

Turning the Tide

All citizens can serve as change agents in accomplishing the mission to reverse irreparable environmental damage by expanding self-awareness, implementing new behaviors, and motivating others.

This monthly summary of environmental news, resources, and networking opportunities serves to enhance the education and awareness of those who want to “Turn the Tide.”

www.ircgov.com/stormwater
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IRC Pollution Reporting Hotline # 226-1888
Email “environmental news” to dwilson@ircgov.com

Letter from the Editor

When I recently heard Paul Harvey’s say, “News and comment,” during his syndicated radio slot it made me think of the news and comments I write each month in this newsletter. I appreciate all the positive feedback on the news and comments provided through this medium.

“How lucky we are to live so close to one of the most popular convention destinations in the county” I thought as I drove up to the Green Earth Expo in Orlando recently. We are afforded a wide range of national level educational opportunities within a 90 minute drive! For those of you who need to learn the most current environmental compliance techniques and practices, the world’s largest stormwater conference will be held in Orlando August 3 – 7 (*see Topics of Interest for the Construction Industry section below*).

FREE pontoon boat rides on the Indian River Lagoon are being offered Saturday, June 7 at 10:15 a.m., 11:15 a.m. and 3 p.m. as part of the of the World Ocean Day celebration at the Smithsonian Marine Ecosystems in Fort Pierce. <http://www.sms.si.edu/SMEE/calendar.htm> . Learn more about your connection to the ocean and how you can help protect and conserve the ocean through positive changes in your daily life. For more information on The International World Ocean Day project visit www.WorldOceanDay.org.

Keeping Indian River Beautiful,
Diane Wilson, IRC Stormwater Educator

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IRC Environmental Event Calendar

To enhance community awareness and organizational planning, non-profit and governmental groups (no commercial groups) are welcome to list their environmental events, meetings and activities occurring inside and outside the county. Go to <http://www.calendar.yahoo.com>. The yahoo Id is IRCwaterqualityed and the password is calendar. Once you are in the calendar, events are easily added by selecting the desired date and clicking on "add". Please include your name, title, organization name and phone number in the comments section.

Best Management Practice (BMP) for the Month

Be conscious of not directing any wash or rinse water to a gutter, street or storm drain.

Grant Deadlines

ROLLING DEADLINE - TMDL Water Quality Restoration Program stormwater construction grants, Deadline is rolling before Dec. 30 2008. Requires a 50/50 match. Average grant award is \$500K-\$1M. Approximately \$18M is available statewide. Construction of stormwater BMPs, wet detention, exfiltration, baffle boxes, etc. Contact aadams@gate.net

JUNE 27, 2008 DEADLINE for The National Coastal Wetlands Conservation Grant Program, administered by the U.S. Fish & Wildlife Service, provides matching grants of up to \$1 million per project for acquisition, restoration, management or enhancement of coastal wetlands. For more information, go to <http://www.fws.gov/coastal/CoastalGrants> (click on FY 2009 Notice of Availability of Federal Assistance).

Websites to Know About

www.CNN.com/solutions, profiles innovative solutions to tough environmental problems
[Carbon Footprint Calculator](http://www.nature.org/initiatives/climatechange/calculator/) – <http://www.nature.org/initiatives/climatechange/calculator/>
www.Earth911.org
www.BuildingSoil.org
www.recyclefloridatoday.org
<http://www.palmbeachpost.com/green/content/shared/green/index.html>
<http://www.learningtogive.org/>

NEWS FOR EVERYONE....

Photographers.....July 31st is the deadline for entries to be postmarked for the 2009 Indian River Lagoon Photo Contest. The Indian River Lagoon National Estuary Program is seeking lagoon-related photographs for publication in our 2009 Indian River Lagoon Calendar. Indian River Lagoon Program, 525 Community College Parkway SE, Palm Bay, FL 32909 321.984.4950 or 800.226.3747

What you need to know before you grill your fresh catch of the day

You can download a handy reference card which lists fish according to high, low and moderate mercury levels at <http://fn.cfs.purdue.edu/fish4health/Walletcard/walletcard.htm>.)

Article: Contaminants in Local Fishing Waters.....It's fun to go fishing. Just be sure that what you catch and where you catch it are healthy -- otherwise, catch and release. On the one hand fish is packed with protein and healthful omega-3 fatty acids, there are also all those warnings about toxins and contaminants. This is especially true for fish caught in local waters, as contaminants and toxins are in many "sparkling streams" and tend to vary by region. **While the government carries the burden of making sure fish in grocery stores and restaurants is safe, the same does not hold true for fish you or other locals catch on your own.** In this case consumers must be knowledgeable about the safety of the local waters. To sort through, the author of this article spoke with Charles R. Santerre, PhD, a professor of food toxicology in the department of foods and nutrition at Purdue University in Indiana.

POLLUTION MAKES SOME FISH UNSAFEThe primary worries for fish in general are mercury and PCBs (polychlorinated biphenyls). Fish caught in local waters may also contain pollutants such as DDT, dioxins and chlordane. Many of these environmental contaminants end up stored in our bodies and can take some time to be eliminated. For instance, PCBs are stored in body fat and the liver, while mercury is concentrated in organs and in muscle. High levels of mercury are linked with nervous system damage or impaired neurological development in the very young. **PCBs can take six years or more to clear from the human body.** Lots of variables contribute to the level of contamination in fish -- including where the fish lives, its age and how contaminated its food source is.

FISHING FOR INFORMATIONDon't assume that fish you -- or your neighbor -- catch locally is safe. Before eating, check with your local health department about safety considerations in the local waters. To find advisories, go to www.epa.gov/waterscience/fish/states.htm.

Guidelines are different for youngsters, as well as for women who are nursing or pregnant. Fish consumption should be discussed with your physician in this case, since the nutrients are vital but the health risks are magnified. Dr. Santerre has developed a chart to help make smart choices for these populations when buying and eating fish. This handy reference sorts out fish according to high, low and moderate mercury levels. (You can download a wallet-sized version at <http://fn.cfs.purdue.edu/fish4health/Walletcard/walletcard.htm>.)

To learn more, in addition to the resources mentioned above, visit the US Environmental Protection Agency Web site at <http://www.epa.gov/ost/fish/>. Source(s): Charles R. Santerre, PhD, professor of food toxicology, department of foods and nutrition, Purdue University, West Lafayette, Indiana.

Basic Fire-wise Principles for Home Protection

Florida Agriculture and Consumer Services Commissioner Charles H. Bronson is urging state residents to take action around their homes to prevent wildfires damage. “There are simple Fire-wise principles that everyone can put into practice immediately with little or no cost.” Bronson said.

Fire researchers have demonstrated that even 30 feet of defensible space around a home can greatly decrease the probability of structure damage or loss due to a wildfire. Little things often cause a structure to ignite rather than the major flame front itself. Bronson urges every homeowner to review The National Fire Protection Association recommended standards for people to follow who live in or near wild land areas. (http://www.nfpa.org/freecodes/free_access_document.asp?id=114408)

3 areas around your home where these “little things” need your attention:

- * **Roof and gutters:** remove all dead leaves, pine needles, small twigs and palm fronds – anything that can ignite easily by falling embers.
- * **Sides of the home:** remove dead vegetation and any combustibles (e.g. fire wood piles) from the sides of your home
- * **Area within 30 feet of your home:** remove dead vegetation, keep grass cut and watered, remove any vines stretching from the wildland to your home or into your trees, prune dead limbs from your trees and bushes.

For more Fire-wise tips, visit the Florida Division of Forestry web page: fl-dof.com.

BIOLOGY ADJUNCTS NEEDED BY IRC (formerly IRCC)

Biology adjuncts--especially to teach General Biology and Microbiology at our Okeechobee campus, however, we can use more adjuncts at our other campuses starting for the Fall semester.

In order to lecture at the college, minimum requirements are a Master's degree with 18 graduate hours in the subject you are teaching. Prior teaching experience would be nice, but is not required. The department will provide everything you need (text book, lecture materials, example tests, etc).

Pay runs according to the degree (Master's, Ph.D) you have but ballpark is \$500/credit hour (lecture classes are 3 credits) so it is approx. \$1500 per course. The course runs 15 weeks in the Fall & Spring and 6 weeks in the Summer semesters. Classes meet for 2 1/2 hours per week. Day classes generally meet twice a week for 1 and 1/4 hours, while night classes meet one day a week for 2 1/2 hours (usually 5:30 to 8 p.m.).

If anyone is interested or has questions, please have them contact me at this e-mail address, Sherry Bowen [sbowen@ircc.edu]

CDC: Expect More Recreational Water Illnesses

More recreational water illnesses outbreaks were reported in 2007 than ever before, and the numbers could increase in the coming years, according to the Centers for Disease Control and Prevention (CDC).

Recreational water illnesses are illnesses that are spread by swallowing, breathing, or having contact with germs in the water of swimming pools, spas, lakes, rivers, or oceans.

"The leading cause of recreational water illnesses outbreaks is *Cryptosporidium* or Crypto, a chlorine-resistant parasite, primarily associated with treated swimming places, such as pools and water parks," explained Michele Hlavsa, an epidemiologist at the CDC. "This recreational water illness has been a public health issue in the past and will likely pose an even bigger challenge in the future."

During 2004-2007, the number of Crypto cases tripled. At the same time, the number of Crypto outbreaks linked to swimming pools more than doubled. Because Crypto is chlorine resistant, even a well-maintained pool can transmit this parasite.

"People need to practice healthy swimming habits, such as not swimming when they have diarrhea, not swallowing the water, taking a shower before swimming, washing their

hands after using the toilet or changing diapers, and washing their children thoroughly -- especially their bottoms -- with soap and water before swimming. To prevent outbreaks, we encourage pool operators to add supplemental disinfection to conventional chlorination and filtration methods," adds Hlavsa.

Symptoms generally begin two to 10 days (average seven days) after becoming infected with the parasite.

Crypto is characterized by watery diarrhea lasting one to three weeks. It can be spread by swallowing recreational water contaminated with Crypto or by putting something in your mouth or accidentally swallowing something that has come in contact with the stool of a person or infected animal. Other symptoms include stomach cramps or pain, dehydration, nausea, vomiting, fever, and weight loss. Crypto is not spread by contact with blood.

Some people with Crypto will have no symptoms at all, and most people who have healthy immune systems will recover without treatment. People with weakened immune systems are at risk for severe or life-threatening illness.

Topics of Interest For....

The Construction Industry

METRA Meetings are held at 3:00 p.m., on the second Wednesday of every month typically at the Florida Department of Environmental Protection's Central District office in Orlando however it is advisable to check www.metra.org <www.metra.org> for meeting locations. There are no fees or dues to join METRA. Everyone is encouraged to come and participate. Remember, everybody shares and everybody benefits. See the Calendar of Events at (<http://metra.org/>). The mission of METRA (Metropolitan Environmental Training Alliance) is to promote environmental excellence through training and partnerships. METRA was established in 1998 by the leaders of Orange and Seminole Counties, the City of Orlando, the Greater Orlando Aviation Authority, Reedy Creek Improvement District and the DEP Central District. Contact METRA to be added to their email distribution list.

August 3 – 7, 2008 the world's largest stormwater conference, The North American Surface Water Quality Conference and Exposition at the Orlando World Center Marriott Resort. You will learn the most current techniques and practices for meeting your stormwater compliance challenges from people with practical, hands-on experience. You can also learn from the stormwater-related products, services, and technology exhibitors. www.StormCon.com

November 5, 2008 METRA's FREE Environmental Excellence Day, to be held at the Sea World Ports O' Call facility in Orlando. Attended by environmental stakeholders from across the state, this workshop has become METRA's flagship event, combining a full day of expert environmental training, hot-topic presentations, a complimentary luncheon, exhibits, and prize drawings. The featured theme this year will be water conservation and feature a prominent guest speaker.

PlanetReuse.com is the world's first Web site that connects buyers and sellers of reused and reclaimed construction materials and equipment and allows them to purchase products with integrated shipping online, per <http://www.eponline.com/articles/60262>

Concrete washout issues ... EPA is targeting construction sites to insure that there is no violation of the NPDES requirements. Those who are in violation are being hauled away in handcuffs. Please make an extra effort to ensure your staff is informed and you are making specific plans to handle concrete washout. Contractors and concrete producers must wash out the chutes in order to prevent any concrete from spilling onto the streets. Simple solution for small amounts of washout is a designated pit (sign) lined with plastic – remove and haul off when dried. Make sure this activity is located AWAY from streams and water bodies. There are 2 potential pollutants in washout. 1 = pH issues. 2 = Selenium 6 (toxic). Any questions....look at the EPA and DEP websites.

Learn new practices and implement them project by project: <http://www.wwn-online.com/articles/50888/>

See www.BuildingSoil.org

Students & Teachers

June 4 - Treasure Coast Environmental Educator's Council (TCEEC) meeting, 3 pm at Oxbow Eco Center, 5400 NE St. James Dr. Port St. Lucie. Meet fellow environmental educators and naturalists, Discover local organizations, Voice your ideas for supporting environmental education in the classroom. Bonus Learning Opportunity: After the meeting, learn about global positioning (GPS) and Geo-caching. This is TCEEC's first Annual meeting as a non-profit corporation. During the meeting we will appoint officers, approve by laws, and discuss plans for next year. Snacks available. Please RSVP to Jennifer Howard, 772-785-5833 howardj@stlucieco.gov

June 7... Everyone is invited to join in on an international celebration with the Smithsonian Marine Ecosystems Exhibit from 10 a.m. to 3 p.m.! Whether you have seawater in your blood or are a proud landlubber, EVERYONE is connected to the ocean. We play in it, eat food from it, work on it, breathe because of it * what better reasons can you think of to celebrate the world*s ocean? Come to the Smithsonian Marine Ecosystems Exhibit, located in the St. Lucie County Marine Center, on June from 10 a.m. * 3 p.m. and enjoy learning stations, crafts, face painting, a sidewalk chalk art contest with prizes for kids 6 to 14, and other activities all centered around the Earth*s indispensable marine resources. The first 200 children 14 and under will receive a free gift bag filled with educational materials. Visit www.sms.si.edu/SMEE

Now through November 5th – vie for the \$25,000 award offered by the www.wfchallenge.com competition by conceiving and implementing a totally unique volunteer project improving any waterfront

Kids Taking Action to preserve aquatic habitats.....visit the website:

<http://www.aquakids.tv/> – a half-hour program on the FOX television network (airs locally on WFLX 12:30 PM Saturdays) features young people taking action across the U.S. to preserve aquatic environments and wildlife.

June 17 –20 Forestry Tour of Florida Educators - http://www.fl.dof.com/calendar/forestry_teachers_tour.html

To open in the summer of 2008.....The Children’s Museum of the Treasure Coast, 1707 NE Indian River Drive, Jensen Beach. The entire building will be used as an exhibit explaining “green” features with interactive displays and animated virtual tours designed to teach children and their parents the merits of sustainable building design, function and technology. Visit www.childrensmuseumtc.com for more information.

Marine Industry and Boaters

Planning going on now for theThe 1st Tri-County Waterway Clean-up – on July 19. Indian River County citizens (along with Martin and St. Lucie residents) can plan and participate in this event sponsored by the Florida Inland Navigation District and coordinated by The Marine Industries Association of the Treasure Coast (MIATC). This will be the first cleanup specifically concentrating on the waterways, spoil islands and area canals. For more information please contact April Price, southyacht@aol.com, cell #: (772) 285-1646.

Here is an idea tournament directors can consider....The Miami Beach Sailfish Tournament produces a lot of CO₂ – roughly 2,000 tons, according to Dan Kipnis, founder of the event. To offset the impact of fuel used by boat engines, travel to the tournament, and the manufacture of tournament T-shirts, this year corporate sponsors bought carbon credits, which will help fund a methane capture project...per www.CNN.com/solutions

Adopt-A-Fishing Bin Project - Volunteers are needed to inventory monofilament recycling bins along our waterfronts, and place collection boxes in marine-oriented businesses. For details contact KIRB at 388-5472

Clean Boater Program – If you would like to assist in the efforts to promote this valuable program at events please call KIRB at 388-5472. We can educate our citizens to utilize Florida’s Clean Marinas, Boatyards & Retailers, safeguard the state’s waterways, and adopt environmentally-friendly practices such as using bilge socks, fueling collars, and

good recycling habits. For more information see
www.dep.state.fl.us/cleanmarina/boater/default.htm

Business Sector

Important Things to Remember:

1. **Keep your business neat and clean – it saves time and money and prevents pollution.**
2. **Protect your storm drain inlets from pollution of any kind.**
3. **Be prepared! Keep spill cleanup materials easily accessible.**
4. **Use dry methods to clean up spills whenever possible.
Never wash spills down the storm drain.**
5. **Train staff regularly on these practices.**
6. **Pick up litter daily. Maintain the sidewalk in front of your business so that it is free of litter and dirt. Don't wash into street or storm drain**
7. **Provide enough trash receptacles for customers and employees.
All outdoor receptacles must be covered.**
8. **Mercury contaminates fish making them unsafe to eat. Properly dispose of hazardous waste and recycle all mercury-containing products including fluorescent lamps, light bulbs, manometers, thermostats, switches, and batteries.**
9. **Do not over water. Maintain sprinklers to avoid pavement watering.**
10. **Clean up grass clippings or place them back on your grass.
Don't dispose of grass clippings into street or in storm drain.**
11. **Do not rinse waste containers or areas to storm drain.**
12. **Don't direct any wash or rinse water to a gutter, street or storm drain.**