



TURNING THE TIDE

Volume 2 Number 10 December 2009

View past issues at www.ircgov.com/stormwater

IRC citizens are “Turning the Tide” of polluted water runoff leaving their properties and reaching the Indian River Lagoon by learning and implementing the proper property maintenance and disposal methods.

Where Does the Rain “Wash” Pollution to?

Anything that goes in a stormdrain, can end up in the IRL



Your neighborhood stormdrain



Your Indian River Lagoon

Join your IRC neighbors in treating water as a resource, not as a waste product.

Have a safe and happy holiday,

Diane Wilson, IRC Stormwater Education Coordinator, dwilson@ircgov.com



Contents

NEWS

Everyone
Construction Industry
Students & Teachers
Marine Industry & Boaters
Business Sector

CONFERENCES & EVENTS

TRAININGS & WAYS TO LEARN MORE

BMPS & Things Worth Knowing

Volunteer Opportunities

Media to Watch

Identifying & Reporting Illicit Discharges (visit stormwater website)

Job Network

IRC Environmental Calendar

Websites

Grant Deadlines

Did you know.....

97% of the earth's water is salty or polluted,

2% is too far underground to reach.

That leaves only 1% for clean drinking water

.....and 50 -70 % of residential water is

consumed outside in landscaping

With so little water available
we each need to
use it conservatively
and keep it clean.

Source:

http://www.gotwater.net/protect_water.htm



Do you know where the trash/polluted runoff from 48,000+ acres in Indian River County goes? See page 9 for the answer.

NEWS

Everyone:

MANDATORY Landscape Irrigation Restrictions in IRC – Only 1 Day/week as required by St. John's River Water Management District. For details visit <http://www.sjrwm.com/wateringrestrictions/index.html> or call their **24-hour "Irrigation Line" at 1-800-232-0904**

- **Unwanted Medicines – Don’t Flush Them**
Instead, take them to the IRC Sheriff’s Department where they will incinerate them at no charge. For more information contact Sergeant Rick Vidiri at rvidiri@ircsheriff.org or 978-1817
Alternative disposal methods are available at
http://www.dep.state.fl.us/waste/quick_topics/publications/shw/meds/DEPMedicationDisposalFlyer.pdf
- **Interested in growing your own food?** IRC’s unique soils and climate make growing food very different from the rest of the country. With that in mind, this group Internet site is a resource for discussing the problems, concerns, successes, and revelations of harvesting food from your IRC backyard! <http://groups.yahoo.com/group/IRCBackyardHarvest/>
- **Waterfront Property Owners....consider alternatives to bulkheads.** Information on living shorelines is available by calling Debbie DeVore at US Fish & Wildlife Service office 772-562-3909 x324, or email her at Debbie_DeVore@fws.gov. Visit www.fws.gov/verobeach/coastal.htm for more information.

Construction

- **New regulations in the future to reduce water pollution from construction sites**
EPA says its new rule, “Effluent Guidelines for Discharges from the Construction and Development Industry” (ELG) is scheduled to become effective in February 2010. It is being phased in over the next four years, and will be incorporated as part of the NPDES Construction Generic Permit (CGP) administered by the FDEP. The first phase will catch construction sites that disturb greater than 20 acres of land. The final phase will catch those sites that are 10 acres or greater. Sites covered by the new rule will have to monitor the discharges from their site and have a limit of 280 NTU. For more information, please see webpage: <http://www.epa.gov/waterscience/guide/construction/>
- **Contractors, Electricians, Construction** - See training list below about January 27th Tainted Drywall Conference

Students & Teachers

- **Information for “Green” teachers.....**<http://www.greenteacher.com>
- December 11th – Deadline for the Indian River Soil & Water Conservation District Annual Poster Contest. Theme: “Conservation Habits = Healthy Habitats” Call Brenda Davis at 770-5005 for additional information.
- **January 15** – Deadline for application for the Richard C. Bartlett Environmental Education Award - \$5,000 award given annually to an outstanding educator who has successfully integrated environmental education into his or her daily education programs. <http://www.neefusa.org/bartlettaward.htm>

- **Students....you can be an Aqua Kids Eco-Hero!** E-mail your story about what you're doing to preserve and protect the waters near you. If they choose your story, the “Aqua Kids” will come to your hometown and film a show about what you're doing to help the environment.
<http://www.aquakids.tv/ecohero.html>

Marine

- **Save the Date...July 24** for the 2010 Tri-County Waterway Clean-up Event
<http://www.tcwaterwaycleanup.com>
- **Volunteer instructor training programs** are offered free by the Florida Fish and Wildlife Conservation Commission's Division of Freshwater Fisheries Management allowing you to be a part of handing down the fishing tradition to children. Stewardship, aquatic ecology, and other related topics are discussed. Contact: Steve Marshall, Angler/Aquatic Education Coordinator (561)292-6050 Email:
Steve.Marshall@MyFWC.com

Business

- **Does Your Business Have an MSGP?**
Certain businesses are required to have the Florida Department of Environmental Protection’s Multi-Sector Generic Permit (MSGP). As illicit discharges are received by Indian River County via the IRC Pollution Reporting System (226-3477 and online), inspectors are visiting businesses that are reported anonymously. The first question an inspector will ask is to see this permit if it’s required. To determine if an NPDES Stormwater permit is required, business owners should visit the business BMP page at www.ircgov.com/stormwater
- **Best Management Practices (BMPs)** are methods and practices such as good housekeeping, spill prevention, or treatment measures to prevent or minimize pollutant discharges to municipal storm drain systems. BMPs are listed by business category at www.ircgov.com/stormwater
- **Best Management Practices for Dumpsters & Compactors** - Solid waste containers, such as dumpster and compactors are typically located in outdoor locations where rainwater can pickup pollutants. Mismanaged solid waste containers will ultimately result in stormwater pollution. As a general rule, facility managers and waste contractors should work together to keep solid waste containers clean, in good repair and functioning as designed. For details visit http://www.uos.harvard.edu/ehs/environmental/stormwater_containers.shtml
- **Have you considered recycling at work but don’t know where to start and what resources are available?** Sustainable Indian River Inc. is offering free recycling consulting. Contact aurorabudora@hotmail.com for details.

CONFERENCES & EVENTS

- **We Will Publicize Lagoon & Beach Clean-up Events** The County Stormwater Division welcomes the opportunity of promoting Lagoon and Beach Clean-ups conducted by non-profit groups in the County's stormwater newsletter in exchange for receiving information to be included in the county's stormwater annual report to the DEP (# of volunteers participating at each event and # of pounds of debris collected). **Deadline:** Dates and information must be submitted to Diane Wilson at dwilson@ircgov.com by the third week in the month preceding the event. This increased exposure of a group's Clean-up Events provides not only volunteers for the clean-up but also provides opportunities for potential members to become familiar with your group.
- **December 2, 2009 (Wednesday) 7:45 a.m. – 12 noon IRL Research Forum** at UF/IFAS Research Center (Ft. Pierce) - To showcase environmental research and work focused on improving the state of the Indian River Lagoon and St. Lucie Estuary and bring researchers and environmental managers together for identifying possible synergies. Questions - contact Chris Wilson (pcwilson@ufl.edu) or Kathy LaMartina (klamart@sfwmd.gov)
- **December 11 (Friday) 9:30 am – 12:30 pm FDEP Technical Basin Management Action Plans (BMAPs) Meeting** addressing TMDLs (Total Maximum Daily Load: the maximum amount of a given pollutant that a water body can assimilate and still meet water quality standards) for the Central IRL (the area from C-25 in Saint Lucie County north to Crane Creek in Brevard County) at the Brevard County Ag Center in Cocoa. You can keep abreast on how the Florida Department of Environmental Protection is working with stakeholders in the IRL basin to develop the BMAP and obtain meeting agendas, summaries, handouts, and presentations at their website, <ftp://ftp.dep.state.fl.us/pub/water/BMAP/IndianRiverLagoon/>. **NOTE:** All basins are invited to the Dec 11 meeting to review the TMDL model information with FDEP and SJRWMD staff. (This all-basin meeting preempts the planned IRL North Technical meeting originally schedule for Nov 13). Basin-specific meetings will start up again with IRL Central on January 15 – location to be announced.
- **December 19 (Saturday) 9 a.m. - 12 noon Beach Clean-up hosted by VBHS Student Gov. Assoc.** And KIRB at Vero's South Beach (*end of 17th Street Bridge*) "Do it for Duerr" Beach Cleanup is in honor & memory of Vero Beach High School teacher, Daniel Duerr, who passed away in Dec. 2008
- **January 29, 2010 8am-5pm Tainted Drywall Conference** Indian River State College Kight Center for Emerging Technologies - Room V110, 3209 Virginia Ave. - Ft. Pierce, FL Training and license credits are currently being sought for participants. Please inquire if we have your expertise covered or if you can assist the organizers in obtaining them on your behalf. Additional fees might be required for some certifications. Training and licensing hours approved by: Approved by IHMM for 4 CMPs; "InterNACHI approved; "Individuals certified under section 381.0101 F.S. are awarded 6 contact hours for this training". Homeowners: This is a meeting for professionals featuring an open discussion of effects and impacts. If you choose to come, please understand that while we are sympathetic to your concerns, this is a professional forum and we will not be addressing individual issues. Cost: \$149 per person Advanced Registration Required By: January 26, 2010 For More Information Contact Karen@asset-a-m.com or Go to the CCTI website @ www.irsc.edu/ccti or Call 1.888.283.1177.

- **January 26-27, 2010 (Tues/Wed) Florida Federation of Garden Clubs District X 54th Annual Tropical Short Course** offering sustainable gardening information at Mounts Botanical Garden, West Palm Beach [Brochure & Registration Form](#) For additional information contact: Sandra Arlund, *Chairman* taotaotoo@aol.com 561-582-0051
- **Jan 27 – Feb 1, 2010 – 13th Annual Space Coast Birding & Wildlife Festival.** Visit www.nbbd.com/fly
- **February 24 – 26, 2010 2nd UF Water Institute Symposium (Gainesville, FL)** will focus on complex challenges and integrated solutions for sustainable watershed management. This symposium will bring together scientists, engineers, academics, policy makers, water managers, industry and utility representatives, lawyers, students and the public to address complex water issues from multiple perspectives. Visit <http://waterinstitute.ufl.edu/symposium2010index.asp>
- **April 10, 2010 (Saturday) The Indian River County Sustainability Inc.'s SUSTAINABILITY CONFERENCE** at The Vero Beach Heritage Center, 14th Lane, Vero Beach. Know of any vendors who would like to educate homeowners on ways to be more sustainable? Email Judy Orcutt at jjorcutt@bellsouth.net
- **April 17, 2010 (Saturday) 9:00a.m.–3:00pm Earth Day Celebration** at Riverview Park, U.S. Hwy 1, Sebastian, FL

TRAININGS

- **Agricultural BMPs:** UF Online course, Agriculture and Environmental Quality. Zhenli He, PhD, an associate professor of Soil Fertility and Environmental Chemistry at the UF/IFAS Indian River Research and Education Center in Fort Pierce is offering this new Internet course starting Thursday, January 7, and will continue each Thursday through mid-April. To enroll call Jackie White at (772) 468-3922, Ext. 148, or by e-mail at: jkwhite@ufl.edu. For specific information about the course please contact Dr. Zhenli He at (772) 468-3922, Ext. 109, or by e-mail at: zhe@ufl.edu.
- **Construction & Earth Moving BMPs:** FDEP Stormwater Inspector Classes
The program addresses proper installation, inspection and maintenance of Best Management Practices (BMPs) for use during and after construction to minimize erosion and sedimentation and to properly manage runoff for both stormwater quantity and quality. The exam is now closed book. To see available classes visit <http://www.dep.state.fl.us/water/nonpoint/erosion.htm> . Class manual can be downloaded at [The Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual \(New Revised Version - 3.9 MB\)](#)

- **Florida Native Landscaping BMPs** - Offered to degree and non-degree seeking students at the UF Fort Pierce campus, many industry professionals, nursery owners and state employees have completed the course. Students will be introduced to a wide array of native plant species used in Florida landscapes Registration is taking place now for spring semester 2010 and will continue until Monday, January 4. The course will begin Wednesday, Jan. 6, 3:30 until 6:30 p.m., and will continue each Wednesday through mid-April. Jackie White, at (772) 468-3922, extension 148 jkwhite@ufl.edu or at: www.irrec.ifas.ufl.edu . For specific questions about the course or materials contact Dr. Sandra Wilson at: sbwilson@ufl.edu
- **Landscape Architectural BMPs** segments on water-conserving gardens, including very important “right plant, right place” concepts; stormwater gardens, including specifics on rain garden design and wildlife enhancement gardens. Participants walk away with specific, technical design concepts for doing new projects, retrofit existing landscapes, and add to their marketing niche on how to earn points in green certification. Course title: Florida Yards and Neighborhoods – Florida Water Systems, Concepts and Practices, Protecting Water Systems through Ecologically Sound Maintenance/Irrigation for Landscapes and Turfgrass, Creating Wildlife Habitat in Home Landscapes. (BOLA 0007551) 4 CEH's. For details visit http://buildgreen.ufl.edu/continuing_education.htm
- **Landscape BMPs for Property Management Associations** – The focus and goals of the course are to provide information and guidance on turfgrass and landscape management practices to conserve and protect Florida's water resources. The participant will learn to: identify the impacts of storm water runoff on water bodies; apply Best Manage Practices including Pesticide, Landscape, Fertilizer and Irrigation Management to increase property beauty and value; develop a landscape management plan utilizing the Best Manage Practices for the protection of storm water resources. Materials used in the development of the program come from a variety of agencies, including University of Florida/IFAS/Extension and the Florida Department of Environmental Protection.(CAM 9625316) 5 CEH's. For details visit http://buildgreen.ufl.edu/continuing_education.htm
- **Pesticide BMPs: GENERAL CERTIFICATION STANDARDS TRAINING & TESTING FOR AGRICULTURAL PESTICIDE APPLICATORS** December 2 at 9 a.m. Pesticide applicators who purchase or use pesticides classified as restricted-use by the U.S. EPA must demonstrate that they meet certification standards established by the Agency under authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as Amended. For more information and to register (\$20) call the SLC Extension office at (772) 462-1660.
- **All Levels of Various Stormwater Training** are available through the Florida Stormwater Association Call for more information at 888-221-3124 or visit the FSA Training Center Online or email stormwater@ksanet.net or visit the [FSA Training Center Online](#).

BMPs and Things Worth Knowing

What's Your Water IQ?

What is water that has been used once but is still clean enough to do other jobs?

Grey Water. Fish tank water, dishwater, shower water and clothes washer water are all examples of grey water. You can use this water to clean exterior siding, water the garden or scrub out your bird bath. Just don't dump it down the sink or in the stormdrains!

How much water is used to flush the average toilet?

3 gallons – The average toilet uses 3 gallons per flush. Newer toilets will use less water and older toilets tend to use more. The toilet uses more water than any other indoor fixture. It is also prone to leaks. Flush as little as possible and check your toilet for leaks.

True or false: Is it greener to wash your car at home

False. In most cases, it is greener to do some things yourself, but not when it comes to washing your car. Car washes usually save more water than an old-fashioned home washing. Car washes are also zoned so the soap doesn't run off in to the ocean or groundwater. For an even greener wash, check to see if your local car wash recycles its waste water.

Which uses more water washing dishes by hand or in the dishwasher?

Washing dishes by hand. Washing dishes in the dishwasher uses 1/6 less water than washing them by hand. The dishwasher accounts for .06 percent of your home water use. Sometimes it is easy being green! Source www.planetgreen.discover.com/games-quizzes/water-iq-quiz/index.html

- **Florida Has a Unique Mix** - We have intense rainy periods, the Floridan aquifer - one of the most productive aquifers in the world, the Everglades – one of the most unique wetlands eco-system in the world, and a population projected to increase faster than either the national population or the global population over the next 20 or 30 years! Florida is a great place to try and develop knowledge and test solutions to becoming a sustainable society. (Source: Florida Tomorrow Campaign video for University of Florida's Water Institute http://www.floridatomorrow.ufl.edu/gallery/video_galleries/Initiatives/UFWI_video.htm)



Water is Florida's lifeblood. It powers our economic engine and defines life for all. An expanding population and periods of drought have stressed the aquifer, the state's drinking water supply, and many rivers and lakes are impaired because of pollutants from stormwater runoff. Today, Florida's Department of Environmental Protection oversees one of the most extensive watershed restoration programs in the world. In every corner of the state, DEP is working to help restore the health of rivers, lakes and streams. Visit: http://www.protectingourwater.org/florida_water_story/



THE END OF THE LINE: Imagine a World without Fish....

7/10 of the Earth is covered by water and the oceans belong to all of us. **Every person on the planet can claim 2 hectares of ocean - that's what you get if you divide the surface area of ocean by the number of people on Earth.** Learn more at <http://endoftheline.com/ocean/index.php>

Answer to the “Do you Know?” question: Much of the trash/polluted runoff in the Lagoon enters it through 3 large canals. These canals discharge runoff from 300+ miles of canals that drain over 48,000 acres in eastern Indian River County (excluding the barrier island).



Rain Barrel Solution for Small Outdoor Spaces

Rain barrels for homeowners are typically 55-gallon drums or containers. But what if you are one of the millions of people living in town homes, houses or condos with tiny outside green spaces? A 55-gallon barrel may be perceived as a space hog. Using a 20-gallon plastic garbage container can be a solution for small outdoor spaces. Use directions of your choice and replace the 55-gallon container with a 20-gallon container, or visit www.townofcary.org/_shared/assets/rainbarrelinstructions11204.pdf for instructions and diagrams—just replace the 55-gallon container with a 20-gallon container. Total cost is under \$40!

VOLUNTEER OPPORTUNITIES

December 1st 3-5 pm VOLUNTEER OPEN HOUSE - at the Environmental Learning Center
www.DiscoverELC.org

RECYCLING & BEAUTIFICATION PROJECTS - KIRB is the acronym for Keep Indian River Beautiful. It promotes livable neighborhoods by empowering individuals to take greater responsibility for enhancing their community through beautification projects, neighborhood cleanups and school cleanup clubs. Visit www.kirb.org and learn how you can enhance your environmental stewardship knowledge and/or contribute your time and talents. Call KIRB's executive director, Kristy Sturdivant 772-388-5472 or email keepirbeautiful@gmail.com

Community Rain Barrel Campaign - The Cultural Council of Indian River County, Keep Indian River Beautiful, and the Stormwater Division of IRC are in the planning stages of an awareness campaign to teach people of the importance of reducing contaminated runoff through the use of rain barrels, recycling rainwater (and containers) as a conservation tool and the role art can play in social marketing and enhancing the quality of our environment. The vision is to kickoff the program involving all 6 governmental entities in IRC in April 2011. A “moving display” will be completed by July 2011 and will be used at local schools and organizations to raise awareness through the following July 2012. If you or your organization would like to become involved contact Mary Jayne Kelly, Executive Director, Cultural Council of Indian River County (772) 770-4857 e-mail: info@cultural-council.org or Kristy Sturdivant, Executive Director, Keep Indian River Beautiful 772-388-5472 email: keepirbeautiful@gmail.com

JOB NETWORK....

Green Collar Jobs Consortium - apprenticeship programs that focus on labor opportunities for green building projects, including energy efficiency, the reduction of pollution, retrofitting, protection of natural resources, and utilization of renewable power sources. The apprenticeship program is expected to be in place by early 2010 with the goal of enrolling 100 workers in the first six months of operations. The Green Collar Task Force will utilize space inside St. Lucie County's Logistics Center located on U.S. 1 in Fort Pierce as its training facility. The instructors will be provided by the trade unions and the overall administrative management and worker recruitment will be done by Workforce Solutions. Training opportunities are open to all Treasure Coast residents. For more information regarding this program call the Workforce Solutions office at 1-866-4-U-2-HIRE

IRC Environmental Event Calendars

INDIAN RIVER COMMUNITY EVENT CALENDAR

Community, non-profits and governmental agencies are welcome to list all their environmental events and activities on the Indian River County Cultural Arts Calendar in the “Community & Special Events Category” at www.cultural-council.org. To have your event listed email the information to Sharon at info@cultural-council.org.

UF/IRC Extension Service Calendar - http://indian.ifas.ufl.edu/Calendar/2009/aug_09.htm

GRANT DEADLINES

December 15 – deadline for the U.S. Environmental Protection Agency grant applications for environmental education projects and programs to promote environmental stewardship and help develop knowledgeable and responsible students, teachers and citizens. The grants provide financial support for innovative projects that design, demonstrate, or disseminate environmental education practices, methods, or techniques. Projects should involve environmental education activities that go beyond disseminating information. <http://www.epa.gov/enviroed/grants.html>

National Geographic Conservation Trust Offers Funding to Preserve Earth's Resources For more information, visit the Trust's website @ <http://www.nationalgeographic.com/field/grants-programs/conservation-trust-application.html> Questions? Email conservationtrust@ngs.org.

December 10 Deadline....Funding for Wetland, Riparian & Coastal Habitat Restoration
The Five Star Restoration Program seeks to develop community capacity to sustain local natural resources for future generations by providing modest financial assistance to diverse local partnerships for wetland, riparian, and coastal habitat restoration. An online webinar on **Thursday, December 10, 2:00-3:30pm** EST will provide supplemental information regarding the grants program and to respond to questions. Applicants are strongly encouraged to participate, and should follow the registration instructions at www.nfwf.org/FiveStar . Application isn't due until February.

Foundation-Non-Profit Funding:

Open: Civil society (international). □ Letters of inquiry to apply for grants from the Charles Stewart Mott Foundation. Contact: CSMF Mott Foundation Building, 503 South Saginaw Street, Suite 1200, Flint, Mich. 48502; (810) 238-5651; fax (810) 766-1753 info@mott.org; <http://www.mott.org/grantseeker.aspx>

Open: Environment (national). □ Applications for grants from the Energy Foundation. Grants will support projects in four areas: buildings, climate, power, and transportation. Contact: Energy Foundation 1012 Torney Avenue, Suite 1, San Francisco, Calif. 94129; (415) 561-6700; (415) 561-6709 energyfund@ef.org; http://www.ef.org/app_guidelines.cfm

Open: Environment (U.S., Canada). □ Applications for conservation grants from the FishAmerica Foundation. Contact: FAF 225 Reinekers Lane, Suite 420, Alexandria, Va. 22314; (703) 519-9691; fax (703) 519-1872 fishamerica@asafishing.org; <http://www.fishamerica.org/images/grants/guidelines.pdf>

Open: Environment (international). □ Applications for Conservation Trust grants from the National Geographic Society for conservation and research programs that promote the sustainable use and preservation of the earth's biological, cultural, and historical resources. Contact: NGS 1145 17th Street, N.W., Washington, D.C. 20036; (800) 647-5463 conservationtrust@ngs.org; <http://www.nationalgeographic.com/research/grant/rq2.html>

An important funding mechanism for BMAP related projects

Please be advised the FDEP has about \$1.5 million for stormwater retrofit projects and it is looking for a few good projects to be submitted. Preferably these should be projects listed in a BMAP (adopted or in progress). Grant application and information is available at: http://www.dep.state.fl.us/water/watersheds/tmdl_grant.htm. Any questions: Eric.Livingston@dep.state.fl.us.