



#### Practical Information For Environmental **Professionals**

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## SJRWMD water supply plan

The St. Johns River Water Management District has released its latest draft water supply plan. The district anticipates water consumption to increase by 314 million gallons per day district-wide by 2035.

## Keys canal cleanup

The initial phase of cleaning up of polluted canals in the Florida Keys is set to get underway this month. The project will start with work on eight canals that were selected after a two-year assessment process.

## Battle over MFLs

The North Florida Utility Coordination Group has asked the Florida Department of Environmental Protection to delay the establishment of minimum flows and levels for the Lower Santa Fe and Ichetucknee rivers. If the state does not delay the process, the utilities are contemplating a challenge to the MFLs.

## Miami parks update

The city of Miami has closed two additional parks where soil contamination was found. In late December, potential soil contamination was found in Billy Rolle Domino Park in Coconut Grove and Southside Park in the Brickell area of the city. The parks will remain closed until samples can be analyzed to determine the next course of action.

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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 mreast@enviro-net.com

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Photo courtesy of St. Johns River Water Mana

Nine utilities with permits from the St. Johns River Water Management District to pump groundwater for public supply want the Florida Department of Environmental Protection to further delay the establishment of minimum flows and levels for the Lower Santa Fe and Ichetucknee rivers. Above, SJRWMD staff members work on a vegetation investigation during the development of minimum flows and levels. See story on Page 8.

## State petroleum cleanup program achieves deadlines, new tank rulemaking advances

## By ROY LAUGHLIN

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he Petroleum Restoration Program met state legislative deadlines after making lastminute revisions to its proposed noncompetitive bidding rules for "Agency Term Contractors.'

Rules for Chapter 62-771 and Chapter 62-772, Florida Administrative Code, were signed by Florida Department of Environmental Protection Secretary Herschel Vinyard on Dec. 27.

The Legislature must ratify sections 62.772-300 and 62.772-400 in its up-

FDACS \$26M water initiative stresses

importance of water management

coming session to complete the rulemaking process, but at this point, DEP's effort on these two rules is complete and on schedule.

The rule revisions followed oversight comments by the Joint Administrative Procedures Committee. JAPC questioned verbiage in section 62-772.400 of a proposed rule that stipulating a \$25,000 cap on noncompetitive fixed-price contracts.

In response, DEP revised the rule language to specify an increasing range of thresholds (\$20,000, \$35,000, \$65,000, \$195,000 or \$325,000) when

## it announces a contract subject to a fixed-price agreement with a contrac-

agrees to a contract at or under the designated cap, DEP may then offer it through a competitive bidding process.

The thresholds now stipulated in rule are based on those in Section 287.017, Florida Statutes, that the Legislature stipulated be included in reforms of the former Bureau of Petroleum Storage Systems.

DEP announced the new language on Dec. 5 and the comment period passed uneventfully, allowing Vinyard to sign the new rules.

As of mid-January, the Petroleum Restoration Program was finalizing its selection of Agency Term Contractors. The number of applicants to become Agency Term Contractors should appear on the program's web page by the time this article is in print. 'We anticipate that we will sign contracts (with Agency Term Contractors) on or about March 15. This will allow us to directly assign work," said Jorge Caspary, PG, director of the DEP's Division of Waste Management. Term contracts are for five years. Last summer, when program officials announced their intention to increasingly use the pool of Agency Term Contractors, they also indicated they intended to place a much greater reliance on eQuotes through MyFloridaMarket Place, the state's eProcurement system.

## By SUSAN TELFORD

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tor in its new pool of Agency Term Contractors. If an Agency Term Contractor

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lorida Department of Agriculture and Consumer Services Commissioner Adam Putnam is asking the Florida Legislature for \$26 million in new funding specifically targeted to innovative and aggressive initiatives critical to water conservation and water management.

Of the \$26 requested from the Legislature, \$15 million is allocated for use in Lake Okeechobee, and the Caloosahatchee and St. Lucie rivers and estuaries-the area north, east and west of Lake Okeechobee.

Rich Budell, director of FDACS' Office of Agricultural Water Policy, explained why the funding is so vital to the state's sustainability.

"It's critical that if we're going to expand our economy, grow jobs and continue to feed a diverse population that has expectations of a certain quan-

places at the right times, that we be as innovative and efficient as we can possibly be in terms of how we produce that food," said Budell. "Water is a key component of the day-to-day work and affluence of our agricultural industry."

According to Budell, a portion of the money requested will be used for FDACS' routine best management practices cost share program for things like fencing cattle out of waterways and placing or enhancing a landowner's ability to manage stormwater by constructing water control structures, such as swales.

FDACS will also continue to work with the state's water management districts and the Florida Department of Environmental Protection to prioritize agricultural-related land and water use is-

FDACS = Continued on Page 13

Valerie Huegel, director of the Petroleum Restoration Program, said that

**PETROLEUM** = Continued on Page 12

## EPA updates regs for carbon capture and sequestration disposal wells

#### Staff report

The U.S. Environmental Protection Agency updated its regulations, including those in the Safe Drinking Water Act, to reclassify deep carbon capture and sequestration disposal wells.

The new regulations specifically exclude two classes of underground injection control wells from federal hazardous waste regulations.

The first type is UIC Class VI wells used to capture carbon dioxide streams from emission sources for injection through geological sequestration. The second is UIC Class II wells, those approved for injection for enhanced oil recovery, which are also excluded from hazardous waste regulation when CO<sub>2</sub> is injected.

Geological sequestration refers to injection of carbon dioxide into deep geological formations that will hold the gas over geological time scales and prevent it from influencing global climate change over the next few centuries.

The EPA issued these updated regulations after concluding that deep injection of sequestered carbon dioxide "does not pose a substantial risk to human health or the environment." The new rule is complementary to recent regulations describing Class VI well operation, siting, construction, testing, monitoring and closing.

At the time the agency released its final rule for Class VI wells used for CCS, it also released draft guidance for public comment regarding rule development to convert Class II wells currently used for oil and gas recovery to

Class VI wells strictly for CSS.

The 75-day comment period for this draft rule will continue until approximately the end of February.

#### **New access to chemical data.** The public has a new tool for accessing EPA

screening data on 1800 chemicals: the Interactive Chemical Safety for Sustainability dashboard.

The EPA refers to its new offering as iCSS. The tool provides access to "in-

novative screening technologies for chemicals found in industrial and consumer products, food additives and drugs," according to the agency.

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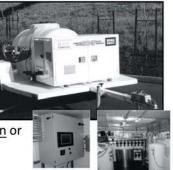
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The iCSS dashboard allows, among other keys, to search by assay or chemical.

The data that iCSS dashboard accesses were gathered through a collaborative testing program called Toxicity Testing in the 21<sup>st</sup> century, or Tox21. The EPA characterized the data as obtained through "advanced techniques, including robotics

and high throughput screening." In addition to EPA testing,

other federal agencies including the National Institutes of Environmental Health Sciences/National Toxicology Program, the National Center for Advanced Translational Sciences and the Food and Drug Administration were also participants contributing screening data.

The data are for chemicals already in use, only a small fraction of which have been adequately assessed for potential risk of adverse

health effects.

Federal

File

Along with announcing this new online tool, the EPA also announced their ToxCast Data Challenge, an invitation to researchers and technicians to work with the iCSS data now available to provide solutions for using the data to predict potential health effects.

Challenge winners may receive awards for innovative research ideas.

Having now developed a suite of rapid data gathering tests, a spokesperson for the new program said that the purpose of the challenge is to accelerate chemical assessment.

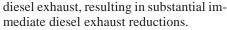
**Funding for emission reduction at seaports.** The EPA will provide up to \$4 million in grant funding for clean diesel projects at oceanic and in-land ports.

The Diesel Emission Reduction Act grants will allow port authorities to update or replace older diesel engines not currently meeting contemporary diesel exhaust emission standards.

The agency anticipates awarding the \$4 million through several competitive "assistance agreements." The application deadline is Feb. 14, 2014.

In its announcement, EPA noted that some of the nation's ports are part of larger metropolitan areas with poor air quality, due to multiple contaminant emission contributors. Ports in areas with chronically diesel-polluted air will be considered first for this round of funding,

This grant program provides funding for immediate upgrade or replacement of older diesel engines emitting particulate



Diesel engines subject to upgrade or replacement may be in drayage trucks, marine engines, locomotives or cargo handling equipment.

During the last several years, EPA has focused DERA funding on specific activities with a high dependence on older nonconforming diesel engines. The most recent prior DERA grant competition was for diesel-powered construction equipment.

The agency noted that this DERA grant competition is the first to focus specifically on reducing diesel emissions at seaports.

The EPA also offers annual support through the National Clean Diesel Campaign's Funding Assistance Program, pending funding availability. This may be another source of funding for interested Florida entities seeking assistance in reducing diesel emissions.

**EPA updates sustainability plan.** In 2014, the EPA will give special consideration to three activities that contribute significantly to meeting President Obama's 2009 plan to reduce waste and pollution.

The first involves the reconstruction of EPA infrastructure in ways that will significantly reduce energy consumption.

The second is reconstruction of the Research Toxicology Laboratory and the EPA's main laboratory at Research Triangle Park, NC.

This will provide savings in rents and reductions in greenhouse gas emissions, and will economize on space "without impacting research capacity."

Thirdly, the EPA will continue implementing its already effective water conservation program.

In 2009, Obama issued Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance. The plan established agency-specific targets at each federal agency for reducing waste and pollution between 2009 and 2014.

Four years into the effort, the agency has reduced its electricity consumption by approximately eight percent, and by 25 percent compared with 2003.

All electricity the agency uses now comes from green power or green power credits. Consequently, emissions of two classifications of greenhouse gases, Scope 1 and Scope 2, have declined by nearly half from FY 2008 levels.

Potable water consumption has dropped by 25 percent—30 million gallons—over the past four years

In addition to meeting sustainability goals outlined in Obama's 2009 executive order, the actions taken have reduced pollution, encouraged development of homegrown energy sources and promoted energy independence.

Offshore gas versus biomass energy. Two recently released reports contrast green energy with fossil fuel production substituting Florida's forest products for biomass fuel production versus the benefits of offshore drilling for oil and gas pro-



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The first report, "Forestry Bioenergy in the Southeast United States: Implications for Wildlife Habitat and Biodiversity," was commissioned by the National Wildlife Federation and the Southern Environmental Law Center. The report calls attention to the drawbacks of natural forests being converted to pine plantations for wood fuel pellet production.

Southeastern U.S. forests are among the most productive in the world, and are also among the most biodiverse areas on the planet. Forest diversity is being reduced by timber cutting, urban growth, conversion to agriculture and tree plantations, fire suppression and the introduction of invasive species and pathogens.

The report focuses on the rapid development of woody biomass cropping in the region. In 2014, this production may be

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Continued on Page 14



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## Hernando arsenic study reveals no adverse health effects

## Staff report

Spring Lake residents have not suffered measurable health effects from drinking water with arsenic at concentrations of 10– 15 parts per billion. That is the conclusion of a year-long study involving about 360 area residents in southeastern Hernando County.

The study's experimental design included two groups of solicited volunteer participants. Households on wells with arsenic concentrations below 10 parts per billion were a control group. The arsenicexposed group consisted of households whose wells had tested above 10 ppb.

At the end of the study, people in both groups were compared for selected health characteristics. The study found no difference between the two groups.

Arsenic exposure to levels above 10 ppb has been associated with a lifetime risk of certain cancers. While this study obtained data over a year period, participants may have been drinking well water with elevated arsenic concentrations for much longer.

Hernando County's arsenic source is uncertain. The arsenic may have come from cattle dipping vats, from pre-emergence weed killers use several decades ago, or from clay and limestone soils.

**Leesburg brownfield?** The city of Leesburg is mulling over a proposal to designate a four-acre tract on Highway 27 as a brownfield redevelopment site. If so designated, the site would be eligible for cleanup tax credits, sales tax credits on building materials, loan guarantees and cleanup liability protection from the state.

From 1922-1986, the site was home to the Walling Crate Company, which fabricated wood crates for citrus and produce use. The site also includes a shopping center on Highway 27.

**Wildlife protection BMP.** The Florida Department of Agriculture and Consumer Services has proposed best management practices to protect certain wildlife species.

The proposed rule would allow property owners to voluntarily protect wildlife by following BMPs rather than obtaining permits for incidental takings while conducting economically productive use of their land.

The proposed rules are intended to protect gopher tortoises and burrowing owls, both "imperiled" species in Florida and are primarily aimed at forest owners and silviculture operations.

The best management practices include provisions for periodic forest thinning and controlled burning to maintain habitat. Use of heavy equipment may be restricted during September and October when tortoise hatchlings may be present.

The proposed rule applies only to Florida's "imperiled" species. It does not apply to federally listed endangered or threatened species.

Wildlife advocacy organizations are supporting the development of this BMP because many protected species are now found primarily on Florida's extensive silviculture properties. onstrate effective incineration without excessive smoke emissions.

The county currently trucks its wastes to a waste-to-energy plant in Broward County at a cost of \$84.50 per ton. Under

the new plan, garbage will still be
sent to Broward,
but landscaping
waste will be incinerated at Ramrod Key.

**Collier mine challenge.** Three conservation groups filed a lawsuit against the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to halt development of an approximate 1,000-acre lime rock and sand mining operation in Collier County.

The two federal agencies recently issued a permit allowing mine development at Colliers's Hogan Island Quarry.

In the suit, the Conservancy of Southwest Florida, the Center for Biological Diversity and the Sierra Club claim that the agencies did not follow the law when they issued the permit.

They argued that quarry construction and operation, adjacent to the Camp Keais Strand, will adversely affect downstream wetlands and a major wildlife corridor for

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the Florida panther.

The group also pointed out that this mine is one of several existing and planned mines and residential developments whose cumulative effects will be highly detrimental and were not considered in evalu-

ating this single project.

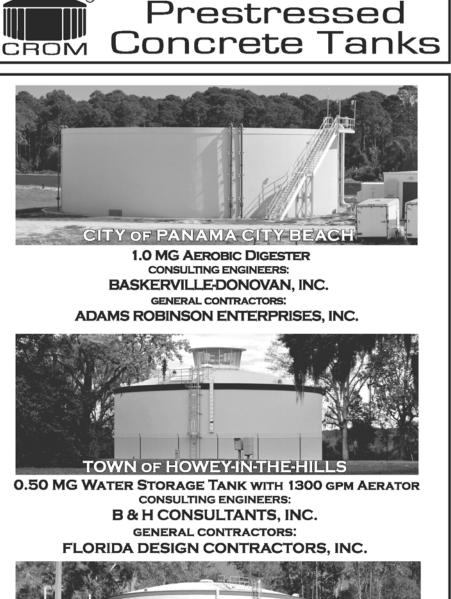
**TPS-ISOTEC partnership.** In-Situ Oxidative Technologies Inc. has formed a partnership with TPS Technologies Inc. through a licensing agreement to market and use TPS' thermal remediation technologies in North America.

A spokesperson for ISOTEC said that under the terms of the license, new technology and experience will be continuously shared, discussed and improved upon, which will benefit clients.

TPS is a California-based company and ISOTEC Remediation Technologies LLC is based in Lawrenceville, NJ.

**Law firm expands.** Nason, Yeager, Gerson, White & Lioce PA opened an office in Boca Raton.

In conjunction with the opening, John J. Fumero was named as managing partner in the new office.





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P.O. Box 2175 • Goldenrod, FL 32733 (407) 671-7777 • Fax (407) 671-7757 info@enviro-net.com Monroe County lawn waste. If Monroe County receives approval from the Florida Department of Environmental Protection as expected, they will begin burning tons of landscape waste at their Ramrod Key disposal site.

The county intends to install a walled aircurtain burner, a type of incinerator that will burn up to 10,000 tons of landscaping wastes annually. This will reduce their handling costs to about \$60 per ton and could save the county as much as \$250,000 per year.

The advanced incinerator traps smoke during incineration to facilitate a more complete burn, substantially reducing the usual amount of smoke produced when incinerating landscape waste.

Monroe County proposed an initial three-month contract with Air Burner Inc., which is contingent on DEP approval, and is considered a pilot project that will dem-



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## Cooperative funding enables reclaim water infrastructure in Volusia County

#### Staff report

The Volusia County Council voted unanimously late last year to approve a cost-share agreement with the St. Johns River Water Management District for the construction of pipeline for a reclaimed water main interconnect with the city of Sanford.

Improving the health of Central Florida's natural springs and the need for more water for an ever-increasing population were cited as the top reasons for the cost-share project.

The funding will enable Volusia utili-

ties to expand reclaimed water availability to residents in its southwest service area where there is both demand and existing pipelines in place for the improvement.

According to the water management district web site, the district's Spring Protection Initiative is designed to improve the health of the springs and their related systems.

The initiative includes water reclamation projects that will decrease nitrate pollution by reducing or eliminating wastewater discharges, as well as protect spring flows by reducing the demand for surface and groundwater withdrawals.

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The quantity of reclaimed water made available from Sanford is estimated at 1.5 million gallons per day and will provide additional benefits to the region, enabling the county to provide reclaimed water for Orange City and other municipalities within the service area.

Adding interconnect transmission pipelines to the reuse distribution systems of the cities of DeLand and Deltona, and Volusia County will cost \$9.3 million. Sanford is responsible for approximately 17 percent of the project and Volusia 83 percent.

The district will contribute over a million dollars to Volusia County and \$235,000 to Sanford, as most of the project's infrastructure will be in the county.

The project consists of 1,600 linear feet of 20-inch diameter reclaimed transmission line from the Sanford North Water Reclamation Facility to just south of the St. Johns River at the U.S. 17/92 Bridge.

It will connect with a 24-inch diameter line horizontally drilled under the river. The county

will construct a 13,000-linear-foot transmission line

to the existing systems in place along South Shell Road that serves Spring View, Park View and the Reserve at DeBary subdivisions in southwest Volusia County.

It is anticipated that the project will be put out to bid in early 2014, with completion expected by the end of the year.

Palm Beach plant rehab. The sand transfer plant at the southern tip of Singer Island will receive partial reimbursement for the cost of its 2009 rehabilitation.

The Florida Department of Environmental Protection awarded the town of Palm Beach a \$344,000 grant that will go into the town's Coastal Protection Fund. The \$2.5 million rehabilitation project was partially funded by a \$300,000 grant from the Florida Inland Navigation District.

Located on the north side of the Palm Beach Inlet, the plant is part of the town's Coastal Management Program. The plant pumps between 100,000 and 225,000 cubic yards of beach-quality sand beneath the inlet and onto the town's shoreline south of the inlet.

In 1958, a contractor gutted the plant, rehabilitated the concrete and installed new machinery, electrical systems and a new boom. The plant was also converted from diesel to all electric power.

The plant was updated in 2009, but the town was notified late last year that there was an opportunity for a partial reimbursement of the plant rehabilitation. The town's coastal coordinator, Rob Weber, responded immediately to the opportunity for the partial reimbursement of the project.

DEP to fund restoration work. The Florida Department of Environmental Protection selected nine projects that will receive federal funding to assist with protection and restoration of the state's imperiled waterways.

ter Haven Chain of Lakes.

Some of the funding will be used to construct stormwater ponds and to implement best management practices in beach and coastal areas that will reduce pollution

Participating communities contributed more than \$8.4 million to the federal funds, exceeding the 40 percent match required by the EPA, demonstrating an overall commitment to improve the water quality in Florida.

SRWMD, FWCC partner to restore Bell Springs. The Suwannee River Water Management District and the Florida Fish and Wildlife Conservation Commission are working together to restore the natural flow and ecology of Bell Springs.

Acquired by the water management district in 2008, the 54-acre Bell Springs Tract, floodplains and natural systems discharge about 350 gallons per minute to the Suwannee River, just northeast of White

Springs.

Prior to the district purchase of the property, the springs had been converted into a 1.3-acre pond with two smaller ponds.

The installation of earthen berms and culverts to partition the spring run into three distinct ponds caused the main pond to become overrun by algae and the smaller ponds to be dominated by duckweed.

The restoration effort includes removing the berms and relocating fill on site. The artificial ponds will be filled and the original spring run channel will be reestablished. Native vegetation will be planted along the spring run to prevent erosion and to restore natural habitat for wildlife.

Both the district and FWCC anticipate the restoration project will bring back the ecological integrity of Bell Springs through the improvement of fish and wildlife habitat, and the restoration of the natural hydrology.

FWCC provided funding for the topographic survey, construction services, and planting of native trees and ground cover vegetation, while the water district covered the engineering and design for the site plans, the construction specifications and drawings, and secured all permits for construction.

Construction is anticipated in early 2014. Bell Springs will remain closed during construction activities.

New Matanzas Riverkeeper. In an effort to bring a new focus and energy to local efforts to protect the 23-mile Matanzas River, Neil Armingeon, who served for eight years as the St. Johns Riverkeeper, will become the new Matanzas Riverkeeper.

Armingeon said that his chief priority will be protecting the river's oyster beds, which are threatened by pollution, sea



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The \$6.14 million in U.S. Environmental Protection Agency grant money will help finance projects that specifically target nonpoint source pollution.

Florida first implemented a stormwater management program in the 1970s and was one of the first states to directly address agricultural and urban nonpoint source in its restoration program.

This federal funding enables the DEP to provide local governments additional targeted funding for restoration projects, including environmental education and community outreach.

The nine watershed projects that are labeled high priority and targeted by the DEP to receive funding will work in partnership with local efforts and include: restoration of the Indian River Lagoon, the St. Lucie Estuary, Pensacola Bay, Wakulla Springs, lakes in Ocklawaha and the Winlevel rise and development.

Matanzas remains one of just three local fisheries where shellfish may be safely harvested and consumed. That makes the Matanzas one of just 13 in the state where the water is still clean and the food web is intact.

SFWMD land exchange. As part of the comprehensive plan to achieve Everglades water quality standards, the South Florida Water Management District Governing Board will consider approval of a land exchange necessary for the expansion of a water-cleansing wetland.

With the land exchange, Stormwater Treatment Area 1 West will expand from 6,700 acres to 11,300 acres of aquatic plants that remove phosphorus and other nutrients from water flowing south into the Everglades.

The project is one of 10 components in the state's restoration plan to improve Everglades water quality.

## Draft report: Central Florida's water consumption to increase substantially

#### By ROY LAUGHLIN

y 2035, the St. Johns River Water Management District expects water consumption to increase by 314 million gallons per day more than the current 1,250 mgd consumed. Drought year consumption could increase demand even more—up to as much as 466 mgd.

This statistic and more are included in the water management district's recently released draft water supply plan.

Potable water consumption dominates the district's water use and is predicted to increase 236 mgd or 38 percent more than currently used. This is 57 percent of the expected consumption increase across all water use categories and more than all other categories of water use combined.

In contrast, agricultural irrigation—the district's second largest water use-is expected to decrease by eight percent, except during drought years. In those years, consumption will be close to what it is now, in spite of decreased land area devoted to agriculture.

Across the district, the report predicts an uneven areal distribution of future agricultural water use. While it will decrease generally, the report predicts increases in the Kissimmee area due to increased farming intensity there.

Four other categories of water usedomestic self supply (from wells on property), recreational self supply, commercial/ mining/industrial self supply and power generation-are projected to increase in percentage terms between 39 and 76 percent.

But because their contribution to overall water use is small to begin with, mgd equivalents are proportionally small.

Power generation use is predicted to increase by 76 mgd.

Because so much of the SJRWMD's water use is for public water supply, population increase is the primary demand driver.

The primary obstacle to meeting demands of increased population growth is that surface and near surface groundwater resources will be, according to the report, insufficient to meet all of projected demand while still leaving enough in the environment to meet minimum flow and level requirements, and spring supply requirements.

Tom Bartol, assistant director of the water management district's Division of Regulatory, Engineering and Environmental Services, said that effective allocation of surface water and shallow aquifer supplies is important to those who use it.

Water from those sources is preferred because its high quality translates into the least treatment, making it the least expensive source. But over-utilization of shallow aquifers leads to decreasing water quality, particularly because of increasing chloride levels, rendering them less useful without additional treatment.

Water conservation and reuse have been very useful contributors to meeting Florida's water needs, especially for landscape irrigation. The report presents sce-

The report notes that underlying the need for planning is time. Exploitation of alternative water sources inherent in many of these water management scenarios requires multiple years-typically three or more-to move from idea to completed project. The need for early planning is implicit as a result.

Implementing specific techniques for water resource management as characterized in the plan depends primarily on the 200 water utilities in the district that treat and distribute water, Bartol noted.

He characterized these utilities as businesses that are interested in the lowest cost option for developing water resources. He said that the water management districts do not directly stipulate through permits what water sources a utility must choose, but can offer cost-sharing agreements to underwrite more expensive options.

By helping to pay for deeper wells and facilities providing more extensive water treatment from sources with poorer initial quality, surface water supplies can be spared. Second tier sources for water utilities include brackish groundwater, deeper strata of the Floridan Aquifer and seawater.

The current supply planning report is the most extensive since the late 1990s, said Bartol. The report this year reflects some significant changes to the WMD's approach, compared to prior efforts.

Perhaps the biggest change is the division of the district into four subregions for planning purposes.

Region 1 and 3 are centered around Jacksonville and Orlando, respectively. Regions 2 and 4 include the remaining areas.

Topic presentation is similar for each subregion and mirrors that of the discussion for the district as a whole.

This organization greatly improves a reader's ability to consistently compare each region with another, and focuses attention on the most important water supply issues that a specific utility must consider when planning expansion or siting a new facility

Region 3, the area around metropolitan Orlando, receives special focus in this planning cycle because it is the fastest growing area in the state. It is part of a population corridor that spans parts of three water management districts.

For the corridor from Orlando to St. Petersburg/Tampa, coordinating water development is being managed through the Central Florida Water Initiative Regional Water Supply Plan. It includes SJRWMD's Region 3, plus the Southwest Florida WMD and South Florida WMD.

The regional initiative is a separate entity and is mentioned in the SJRWMD's planning, but not discussed. Bartol said that when the initiative's plan is approved and implemented, parts that affect SJR-WMD will be incorporated into its water supply planning document.

The report mentions other significant changes in water resource management. First, water use caution area designations have been discontinued. Rule changes will allow the district to use authority over a broader area.

Climate change is discussed more extensively and with stronger assertion that it is exerting mostly undesirable influences on Florida's water resources. The report describes observations and monitoring of effects, but no regulation or anticipated management strategies are mentioned.

Like all planning over long time intervals, predictions and proposals are based on some assumptions. That per capita daily water consumption rates will stay the same, or even decrease somewhat, is one on which this report is based.

For the past 15 years, total water consumption in the district has increased only slightly in spite of substantial population

PLAN : Continued on Page 13

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narios in which they could "provide" a additional 46-120 mgd.

This is significant in the bigger picture of needing an additional 236 mgd over th next 20 years. The SJRWMD's analys indicates that conservation and reuse wi make the largest overall contribution through offsets to the public water suppl category.

The draft report includes a substantia discussion of management techniques for enhancing water resources. It notes the while water conservation is a management technique, the above figures show it wi be insufficient alone to supplement exis ing water resources.

In addition to conservation, aquifer recharge, aquifer storage and recovery, we land hydration, water storage project water supply optimization and intercon nection, and potable and nonpotable reus are on the table for consideration and us to add new water to the district's total in ventory.

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## Monroe County canal cleanup project set to kick off in February

### By DAN MILLOTT

he long process of identifying the level of impaired water quality in 502 Florida Keys' canals is nearing conclusion with the initial phase of the cleanup set to start in February.

In January, the Monroe County Commission opened bids for the initial engineering and design contract, expected to be awarded in February.

The project will start with work on eight "demonstration' canals that were selected after a two-year assessment process.

Rhonda Haag, Monroe County's sustainability program manager, said the green light to proceed came in December when the county commission approved \$3.3 million to fund the demonstration projects.

The demonstration canals dot the landscape from Key Largo in the Upper Keys to Big Pine Key in the lower Middle Keys.

Haag said the canal master plan got underway in March, 2012, with a \$100,000 grant from the Florida Department of Environmental Protection, later supplemented with a \$100,000 grant from the U.S. Environmental Protection Agency in September, 2012.

Those grants jump-started a process of inspecting all 502 canals and establishing

a priority list for cleanup.

"We looked at canals throughout the county including those in municipalities," she said. "We measured the depth of each canal and checked the water quality of each one."

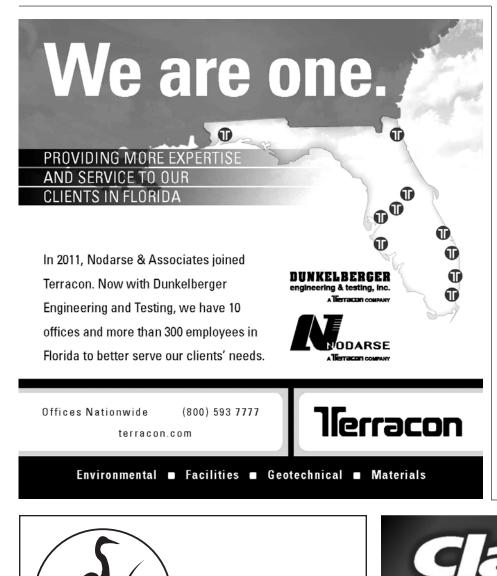
After the extensive canal tour, three priority rankings were established for canals. Canals classified as "poor" numbered 131; 180 were rated as only "fair," and the remaining were judged to be "good."

Until May, 2013, the canal restoration program was operated on grant money alone until the county approved \$37,000 to hire AMEC Environment and Infrastructure to do a more detailed study to select the canals that would be part of the demonstration project.

Haag said the goal was to whittle down the list of canals to include the top 15 to focus on first. Those canals would be designated for the Water Quality Protection Program Action Plan.

She said five types of approaches would be used in the canals selected, including weed barriers, organic removal, culvert installation, pumping and backfilling.

In October, the report from AMEC was received and the county commission approved six canals for the demonstration



projects. They later added a seventh because they wanted a canal with weed barrier technology in the group.

Haag said that since then, some additional grant money came in so an eighth canal was added.

In some cases, demonstration canals would use two technologies so they wanted to have at least a single canal where only one type of each technology would be implemented.

The \$3.3 million approved by the county commission will come from Monroe County's tourist development tax, the same source that pays for the tourism advertising campaigns.

In late 2012, the county considered the possibility of sending the bill for cleanup to the property owners along canals. But since then, county fathers decided to pick up the tab.

The commission also decided to pick up the maintenance costs for each of the demonstration projects for two years. After that time, the homeowner groups will pay for canal maintenance.

While the county commission did approve the \$3.3 million, additional money could be tapped, up to \$1.7 million more.

Construction is expected to start in July, 2014, and be completed by year's end.

That timetable is dependent on the speed of the permitting process through the U.S. Army Corps of Engineers, the Florida Department of Environmental Protection, the South Florida Water Management District, Monroe County and the cities in the incorporated areas where the demonstration canals are located.

The U.S. Environmental Protection Agency has also shown interest in the project. Haag said that a \$300,000 federal grant was approved in September to monitor canal water quality in the seagrasses before and after construction.

Ultimately, Monroe County would like to get restoration money for all the canals in bad shape, but that is a costly proposition. With that as a goal, they have applied for \$30 million from the restoration fund connected to the BP oil spill.

The movement on canal restoration was great news to Chris Bergh, Florida Keys program manager for The Nature Conservancy.

"Since the area has made great strides on wastewater projects that have protected the environment, this is another step forward," Bergh said.

Gus Rios, environmental administrator in the Marathon office of DEP's South District, is also looking forward to the project's results.

"The results of these demonstration projects will be used to determine if the technologies are successful to improve water quality and to compile information on actual restoration costs that can be used by Monroe County and other local governments to apply for future grant applications to state and federal sources," Rios said.

# Conservation amendment on its way to 2014 ballot inclusion

### By BLANCHE HARDY, PG

n near unprecedented unison, Florida environmental groups and related organizations banned together to create an action committee to amend the state's constitution.

The Florida Water and Land Legacy Committee, initiated by The Trust for Public Lands, Audubon Florida, the Florida Wildlife Federation, the Sierra Club, 1,000 Friends of Florida and others joined in hopes of reestablishing dedicated state funding for water, land and resource conservation.

"343 organization have now endorsed the amendment, from garden clubs to prominent environmental law practices, and including fourteen newspapers such as the *Miami Herald*, *Orlando Sentinel* and *Tallahassee Democrat*," said Pegeen Hanrahan, the conservation committee's campaign manager. If approved by voters this fall, the conservation amendment would set aside onethird of the existing documentary stamp tax paid when real estate is sold, providing over \$10 billion annually for conservation through the Florida Forever pro-

gram over the next 20 years. There would be no tax increase to Florida's citizens as the revenue already exists and was utilized for two decades for this purpose. Florida's Supreme Court agreed the amendment meets the legal requirements for placement on the 2014 ballot earlier this year.

Although the amendment has garnered support from a broad collation, it is not without opposition.

Florida's Agriculture Commissioner Adam Putnam, some members of the House of Representatives and the Florida Chamber of Commerce are among those in opposition of the amendment.

"The leadership of the campaign took the opportunity to discuss the chamber's opposition," said Hanrahan. "The chamber has a history of supporting programs the amendment will fund."

Hanrahan said that the collation was not eager to start a campaign requiring 60 percent of voters to support the proposal.

According to Hanrahan, the chamber generally believes that if a problem can be solved legislatively, then the constitution should not be amended. "The chamber understands the importance of clean water, clean air, and protection of lands," she said. "(From 2009 through 2013), we tried to convince the Legislature of the value of these programs-to provide adequate funding for these programs-and were not successful," she said. "Beginning in 2009, every one of the legislative sessions cut funds to Florida Forever. Funding is now at an average 96 percent less since 2009-too big a cut. There were no funds allocated in some of those years."

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Conservation initiatives have been a priority in the state for the last four decades. Prior to 2009, \$300 million per year was allocated for water, land and resource conservation.

The Florida Water and Land Legacy Committee has collected more than enough signatures supporting the inclusion of the amendment on the November ballot.

## Plans in place for **Crystal River plant** decommissioning

## **By PRAKASH GANDHI**

nvironmental safeguards will be fully addressed during the closure of the Crystal River nuclear plant on Florida's Gulf Coast, said the company behind the decommissioning of the facility.

Duke Energy officials said the plant will be placed in a safe, stable condition for decades until decommissioning work is completed in 2074.

The estimated decommissioning cost is \$1.18 billion, but the utility's customers will not have to foot the bill, according to company officials.

'Radiological and environmental monitoring will continue during the entire decommissioning process to ensure safety and environmental protection," said Duke Energy Communications Specialist Heather Danenhower.

The plant is located about 85 miles north of Tampa on Florida's Gulf Coast. It operated from 1977 to 2009.

The plant went into service in March, 1977, generating an average 860 megawatts of electricity. It is co-located with four coal-fired units at the Crystal River Energy Complex, a 4,700-acre site-the largest energy complex in Duke's Florida system.

Duke first discovered problems with the plant while officials were replacing two 500-ton steam generators during a scheduled maintenance and refueling outage in October, 2009. Engineers discovered a separation of concrete within the containment building that surrounds the reactor vessel, Danenhower said.

Although crews successfully repaired the damage, additional separation was discovered in two different areas of the containment building in 2011, she said.

After completing a comprehensive study of costs, risks and other factors, the company determined that retiring the plant instead of replacing the building was best option for customers and shareholders.

Estimates to repair the building reached as high as \$3.4 billion. Duke decided to shut down the plant rather than fix it and risk a failure.

Duke recently submitted its decommissioning plan to the U.S. Nuclear Regulatory Commission. The plan includes a decommissioning description, cost estimate and schedule. It also includes a management strategy for storing used nuclear fuel.

The cost of the decommissioning will be spread between the current decommissioning fund, along with the interest the fund will earn in the coming decades, and the plant's other owners.

The decommissioning fund currently stands at about \$780 million. The money is used to manage spent fuel stored at the site, dismantle the plant and cleanup any contaminants found.

Duke officials said no additional expenses will be borne by Florida customers to supplement the nuclear decommission ing trust fund. Danenhower said Duke is using a method called safe storage. In safe storage, a nuclear facility is left intact or may be partially dismantled to decontaminate the facility over time.



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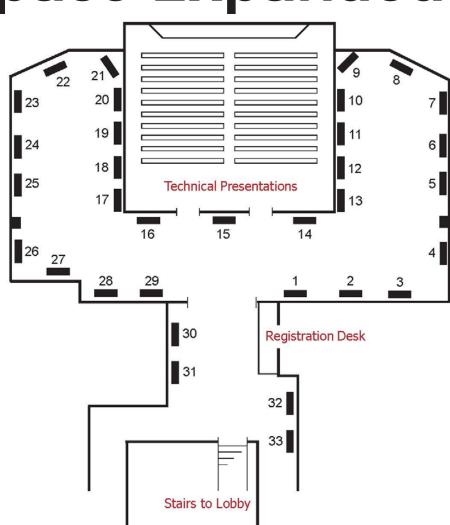
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She said that putting the plant in safe storage will save millions in up-front costs while letting natural decay do most of the decontamination.

Duke owns about 92 percent of the plant. Municipal utilities own the rest.

Terry Hobbs, Duke Energy's Crystal River decommissioning director, said that decommissioning the Crystal River nuclear plant will be a well-defined process.

About 275 employees work at the plant in addition to security personnel.

Duke Energy has also submitted the plan to the Florida Public Service Commission.

#### NUCLEAR Continued on Page 16

Just a few spaces still left. Contact Mike Eastman at (407) 671-7777 or mreast@enviro-net.com for more information

## GRU may challenge minimum flows and levels for Lower Santa Fe, By SUSAN TELFORD Ichetucknee rivers of Environmental Protection to set levels.

he North Florida Utility Coordination Group—nine utilities with permits from the St. Johns River Water Management District to pump groundwater to supply the public—wants the Florida Department of Environmental Protection to delay the establishment of minimum flows and levels for the Lower Santa Fe and Ichetucknee rivers.

MFLs are the lowest levels of water that a river, spring or stream can have without significant environmental harm.

If the state does not delay the process,

the utilities are contemplating a challenge to the MFLs.

Today, both the Ichetucknee and the Lower Santa Fe are already impacted by low flows and high nutrient levels. Both are currently at flows and levels below the proposed MFLs.

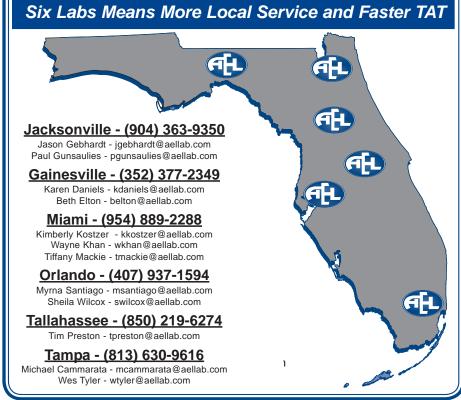
According to the state, the current flow in the Lower Santa Fe River is 11 million gallons a day less than needed, and the Ichetucknee flow deficit is two million gallons a day.

Gainesville Regional Utilities is cur-

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rently seeking a new 20-year public supply permit to withdraw up to 30 million gallons a day of groundwater from the aquifer.

One of the issues with MFLs is jurisdictional. While GRU would receive its permit from the SJRWMD for groundwater from the area of the utility's Murphree wellfield, flow is toward the Santa Fe River, which is in the Suwannee River Water Management Dis-trict's region.

GRU anticipates receiving its permit before MFLs are established and wants more details from the state on possible requirements and their costs.

"There isn't an understanding of what it's going to take to meet that regulatory standard," said Rick Hutton, a supervising engineer at GRU. "Our big concern is: Is there going to be a need to do some really expensive projects to do this and is that the right way to do it?

"The utilities feel the current methodology for determining MFLs overestimates the impact of groundwater pumping and overestimates the effects of weather cycles and drought on the rivers and springs," he added.

The utilities' projected costs could reach close to \$1 billion if alternate water sources are needed. Possible alternatives include a desalination plant on the East Coast for Jacksonville, along with other utilities and GRU combining funds to cover the costs of pumping water out of the Lower Suwannee River and then sending it via pipeline to a reservoir to replenish the aquifer.

Some advocacy groups and environmental professionals see it differently.

Audubon Florida, the Howard T. Odum Florida Springs Institute and Alachua County's Environmental Protection Department all agree that it is well past time to do something to ensure the protection of the Ichetucknee and Lower Santa Fe rivers, and something is better than nothing.

"I think everybody from the environmental side is concerned they (MFLs) may not be strong enough," said Charles Lee, director of advocacy for Audubon Florida. "With that said, they are still the best game in town."

The process of setting MFLs was jumpstarted several years ago by environmental activists who pushed for better water quality by establishing protections for the Ichetucknee and Lower Santa Fe rivers.

The past two years have been the most instrumental with the Suwannee River Water Management District working in close coordination with the Florida Department



## Opportunity available for agricultural assistance

## Staff report

The 2008 Farm Bill was recently granted an extension by Congress, allowing the USDA Natural Resources Conser vation Service in Florida to give farmers and ranchers an additional opportunity to improve water and air quality, build healthier soil, conserve energy and achieve other environmental benefits. Producers now have extra time to submit applications to help them get started implementing practices to benefit natural resources in their operations. Producers may apply for conservation technical assistance and possible financial assistance under the Environmental Quality Incentives Program and the Wildlife Habitat Incentive Program. Applications must be filed no later than Feb. 21, 2014, to be eligible for this year's funding. Although applications are accepted on a continuous basis, the February 21 date has been set to make FY 2014 funding decisions for these special initiatives. Additional information on NRCS, conservation assistance and available programs is available at www.fl.nrcs.usda.gov or at local USDA/NRCS offices.



Alachua County Environmental Protection Director Chris Bird said that his staff would recommend that the county commission support the MFLs currently proposed.

"There have been delays and they are finally trying to do it," said Bird. "We need to go ahead and adopt these now and immediately start working to make them better...get something in place.

"To continue to delay is not the right course because then there is no recovery plan. To get to where we need to go is going to take years. The longer we wait, it's only going to make it more expensive and more difficult."

Bob Knight, president of the Howard T. Odum Florida Springs Institute, also supports setting the MFLs and argues that the county and city should push for the state to not only revise, but to strengthen the protection.

"It will be an embarrassment if Gainesville is aligned with and helps to fund any utilities who are planning to challenge the Suwannee River Water Management District's MFLs because they are too restrictive," Knight wrote in an e-mail to city commissioners late last year. "Such a challenge would be a denial of our collective role in depleting the aquifer and the springs that are dependent upon it.

"Rather than participate in a legal challenge, he continued, "the city of Gainesville should insist that the district revise the MFLs to make them more restrictive."

City commissioners received comments from Knight and Lee prior to a commissioner meeting late last year, where the vote to request a delay in setting the MFLs was on the agenda.

GRU staff had recommended that if the state did not agree to the delay, the city should consider joining Jacksonville's utility and other members of the North Florida Utility Coordination Group in filing a challenge against the MFLs.

But after a meeting between GRU staff, water management representatives and DEP officials, GRU staff pulled the item from the agenda.

GRU officials hope to resolve their concerns through meetings, but may request authorization to participate in a legal challenge at a later date if the issues are not addressed to their satisfaction.

State officials have agreed to extend the time period for providing feedback on the proposed MFLs and forwarded a final report for review by the University of Florida Water Institute.

The DEP plans to move forward with the established MFLs through the rulemaking process.

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## Niagara CUP now under consideration

## By SUSAN TELFORD

iagara Bottling Co. pumps hundreds of thousands of gallons of water out of the same aquifer that supplies drinking water to many Floridians and then sells it-most likely to a lot of Floridians.

But now at a time when residents are told to conserve water, the company wants to withdraw even more. And that has some citizens concerned.

Niagara has bumped its consumptive use permit application to the St. Johns River Water Management District from 484,000 gallons per day to 910,000 gpd, mitigating for the huge increase by tapping the Lower Floridan Aquifer, while reducing its Upper Floridan withdrawals.

Consistent with one of the strategies being developed by the Central Florida Water Initiative, Niagara applied to the district on Sept. 13, 2013, to renew and modify its CUP.

The Lower Floridan is separated from the Upper Floridan by different layers and in between the layers are semi-confining layers-pockets that hold water. Because the Lower Floridan holds more water, this withdrawal request would allegedly have less impact than the currently permitted levels drawn from the Upper Floridan.

District staff determined that the application met district permitting criteria and recommended that the district's governing board approve a 20-year permit for Niagara at the board's Jan. 14, 2014, meeting.

But according to the district's web site, the application will not be considered until the Feb. 11, 2014, governing board meeting in Palatka.

The district received a time frame waiver from the applicant on Jan. 9 allowing district staff additional time to evaluate feedback on the application-and the Clermont South Lake Press gave the district immediate feedback.

"We'd like St. Johns River Water Management District officials to provide a fuller explanation of their decision to recommend approval of a request by Groveland's Niagara Bottling Company," wrote representatives of the Clermont South Lake Press late last year. "We're not taking a stand on district officials' decision, but against the backdrop of widescale water conservation measures, we believe the public deserves a broader explanation.'

The request for an explanation was simple. "By comparison to some nearby water users, such as municipalities and community developers, Niagara's water draw is relatively insignificant. But a closer examination of Niagara's sheer numbers alone begs the questions: Why? And why now? Homeowners are told they can only water on certain days, and public groups are constantly spreading the conservation message."

Niagara is one of seven bottled water operations permitted in the 18-county St. Johns River Water Management District. The company complied with every requirement before doing business in Groveland. However, Woodlands community residents who live proximate to the bottling plant want a closer examination of water use in the area and its impact on the environment. "You know, Florida's having a problem already with low water levels and droughts. What worries me is (what happens) if you start taking gallons and gallons of water out of here," said Woodlands community resident Charles Franklin, who has seen the area slowly drying up around his neighborhood in Groveland.



THE 5TH INTERNATIONAL SYMPOSIUM & EXHIBITION ON THE REDEVELOPMENT MANUFACTURED GAS PLANT SITES OF L 6<sup>TH</sup>-8<sup>TH</sup> 2 () HILTON SANDESTIN BEACH GOLF RESORT & SPA



Residents in South Lake are also concerned that Niagara is asking for additional capacity at a time when residents are being asked to conserve more.

Locals also commented on the timeliness of the permit application, noting that

BOTTLER = Continued on Page 16

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"Clean water is the lifeblood of Florida's economy and essential to our health and quality of life. We cannot afford to sacrifice our valuable water resources for the politics of the moment and the fortunes of a few."

# Miami identifies two additional parks with contamination

## By DAN MILLOTT

he city of Miami has now identified and closed two additional parks where soil contamination has been found.

In late December, potential soil contamination was found in Billy Rolle Domino Park in Coconut Grove and Southside Park in the Brickell area of the city.

The two parks will remain closed until the city and Miami-Dade County's Department of Environmental Resource Management can analyze samples to determine their next course of action.

Assistant City Manager Alice Bravo said that all 112 of the city's parks have been field inspected. In addition, they have used aerial photography to determine if contamination is present.

"In the case of Douglas Park that was closed in November, we found traces of melted glass in the park," she said.

Contamination was found in two other parks-Merrie Christmas and Blanche Park -earlier in the year. Merrie Christmas is still closed but Blanche Park, outfitted with artificial turf and clean top soil, remains open.

Blanche Park was at the center of scrutiny when the city scheduled a Dec. 10 public meeting.

At that meeting, findings from a report by Florida Department of Health State Toxicologist Kendra Goff were presented by Wilbur Mayorga, PE, chief of Miami-Dade County DERM.

The report was a review of tests made in Blanche Park by SCS ES Consultants, the firm retained by the city to assess the parks' levels of contamination.

The site assessment report addendum concluded that while some level of contamination was found in Blanche Park, it did not reach a level that poses health risks to adults or children.

The report concluded that if a 99-pound child played in the park for 250 days out of a year and absorbed 50 milligrams of soil every day for 14 years, they would be in no danger of becoming sick.

Despite opinions from a team of doctors from the University of Miami Medical School that concurred with the report, some local residents remain skeptical.

Samir Elmir, PhD, PE, division director, environmental health and engineering at the Miami-Dade Health Department, said that conclusions reached in the report leaned toward the conservative approach, relying on federal standards.

Because the city had installed new turf in Blanche Park, Elmir had asked for tests of the soil below the turf so a better picture of conditions could be ascertained.

In the eight-page report presented by Mayorga, the levels of PCB's, dioxins, cadmium, iron, barium, copper, antimony and arsenic were discussed. All the compounds listed were found to be below health benchmark standards and were unlikely to cause illness.

City Commissioner Marc Sarnoff, whose district includes most of the parks identified with contamination, said the city is producing a report with recommendations for cleanup.

Harry James, the city's environmental compliance coordinator, said that report will probably be completed and submitted to DERM be early February.

# Stakeholder group formed to address saltwater intrusion issues

### Staff report

The Southwest Florida Water Management District is seeking interested parties for an informal working group from Manatee and Sarasota counties to help establish a strategy for dealing with saltwater intrusion.

"One of the goals we need to achieve in the next 12 years is to reduce the rate of saltwater intrusion into the aquifer to protect the quality of the groundwater," said Tara Poulton, SWFWMD's government affairs program manager.

Referring to the migration of saltwater into freshwater aquifers, district officials have asked Manatee County to appoint



representatives who can sit on a committee that will prioritize projects that could best achieve that goal.

"The water district is seeking interested parties for an informal working group from the most affected areas," said Terri Behling, the district's external affairs manager.

Four meetings are scheduled to present information and findings, and get input on what projects are already in the works and potential projects to consider.

The group would first evaluate and make recommendations about long-term strategies in the most affected coastal areas, and then evaluate and make recommendations about a specific area in Central Florida along the Lake Wales Ridge.





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February 2014

# Calendar

## February

FEB. 4-5 - Course: Water Reclamation & Treatment Processes, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 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.

FEB. 6 - 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.

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

FEB. 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.

FEB. 7 - 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.

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

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

FEB. 8 - Course: Backflow Prevention Recertification Review, Bradenton, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 8-13 - Meeting: Society of Range Management's 67th Annual International meeting, Technical Training & Trade Show, Orlando, FL. Call (303) 986-3309 or visit www.ragelands.org/orlando2014.

FEB. 10-14 - Course: Backflow Prevention Assembly Tester Training and Certification, Destin, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 11-12 - Symposium: University of Florida Water Institute Symposium, Gainesville, FL. Hosted by the University of Florida and sponsored by Duke Energy. Call (352) 392-5893 or visit water institute.ufl.edu

FEB. 11-13 - 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.

FEB. 12-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.

FEB. 12 - Course: Spotter Training for Solid Waste Facilities, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 14 - Course: Backflow Prevention Recertification Review, Venice, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 15 - Course: Backflow Prevention Recertification Exam, Venice, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 versity of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 18 - Course: Asbestos Refresher: Inspector, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 18 - Course: Asbestos Refresher: Management Planner, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 18 - Course: Lead Refresher: Supervisor/Contractor, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 19 - Course: Asbestos Refresher: Contractor/ Supervisor, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 19 - 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.

FEB. 19 - Conference: FGWA Legislative Conference, Tallahassee, FL. Presented by the Florida Ground Water Association. Call (850) 205-5641 or visit www.fgwa.org.

FEB. 19-21 - Course: Initial Training Course for Landfill Operators and C&D Sites, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 20 - Course: Asbestos Refresher: Worker Trainer, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 20-22 - Conference: Public Interest Environmental Conference, University of Florida Levin College of Law, Gainesville, FL. Call (352) 392-1701.

FEB. 21-22 - Course: Backflow Prevention Assembly Repair and Maintenance Training and Certification, Venice, FL. Presented by the University of Florida TREEO Center, Call (352) 392-9570 or visit www.treeo.ufl.edu

FEB. 23-26 - Conference: 2014 Geo-Congress: Geo-Characterization and Modeling for Sustainability, Atlanta, GA. Presented by the Geo-Institute of the American Society of Civil Engineers. Call (703) 295-

FEB. 24 - Course: Basic Water and Wastewater Pump Maintenance, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 24-28 - 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.

FEB. 25-28 - Course: Water Distribution Systems Operator Level 2 & 3 Training, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

FEB. 25-28 - Course: Wastewater Class C Certification Review, Gainesville, FL. Presented by the University of Florida TREEO Center. Call (352) 392-9570 or visit www.treeo.ufl.edu.

## March

MAR. 1 - Course: Backflow Prevention Recertification Review, Tampa, FL. Presented by the University of Florida TREEO Center. (352) 392-9570.

MAR. 2 - Course: Backflow Prevention Recertification Exam, Tampa, FL. Presented by the University of Florida TREEO Center. (352) 392-9570.

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

MAR. 3 - Course: U.S. DOT Hazardous Materials/ Waste Transportation, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 3-5 - Course: SWANA's Integrated Solid Waste Management Training Course, Silver Spring, MD. Presented by the Solid Waste Association of North America. Call 1-800-467-9262 or visit swana.org

MAR. 4 - Course: Hazardous Waste Regulations for Generators, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 4 - Course: Refresher Training Course for

Experienced Solid Waste Operators- 8 Hour, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 4 - Course: Refresher Training Course for Experienced Solid Waste Operators- 4 Hour, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570.

MAR. 4 - Course: 8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570.

MAR. 4-5 - Course: Initial Training Course for Transfer Station Operators and Materials Recovery Facilities- 16 Hour, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 4-6 - Course: Initial Training Course for Landfill Operators and C&D Sites- 24 Hour, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 4-5 - Course: Refresher Training Course for Experienced Solid Waste Operators- 16 Hour, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.

MAR. 4-5 - Course: Initial Training for Operators of Landfills and Waste Processing Facilities, Orlando, FL. Presented by the University of Florida TREEO Center. (352) 392-9570 or visit www.treeo.ufl.edu.



or visit www.treeo.ufl.edu

FEB. 15 - Course: Backflow Prevention Recertification Exam, Bradenton, FL. Presented by the Uni-



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#### **PETROLEUM** = From Page 1

her program is using the system, with approximately 58 of 67 quotes for cleanup projects already funded.

"We're not using eQuotes as much as we intended," she said. "We are using invitations to bid to give everyone a chance to bid."

Continued reliance on the prior invitation-to-bid process occurred because eQuotes has an upper limit of 100 quotes, which may not allow all interested companies the chance to submit a quote. Invitations to bid, however, have no limit on the number of bidders. This should ease some of the concerns expressed by contractors at last June's workshop in Orlando regarding the use of eOuotes.

At the 2013 Florida Remediation Conference, Petroleum Restoration Program representatives announced they were contacting site owners and responsible parties of contaminated properties to ask if they would allow cleanup by the program using contractors selected through competitive bidding.

As of the most recent update (Jan. 13, 2014), DEP officials had contacted 154 SOs/RPs of properties within the funding range, 127 of which agreed to cleanup with contractors selected through competitive bidding. Twenty seven did not approve.

For sites below the funding range, 622 SOs/RPs were contacted, of which 232 agreed to cleanups funded through competitive bidding and 92 declined. The others have not responded either way.

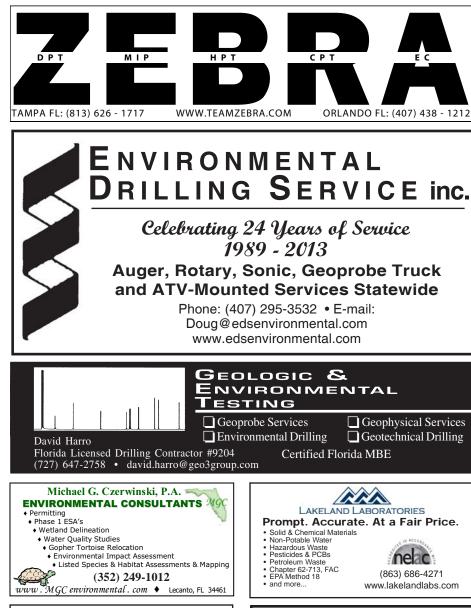
"The number that has agreed (to state selection through competitive bidding) has met our expectations," said Caspary. "Before this change, competitive procurement was not part of the program.'

For remediation companies, this change means they may lose existing clients who had intended to give them work-until agreeing to let DEP channel the work through state-wide competitive bidding.

Spending in the Petroleum Restoration Program from July, 1, 2013, through March 31, 2014, is estimated to total nearly \$54 million. The initial funding appropriation will thus be encumbered for restoration projects and the program will have to request for more funding, a request Caspary said will occur.

Over the last five years, the petroleum clean program has allocated about \$120 million annually. It is on track to get close to, if not meet, that figure by the end of this fiscal year if requests to release addi-

# **Environmental Services**



tional funds are approved.

Finally, the Petroleum Restoration Program has decided to get out of the equipment business and is preparing for its auction of surplus remediation gear. It conducted an open house Jan. 14-17.

At the time of article preparation, the equipment auction had not been scheduled.

Those interested in bidding on surplus state cleanup equipment can download a catalog from the program's news and announcements page, and check govdeals. com for the auction schedule and bidding details.

#### Storage tank regulation update

Along with the major rulemaking effort of drawing up new contract mechanisms and designating qualification procedures for new Agency Term Contractors, the DEP Division of Waste Management has been busy addressing another aspect of reorganizing activities formerly under the Bureau of Petroleum Storage Systems.

It announced two new storage tank rules, Chapter 62-671, FAC, Underground Storage Tanks; and Chapter 62-762, FAC, Above Ground Storage Tanks Rules.

Caspary noted that the Storage Tank Regulation reorganization has three primary goals: "Ease of use by operators, testing of new containment systems and, for underground systems, operator training."

Since last fall, department officials have been meeting with representatives of regulated industry and have based the recently released draft rules on comments and input provided.

Caspary said that the new rules incorporate U.S. Environmental Protection Agency requirements under the SUPER Act of 2005 that set new standards for underground petroleum storage tanks.

Florida is the last state in EPA's Region 4 to implement the new requirements. Language for testing is in Section 62-762.700.

The new rules have a few provisions and references associated with the technical aspects of above and below ground storage-corrosion prevention and detection, for example.

For the most part, the remaining rule revisions involve extensive changes and modifications of the old framework for regulating petroleum storage tanks.

First, these rules apply to tanks storing petroleum in amounts exceeding 110 gallons.

Those familiar with prior tank rules will notice substantial changes in the new regulation.

The term "standard" is being changed to "requirement" in the language of the two new regulations. "Requirement" references the former "Performance Standards for Category C Storage Tank Systems," with language clarification and updates.

Storage tanks will be subject to initial and subsequent annual registration with fees. Financial responsibility, which was formerly linked to the registration procedures, is proposed as a separate rule to be distinct from the rule involving tank registration.

The proposed rule requires "notification" and defines when it is necessary, who

within DEP should be contacted and what information the notification should include. The old reporting system has been eliminated.

A substantial part of the proposed rules defines "incidents" and "discharges," and describe how each will be treated differently.

An incident, broadly defined, is any indication that a spill might have occurred short of identifying spilled material. Visual cues, odors, and machine and sensor behavior could be indicators of a spill. The draft rule is specific in defining what should be treated as an incident.

A discharge is an unambiguous characterization of a spill, such as a sheen on water or other tangible presence of the spilled material including the results of analytical testing.

Currently, both incident and discharge responses are addressed in 62-761.820, FAC. Responses to discharges will be addressed in proposed language in 62-761.440 that will be coordinated with 62-780. FAC.

When releases are detected, new requirements are stipulated. New record retention requirements increase to five years from two.

In commenting on the extensive deletions and additions in the proposed rules, DEP Spokesperson Mara Berger referenced the reorganization of the entire FAC chapter on storage tanks and cautioned that "not all underlined language is 'new' and not all stricken language is being deleted. A phrase or concept that is underlined or stricken may have been relocated to another section of that chapter."

The new rule is clearly more focused than the one from which it is derived, but many of the technical provisions from the prior rule will remain in effect, even if stipulated elsewhere.

The repairs, operations and maintenance rule sections now have "clarified language.'

Records for these activities must also be kept for five years and records formerly to be retained "for the life of the system" now must be kept until "storage tank system closure.'

Electronic submission procedures for records will be described after the rule has been approved.

Equipment will now be "registered," supplanting the former "equipment approval process." In addition, out of service and closure requirements have been updated and clarified.

Last summer, DEP proposed three certification classes for tank system operators, although in this FAC chapter, it has been addressed through a separate rulemaking process.

Caspary said that a final rulemaking workshop is anticipated in March for tank operator requirements, after which DEP will consider comments and revise the draft rule as needed.

Operator rules are expected to require legislative approval after DEP finishes its rulemaking.







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February 2014

## **DEP** questionnaire rankles some feathers

#### Staff report

As 2013 drew to a close, a controversy over a Florida Department of Environmental Protection questionnaire was brewing.

DEP's Office of General Counsel used the questionnaire to solicit responses about the costs associated with permit applications and environmental compliance.

DEP sent invitations to participate to 3,119 recipients who had indicated their willingness to receive such announcements from the agency.

Patrick Gillespie, DEP press secretary, said that the questionnaire's intent was to evaluate compliance costs, in this case for permits.

Florida Statute 120.54 requires a Statement of Estimated Regulatory Cost for rule

#### FDACS = From Page 1

sues.

In fact, FDACS plans to use some of the money to support the Istokpoga Marsh Watershed Improvement District, just south of Lake Istokpoga.

"That's an area of intense agricultural activity where landowners and (water management officials) are working together to put in additional water storage and stormwater management features that will allow them to recycle more water and reduce their discharges, thereby reducing the load to Lake Okeechobee," said Budell.

Areas located north of the I-4 corridor, regional springsheds and the area that extends west of the St. Johns River and into the Panhandle would also benefit from a \$5 million allocation for water management and conservation.

Advances in technology have benefited agriculture and Budell wants to apply that new technology in the field.

The goal is to implement crop tools. But these aren't your grandfathers's crop tools. Sophisticated technologies help farmers and other agribusiness manage irrigation and water nutrients via high tech soil moisture probes and meters.

Today's soil probes and meters allow farmers to measure nutrient content in crops while they are being grown, giving them the opportunity to efficiently manage nutrient inputs.

Weather and irrigation apps are now available for smart phones, giving farmers the opportunity to easily follow weather patterns enabling better water conservation.

FDACS' plan includes additional cost share funding for expansion of the FAWN weather system that allows growers to track weather conditions in real time to make irrigation as efficient as possible.

FDACS' long-term vision for water



making. Gillespie said that over 97 percent of the e-mails were delivered and 26 percent were opened by a recipient (and presumably read).

PLAN = From Page 5

rates.

increases. This is due primarily to

conservation's influence to substantially

decrease per capita water consumption

has had an additional measurable influ-

ence, depressing per capita daily water use.

of continued high population growth, the re-

vival of a strong economy and the continua-

tion of today's low per capita water consump-

tion rates will need to be tested on a more

ning reports have been "completed and put

on the shelf until a new one is written."

He said that this time the report will be put

online and updated when needed so that it

He noted that past water supply plan-

frequent interval than every five years.

In the past five years, the poor economy

Bartol acknowledged that expectations

He noted that in addition to the e-mails, DEP advertised the questionnaire in trade publications.

The questionnaire initially asked respondents to choose a permit type from a list of 14. Upon selecting a permit type, the next window asked 12 questions about costs and effort of obtaining a permit.

They included questions including how much applicants paid consultants to prepare a permit, the credentials of those they paid for application preparation, what the

Continued on Page 15

POLL

management and conservation is imperative if Florida is to keep up with its increased agricultural production and water needs.

The production of fairly new crops, like blueberries, is expanding and other relatively new crops, such as olives and Caribbean-based fruits and vegetables, are developing as population and cultural diversity demand it.

According to Budell, it is more important than ever that the water management districts, the University of Florida and the U.S. Department of Agriculture work hand-in-hand to track trends in consumer demand and stay on top of technological advances.

'There is an ethical responsibility for the state's agricultural industry to be the best possible steward of the land by being as efficient and careful as possible in water use and related issues, such as conservation and nutrient applications," said Budell.

#### **PETROLEUM** = From Page 12

The comment period for the two proposed storage tank rules closed on Jan 31.

Comments received will be posted by Feb. 14 on the department's web site, http:// /www.dep.state.fl.us/waste/categories/pcp/ pages/announcements.htm. Concluding procedures in rulemaking will then proceed.

Changes to DEP's former Bureau of Petroleum Storage Systems have been a whirlwind since the second half of 2013.

The shape of the two emerging groups is increasingly clear, with boundaries drawn between compliance and regulation in one section, and emergency response and petroleum cleanup in the other.

The 2013 Florida Legislature mandated that state petroleum activities be reformed. That's clearly what is occurring.

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will be a "living document."

Population changes, water consumption rates and per capita consumption can all be traced within the five-year planning window. Changes in rules and policies will also be incorporated as they occur.

The SJRWMD's current document is a draft plan. District officials have spent most of January and early February at public meetings presenting it and taking public comment. Some changes, incorporating public comment are likely before the final draft is released later this year.

"We are very excited about getting this district-wide plan to the public and looking forward to some of the solutions. It is the first full plan since 2005," said Bartol.

It may presage some major changes in the district's water supply management over the next two decades.

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## Supreme Court starts review of federal Cross-State Air Pollution Rule

#### By ROY LAUGHLIN

n July, 2011, the U.S. Environmental Protection Agency finalized a rule to protect the human health by helping states reduce air pollution and attain clean air standards.

This rule, known as the Cross-State Air Pollution Rule, requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and fine particle pollution in other states.

In early December, the U.S. Supreme Court heard oral arguments for and against

#### the rule.

Discussion between the justices and lawyers representing each side focused on several issues.

The first, and perhaps most significant legal aspect, was whether the U.S. Environmental Protection Agency had given states adequate opportunity to propose their own plans to reduce air emissions, predominantly particulate sources within their own borders.

Related to this question was whether EPA had appropriately determined what "significant efforts" each state was required to undertake.

## **Environmental Services**





Part of this argument involved whether the agency should determine whether significant efforts were to be based on meeting reduction targets by effort made, or by the expense of the efforts.

With respect to expense, the EPA was portrayed as encouraging the use of air pollution credits, and requiring the greatest air emission reductions where the efforts were the least expensive.

Some states complained that as a result, they were being required to reduce emissions well below their proportional contribution to regional contamination.

Beyond the legal argument, almost every judge acknowledged the complexity of the issue, dependent as it is on atmospheric circulation and the behavior of contaminants in the air.

It will be difficult for the court to come up with a decision that meets the EPA's requirements to protect public health, while still working within the usual boundaries of our legal system.

The goal of the Cross-State Air Pollution Rule is to reduce air pollution that results from atmospheric circulation that draws contaminants from a broader area and focuses them in areas that may be smaller than a single state.

The result is an area that sometimes greatly exceeds the Clean Air Act's air pollution standards. In the worst cases, even if the area where the exceedence occurs were to cease all emissions, it would not be adequate to meet CAA standards.

Areas in the Northeast U.S. including New York, Connecticut and New Jersey often experience atmospheric circulation conditions that draw air contaminants from the Southeast and Midwest, and greatly increase air contamination.

The irony is that in each contributing state, air contamination may be well below standards, but when focused by atmo-

#### FEDFILE From Page 2

more than 13.7 million tons, an 87 percent increase in just two years.

Much of the increased woody biomass is exported to European Union countries that use it to help meet Kyoto Treaty goals for sustainable energy production.

The report presents the case that native southern forests cannot simultaneously endure this level of cropping and sustain indigenous diversity.

In addition, replanting harvested land as pine plantations is a further risk to southern forest biodiversity.

The second report, "The Economic Benefits of Increasing U.S. Access to Offshore Oil and Natural Gas Resources in the Atlantic," prepared for the American Petroleum Institute and the National Ocean Industries Association by Texas-based Quest Offshore, is largely a rehash and spinning of recent technical documents issued by the federal Bureau of Ocean Energy Management, Regulation and Enforcement.

BOEMRE's conclusions are that most of Florida's offshore oil and gas resources are likeliest to be off the Panhandle. More spheric circulation gyres, rises well above standards with obvious and measurable impacts on human health.

The rule invokes a "good neighbor policy" that the protesting states did not criticize, except to the extent that it was not, in their opinion, fairly applied in this case

The Supreme Court is hearing this case after the U.S. Court of Appeals for the District of Columbia found that the EPA had exceeded its authority in setting standards in 28 upwind states. The district court made its ruling in August, 2012.

The law that it rejected was an attempt to rewrite an earlier version, the 2005 Clean Air Interstate Rule, or CAIR. The district court unanimously rejected that rule in 2008.

But the court did not invalidate the law. It allowed the EPA to enforce emission reductions but it did not allow pollution credit trading provisions.

After the EPA had been to court twice in an attempt to meet CAIR's provisions and its cap-and-trade provisions, the Supreme Court is the final recourse for a resolution.

Questions asked by the justices during the 90-minute hearing, half an hour longer than usual, suggested substantial agreement with, or at least acceptance of, the EPA's approach to this complex situation.

Although the Clean Air Interstate Rule affects air emissions in 28 states and the District of Columbia, only 14 states including Texas and Florida were part of the lawsuit heard by the Supreme Court.

Since Justice Samuel A. Alito Jr. recused himself, the final court decision could end in a 4-4 tie. If this scenario should occur, then the District Court of Appeal's decision will stand as is.

The court could announce its decision as early as this summer.

Pesticide producer fined. Harrell's LLC, a Lakeland-based pesticide producer, has agreed to pay more than \$1.7 million in fines for its violations of the Federal Insecticide, Fungicide and Rodenticide Act.

According to EPA, Harrell's sold pesticide without labels or with illegible labels more than 350 times since 2012. EPA also alleged that the company distributed or sold pesticides in violation of a "stop sale" order from the agency.

In addition, the agency alleged that Harrell's produced large amounts of pesticides over several years before they were registered with the agency.

The violations were discovered during EPA field investigations in 2012.

In addition to the fine, one of the largest ever under a FIFRA enforcement case, the settlement with Harrell's requires the company to "ensure that its production and distribution centers are operating in compliance with all regulations under FIFRA."

Since 2012, the company has corrected all the violations alleged by EPA.

Harrell's produces pesticides in Lakeland and in Sylacauga, AL. It operates distribution centers in eight states, including several in New England and the Midwest. Golf courses are the company's largest class of customers, but the nursery, horticulture, turf and landscape industries also use its products. None of Harrell's products are sold through retail outlets to individual consumers.

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importantly, Florida's prospects for oil and gas production pale in comparison to those of other states, either in the Gulf of Mexico or further north along the Atlantic seaboard.

According to the report, in spite of its proportionally large shoreline, Florida is ranked in the bottom third of all Atlantic and Gulf States with respect to total spending for offshore oil and gas exploration and development.

The report takes a 20-year view because BOEMRE is not likely to offer offshore gas and oil leases for several more years. The beginning of substantial economic activities is more than a decade away.

Neither biomass cropping or offshore oil and gas development offer huge economic benefits, according to details in the reports. Both pose risks to the state's environment.

The primary difference is that biomass cropping is already occurring, while offshore oil and gas development is, perhaps, decades off.

New EPA Region 4 administrator. Heather McTeer Toney will succeed Stanley Meiburg as EPA's Region 4 Administrator. The position opened when Gwen Keyes Fleming was promoted to EPA chief of staff in Washington, DC, last summer.

Toney was most recently the executive director of the Center for Excellence in Student Learning at Mississippi Valley State University.

Prior to this academic position, she was the first African American and first woman mayor of Greenville, MS, an office she held from 2004 to 2012.

Toney is also the principal attorney at Heather McTeer, PLLC.

## Coalition report details success of 40-year-old Endangered Species Act

### By BLANCHE HARDY

n celebration of the 40th anniversary of the Endangered Species Act, the Endangered Species Coalition released a celebratory report, "Back from the Brink: Ten Success Stories Celebrating the Endangered Species Act at 40."

Lela Huta, executive director of the coalition expressed the organization's appreciation for the Endangered Species Act's success in the years since its 1973 inception.

"Any law would be fortunate to have the kind of record that the Endangered Species Act does," she said.

The 14-page report contains details of ten species, some of which occur in Florida, selected to reflect their successful recovery under the ESA. All of the representative species were selected for having steadily improved or recovered sufficiently to be removed from the imperiled list.

Candidate species were nominated by coalition member groups throughout the U.S. A panel of scientists was assembled to review the nominations and select the ten species included in the report.

The winners are the nene goose\* (Hawaii), American peregrine falcon (North and South America), El Segundo blue butterfly\* (California), Robbins cinquefoil (New Hampshire White Mountains), bald eagle (North America), southern sea otter\* (Central and South California Coast), humpback whale\* (West Atlantic and North Pacific), American alligator\* (Coastal Southeastern U.S.), brown pelican (Southeastern U.S., Pacific and South American coasts) and green sea turtle\* (global tropical and subtropical marine waters). Species marked by an asterisk retain their listed status.

Several government programs and ad-

#### POLL From Page 13

compliance costs were, the nature of those costs, and a preference for written or electronic compliance report submission.

The questionnaire included two comment boxes so respondents could go outside the multiple-choice format in the questionnaire if they desired.

For each of the different permit types listed, the same set of primary questions were presented, sometimes with an additional question or two for permits that required additional characterization.

Permits included both those from which an applicant would receive a benefit, such as a consumptive use permit, as well as compliance permits such as RCRA and NPDES permits.

The questionnaire was presented online and was similar in format and use as warranty questionnaires-relatively general in nature and anonymous.

DEP's Department of General Counsel began sending invitations by e-mail in August, 2014. The department received 70 responses, about half from individuals, the remainder from either public entities or businesses

vocacy groups participated in wildlife protection measures and contributed to the success of the recovery of the Florida species. Of these, the American alligator has the most unusual listing.

The American alligator is currently classified by the U.S. Fish and Wildlife Service as "Similarity of Appearance (Threatened)." Due to the similar appearance of the American alligator to crocodiles, the alligator is protected to prevent harm to threatened crocodiles by mistake.

The American alligator was listed on its own accord in 1967 in response to the serious decline in their numbers caused by the lack hunting regulations and habitat loss

It is a member of the "Class of 67," the first class of 78 species listed under the program that would later become the Endangered Species Act. Delisting began in 1975.

Because the alligator isn't biologically threatened, their federal designation allows Florida to manage alligator populations under a state-approved management and control program.

They can only be legally taken in

Florida by individuals with proper licenses and permits.

American alligators are the top predator in the Everglades where their nests, expanded by their occupants every year, provide valuable shallow water-filled basins used by other Everglades species during drought.

Bald eagles also represent a species protection recovery success for Florida. Like the alligator, loss of habitat and overhunting contributed to their decline, in conjunction with the ubiquitous use of chemicals such as DDT.

The insecticide thinned egg shells to

the extent that they cracked before the chicks could hatch.

Recovery measures such as protecting eagle nests, which can weigh up to 4,000 pounds and may be used for years by lifemated eagle pairs, banning DDT, prohibiting the killing of eagles, plus water quality improvement and population restoration all contributed to the eagle's recovery

According to the Florida Fish and Wildlife Conservationist Commission, 1,457 active eagle nests were counted during their 2011 aerial survey, up from 88 active nests in 1973.

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Gillespie said that the Office of General Counsel "believes the results are not yet statistically significant because they have only received about 70 responses."

Media outlets across the state reported the questionnaire's use and at least one included an adverse characterization of it from a spokesperson from a statewide environmental advocacy group.

The individual questioned the intent of the permit, suggesting that cost considerations could be used to justify less state oversight of developers regulated under permitted activities.

The adverse characterization of the questionnaire's intent was hard to understand, said Gillespie, because evaluating compliance costs is a statutory requirements for DEP, as it is for all state agencies involved in rulemaking.

No matter the intent of the questionnaire, it generated too few responses to allow a statistically valid characterization of compliance costs.



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## Volunteer monitoring program provides data on area aquifer levels

### By BLANCHE HARDY, PG

quiferWatch, the volunteer pilot groundwater monitoring program partnered with the University of Florida's Institute of Food and Agricultural Science's successful LAKEWATCH program, has completed its first year of operations.

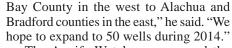
Florida Professional Geologist Rick Copeland, PhD, who served as a volunteer for LAKEWATCH for a number of years, first conceived of its groundwater equivalent, AquiferWatch, in 2010.

"The goal of AquiferWatch is to educate the public in the science of groundwater and use volunteers to obtain vital data in a relatively inexpensive manner," said Copeland. "We want to obtain critical groundwater level data from across the state and to assist governmental entities, by saving them money and supplying them with data in areas of the state where they lack sufficient data."

AquiferWatch began operation in October of 2012.

"Currently, we monitor 26 wells in six counties in North Florida, extending from





The AquiferWatch program and the data collected may provide significant assistance to the state's five water management districts in addressing concerns about the capacity of existing numerical models to adequately predict consumption and water quality.

Until recently, the models were confined for the most part to the individual district's political boundaries.

In some areas, water suppliers on the boundary of two districts might be asked by one district to reduce current groundwater consumption levels because their model indicates there is insufficient supply. Yet by stepping over the district's political boundary into the abutting district they might have virtually no withdrawal limitations because that district's model indicates no shortage.

Similarly, critics of the heavy reliance on the models for permit decision making have expressed concern about the models' inability to address potentially critical water quality and quantity impacts associated with localized phenomena, such as karst features within the aquifers. The models assume flow through comparably uniform layers of sand and gravel.

AquiferWatch has the potential to help the districts integrate their models and better quantify the behavior of localized phenomena by providing additional regularly collected data through measurement of groundwater in under-measured wells.

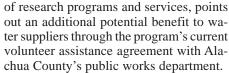
Mark Hoyer, AquiferWatch's director

## BOTTLER =

From Page 9 just as they heard about Niagara's permit application request to withdraw more water, they simultaneously received warning letters from SJRWMD telling them that their residential community is using too much water.

'I know 910,000 gallons of water per day sounds like a huge amount of water. But it's not as large an amount as some businesses consume that use the water to produce a product to sell," said SJRWMD Spokesman Hank Largin.

The Clermont South Lake Press publicly addressed the district about its concerns in print: "This is certainly useful information. But the public deserves broader



"We are now assisting them with their wells," Hoyer said. "They had wells available but didn't have the personnel to continue to monitor them."

Hoyer said that AquiferWatch made an initial assessment of their capability to assist the county. They evaluated accessibility and security needs, as well as collected early metadata such as longitude, latitude and water table elevations to determine if their volunteers could physically complete the measurements.

If it is determined that AquiferWatch can do the work, then they enter into an agreement with the supplier to proceed with the data collection utilizing trained volunteers.

Copeland said that AquiferWatch assures the quality of their work through extensive training.

They hope to extend the program statewide soon and to collect additional information, such as specific conductance data.

#### NUCLEAR From Page 7

The spent fuel at the Crystal River plant will remain in an existing on-site pool until Duke completes construction of the dry cask storage in 2016.

All used fuel will be transferred from the pool into dry storage by 2019.

Duke's plan calls for the spent fuel to be transferred to the U.S. Department of Energy in 2036.

George Cavros, Florida energy policy attorney for the Southern Alliance for Clean Energy, said his organization will monitor the decommissioning process.

It is the first decommissioning in the Southeast that the organization has dealt with, Cavros said.

'We are going to monitor the costs and how the fuel is being disposed of," he said. "We have some concerns about the cost. There are some indications that the funds they have in reserve will not be enough.

"Another concern is the spent fuel that is on site and how it will be stored and disposed of. We will keep a close eye on that also."

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