP's website.

The Florida Legislature must ratify the rule in its spring session, but that is not, in this case, the final stop for this rule. After legislative ratification, the U.S. Environmental Protection Agency must approve it. Once that approval is given, the rule becomes effective in Florida.

The EPA is also under an obligation to establish mercury rules under a consent agreement with environmental groups. The original Sept. 30, 2012, deadline was extended by mutual agreement between the EPA and plaintiffs until Nov. 30.

As noted in an earlier *Specifier* article, both EPA and DEP are walking in lock step in a requirement to set sufficiently protective mercury TMDL values because even if no mercury emissions occurred in Florida, the TMDL could not be achieved due to out-of-state anthropogenic sources.

Carbon Service & Equipment Co.



- Quality carbon and multi-media products & equipment
- Sale & rental of remediation & dewatering equipment and systems including installation and system start-up
- Turn-key non-hazardous & hazardous on-site spent carbon and multi-media change out service

Servicing sites throughout Florida and the U.S.

** CSEC Florida Office **

Jennifer Lalli Belmore
jbelmore@carbonservice.net
Phone: 407-313-9113 • Fax: 407-313-9114

** CSEC Southeastern Office **

H.W. Harter III
hwharter@carbonservice.net
Phone: 803-447-0888 • Fax: 803-732-5670

Florida Specifier

Business Card Ad Annual Rates

Ad size	Dimensions	Rate
Single card	2 1/4" x 1 1/8"	\$425
Double card	2 1/4" x 2 1/4" or 4 3/4" x 1 1/8"	\$725
Triple card	2 1/4" x 3 1/2"	\$1,025
Quadruple card	2 1/4" x 4 1/2" or 4 3/4" x 2 1/4"	\$1,225

All prices are for one year—12 monthly issues.

Keep your firm in front of thousands of environmental professionals every month at extremely low rates. Call (407) 671-7777.



CLEAN EARTH

Clean Earth of Southern Florida
TREATING & RECYCLING PETROLEUM CONTAMINATED SOILS

Services

- Thermal Treatment & Reuse of Petroleum Contaminated Soils
- Transportation, Treatment, & Reuse of Drummed Waste
- Soil Project Management
- Environmental Support Services
- Soil Transportation
- Soil Transloading
- Soil Testing

Benefits

- One-Stop Shop
- Dedicated Customer Service
- In-House Environmental Experts
- Beneficial Reuse
- ~ 3 million tons recycled in 2011

REQUEST A QUOTE TODAY

www.cleanearthinc.com

PH 941.723.2700 | 877.445.DIRT (3478) | Moore Haven, FL

Formerly



CLEAN EARTH OF GEORGIA
NEW LOCATION IN KINGSLAND, GA

Thermal Treatment | Drummed Waste

Index to Display Advertisers

Advertiser (Florida Representative)	Page
Telephone	Facsimile/E-mail
URL/E-mail (if available)	
ADVANCED ENVIRONMENTAL LABS (904) 363-9350 www.aellab.com	8 (904) 363-9354
BEEMATS (386) 428-8578 www.beemats.com	8 (386) 428-8879
CARBON SERVICE & EQUIPMENT (407) 313-9113 www.carbonservice.net	16 (407) 313-9114
CLARK ENVIRONMENTAL 1-800-276-2187 www.thermaltreatment.com	7 (863) 425-2854
CLEAN EARTH (941) 723-2700 www.cleanearthinc.com	16
CROM CORPORATION (352) 372-3436 www.cromcorp.com	3 (352) 372-6209
CUSTOM DRILLING SERVICES 1-800-532-5008 www.customdrilling.net	6 (863) 425-9620
ETEC LLC (813) 972-1331 www.etecllc.com	2
FLOWERS CHEMICAL LABS 1-800-669-LABS www.flowerslabs.com	4 (407) 260-6110
FMC 1-888-295-8661 www.adventusgroup.com	2 (815) 235-3506
GWTT INC 1-800-503-1477 www.gwttinc.com	9
JAEE ENVIRONMENTAL SERVICES (954) 476-8333 www.jaeeenvironmental.com	6 (954) 476-8347
LEWIS, LONGMAN & WALKER PA (904) 353-6410 www.llw-law.com	5 (904) 353-7619
MARINCO BIOASSAY LABORATORY 1-800-889-0384 www.toxtest.com	7 (941) 922-3874
SAWGRASS MATTING (813) 997-1675 www.sawgrassmatting.com	5
TERRACON CONSULTANTS (407) 740-6110 www.terracon.com	6 (407) 740-6112
UNIV OF FLORIDA TREEO CENTER (352) 392-9570 www.doce.ufl.edu/treeo	11 (352) 392-6910
ZEBRA ENVIRONMENTAL CORP (813) 655-1717 www.teamzebra.com	9 (813) 654-9398