



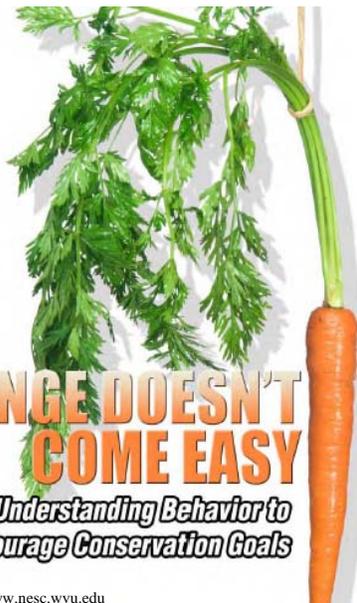
# TURNING THE TIDE

...of polluted runoff from reaching our waterways

Look for this sign along Roads in the County!

**Indian River County's Clean Water Goal:** To reduce the amount of visible and invisible pollutants washed off land and carried by rainwater into waterways and our Indian River Lagoon. Citizens help achieve this goal by voluntarily making simple behavioral changes that reduce the amount and improve the quality of water that runs off their properties.

## We Need Your Input



Graphic source: [www.nesc.wvu.edu](http://www.nesc.wvu.edu)

**What rewards would motivate you to make it worth your effort to make home maintenance behavior changes and replace potential improper home maintenance practices with proper practices?**

What would you want to see or hear in a TV or radio ad that would catch your attention and motivate you to alter your behaviors?

Proper practices are listed within this newsletter in the right-hand column on page 2, and under "Personal Pollution Prevention" link at [www.ircStormwater.com](http://www.ircStormwater.com). The intent of the "proper practices" is to prevent the presence of chemicals and contaminants that could be in the path of stormwater and reduce the amount of runoff from your property. Your response will assist us in designing an effective social marketing campaign. Please email your response to [dwilson@ircgov.com](mailto:dwilson@ircgov.com).

Join your IRC neighbors in treating water *as a resource*, not as a waste product or garbage receptacle, Diane Wilson, IRC Stormwater Education Coordinator, [dwilson@ircgov.com](mailto:dwilson@ircgov.com)

**Pollution Solution Action:** Tiny trash such as gum wrappers and cigarette butts make a lot of pollution in our waters. Make yourself a tiny trash container to carry with you – see page 8.

## Prevent Pollution In the Path of Any Water!



### Contents

- News
  - HOAs & Everyone
  - Students & Teachers
  - Business Sector & Construction Industry
- Events, Trainings & More
- BMPs & Proper Practices
- Identifying & Reporting Illicit Discharges (visit stormwater website)



**A Healthy Lagoon  
Is a Measure of its Watershed!**

### 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.

Source: [http://www.gotwater.net/protect\\_water.htm](http://www.gotwater.net/protect_water.htm)

### How do our waterways become polluted?

The first inch of runoff from a rainstorm may carry 90% of the pollution in its path. Stormwater picks up street litter, yard waste, lawn fertilizers, pesticides, pet waste, oils and fluids from driveways and streets.

Personal Pollution Solutions: You can help by preventing substances that you wouldn't want to swim in or drink from entering storm drains:

- Keep roadside curbs and gutters clean: free of natural and unnatural items.
- Use less fertilizer on lawns and follow directions on package.
- Avoid using pesticides
- Compost garden trimmings and blow grass clippings back onto your yard
- Recycle used oil ~ Check for car leaks
- Wash your car on the lawn, not on driveway or street
- Pick up pet wastes or bury a minimum of 5" deep
- Take leftover paints, automotive fluids, pesticides, etc. to the Household Hazardous Waste Collection Center at the IRC Landfill (770-5113)
- Have your septic tank professionally checked and maintained at least once every two years
- Get educated! Learn more about ways you can prevent water pollution at the Personal Pollution link at [www.ircStormwater.com](http://www.ircStormwater.com)
- Be observant and report pollution at 226-1888 - Sprint/Nextel phones dial #IRC

**Stormdrains are not garbage cans.**

Throw your debris in a trash can

## FOR EVERYONE and Homeowners & Private Associations:

### Homeowner Yard Maintenance Resources

#### Property owners and private associations that hire professional services:

Select a “green certified” professional who you know in advance has successfully completed the Florida-Friendly Green Industry – Best Management Practice (GI-BMP) certification training class\* from the list at [http://fyn.ifas.ufl.edu/professionals/certification\\_lists/cert\\_county\\_name.shtml](http://fyn.ifas.ufl.edu/professionals/certification_lists/cert_county_name.shtml) . The GI-BMPs are a science-based educational program for Green Industry workers (lawn-care and landscape maintenance professionals), brought to you by University of Florida/IFAS Florida-Friendly Landscaping program. The GI-BMPs teach environmentally safe landscaping practices that help conserve and protect Florida’s ground and surface waters. They can also save the Florida homeowner money, time, and effort, increase the beauty of the home landscape; and protect the health of your family, pets, and the environment.

Do-it-yourselfers: The soil in Indian River County is basically sand so it is recommended to first do a soil test to determine the types and quantities of nutrients each lawn needs. Homeowners are encouraged to call the IRC Extension office (770-5030 ext. 1) to learn how to obtain a free pH soil test and more in-depth soil analysis for \$7 per sample. Practical landscaping guidelines are available at <http://fyn.ifas.ufl.edu/homeowners/publications.htm> . An additional practical reference is [www.swfwmd.state.fl.us/yards/fertilizing](http://www.swfwmd.state.fl.us/yards/fertilizing) .

A training program for retailers is being created – As of November 2011 the *Florida Friendly-Landscaping™ – Green Industries Best Management Practices* program Statewide Coordinator, Donald Rainey, is preparing to work with big box stores to train store associates. He is working with local agents in Sarasota to set up a beta program. The goal is to prepare store associates with FFL/GI-BMP program and local/state ordinance/compliance information.

**DO YOU KNOW if pet waste is a fertilizer or not? See page 9**

#### Tip for Your Neighborhood Stormwater Pond:

Use a Variety of PLANTS When AQUASCAPING

#### SOME NATIVE AQUATIC PLANTS FOR AQUASCAPING



Given Florida's abundance of native aquatic plants, and except for the actual hard labor involved, it is not so difficult to create a beautiful and unique man-made pond that also achieves its intended water management functions.

**There are literally hundreds of native aquatic and wetland plants to choose from**, many of which are structurally interesting, amazingly colorful, and highly beneficial to wildlife.

However aquascapers tend to use the same very few types of plants in most of their designs, and don't branch out to discover what other plants are good-looking, suitable and available. Too many retention ponds are aquascaped using just a very few species, such as pickerel weed (*Pontederia cordata*); blue flag (*Iris species*); the orange canna hybrids (*Canna flaccida*) and duck potato (*Sagittaria lancifolia*). While these native plants certainly carry out their intended function as decoration, their overuse causes many aquascapes to have the same uniform look. Instead, why not develop your own aesthetic, look at other plants, large and small, with a fresh eye, and create a uniquely personal aquascape.

Utilizing a variety of plants would offer more to wildlife in the way of food and shelter, would provide better defense against invasive plants, and would appear to be more natural-looking.

Aquatic nurseries offer a greater variety these days - find plants that appeal to you and specify them in your aquascape plan. Source: <http://plants.ifas.ufl.edu/guide/aquascape.html>

## Landscape Irrigation Restrictions

St. Johns River Water Management District (SJRWMD) has established these restrictions throughout its boundaries. They are 1 Day/week now through March 11th. SJRWMD Mandatory lawn watering restrictions specify the days when you may water. For details visit <http://www.sjrwmd.com/wateringrestrictions/index.html> or call their 24-hour "Irrigation Line" at 1-800-232-0904

► LITTER PREVENTION    ► WASTE REDUCTION & RECYCLING    ► BEAUTIFICATION

**KIRB**  
Keep Indian River Beautiful

Find us on Facebook

Barbby

**Need odds and ends?** Come on in to KIRB's (Keep Indian River Beautiful) Reuse Exchange Center located in the Indian River Mall by Macy's.

It's out with the old and in with the...well...'reused'! On display you will find a variety of items that have been created with reusable materials. What good is a puzzle with missing pieces? What is one suppose to do with wine corks, beer caps, buttons, keys, vinyl records? **We could tell you what can be done with these materials**, but that wouldn't be as fun seeing your reaction in person.

Another reason to go to KIRB, they are now **featuring beautiful glass wind-chimes** that are crafted by a local artist and reasonably priced. The glass bottles have been decorated, some have been cut but all have been melted in a kiln to make spoon rests and wind chimes. Also on display is a luggage trunk that has been 'upcycled' into a coffee table. The old luggage trunk was painted, burlap fabric scraps were placed on the top and the decorative ball feet were cut off an old sofa being trashed and the glass top was originally used with a porcelain base which was broken during a move.

**About us:** Most materials that are not recyclable but reusable are taken for donation; proceeds are used in IR County to fund the 4R's (Recycle, Reduce, Reuse, Rethink) Education program. Also, KIRB assists the county with the Adopt-A-Road program, in addition to organizing other community clean up projects while promoting clean waterways. KIRB is the local Keep America Beautiful affiliate.

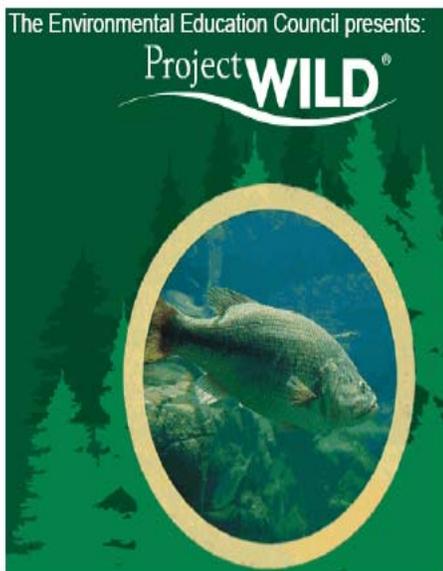
**Hours of operation** Sunday & Monday: Closed Tuesday-Friday 1-5 Saturday 10-3  
For more information or to make donations contact KIRB at 226-7738

## News for Teachers & Students

### Sebastian Elementary Hosts Stormwater Education Presentation



Members of James Batory's 5<sup>th</sup> grade class at Sebastian Elementary School learned the connection between the pollutants on their home property and the Indian River Lagoon.... runoff. Whether the runoff is from stormwater, hose or excess irrigation, homeowners need to reduce runoff and the presence of "invisible" pollutants (i.e. chemicals) from leaving their property as it carries pollution in its path to the closest water body.



## Educator Workshop

February 4, 2012

9:00am-3:00pm

Savannas Preserve State Park  
2541 Walton Rd. PSL

**FREE!** But Registration is Required

The **Treasure Coast Environmental Education Council** invites you to be part of the Project WILD movement! **Project WILD** is one of the most widely-used conservation and environmental education programs among educators of students in kindergarten through high school. It is based on the premise that young people and educators have a vital interest in learning about our natural world. A national network of State Wildlife Agency Sponsors (**Florida Fish & Wildlife Conservation Commission**) ensures that Project WILD is available nationwide -- training educators in the many facets

of the program. Emphasizing wildlife because of its intrinsic value, Project WILD addresses the need for human beings to develop as responsible citizens of our planet. **Reserve your space today by contacting Wren Underwood at [WrenUnderwood@gmail.com](mailto:WrenUnderwood@gmail.com) or call 772-971-5611**



[National Green Week 2012](#) kicks off Feb. 6, 2012 and runs until Earth Day (April 22) 2012. **Pick any week during this timeframe to be your school's Green Week!**

Learn more at <http://www.greeneducationfoundation.org/>



### **Making trash too valuable to toss: FUNDRAISING OPPORTUNITY**

Next time you're about to toss a candy wrapper or a shampoo bottle or a glue stick, take a closer look. Many of these products now carry a TerraCycle logo, much like the triangular recycling symbol, that indicates they can be turned into something new. TerraCycle's entire business model is built on trash – and their offices are made from it (see <http://boss.blogs.nytimes.com/2011/10/10/as-our-company-grows-up-does-our-office-space-have-to-do-the-same/>). The 10-year-old company takes nonrecyclable materials – like the candy wrappers and chip bags – and turns them into new products like pencil cases and lunchboxes. TerraCycle founder Tom Szaky

often says he doesn't ever see trash anymore; he just sees cash. **The drink pouch brigade, by far the most popular, has raised more than \$2 million for charity and kept more than 100 million drink pouches from ending up as trash.** In most cases, TerraCycle pays the shipping costs as well as an additional \$0.02 per unit of waste to a charity or school of your choice. **Learn more at <http://www.terracycle.net/en-US/>**

## **Businesses**

- **Contractors** – YEAR-ROUND FDEP Stormwater & Erosion Inspector Certification Classes - look under Training & Events Column below.
- **Landscapers and Irrigation Professionals:**
  - Green Industry- Best Management Practices (GI-BMP) Certification Classes**  
[http://fyn.ifas.ufl.edu/professionals/bmp\\_training\\_schedule.htm](http://fyn.ifas.ufl.edu/professionals/bmp_training_schedule.htm) .
  - The National Green Values™ Calculator <http://logan.cnt.org/calculator/calculator.php>
  - Landscape Exchange Project  
[http://www.watersheded.com/sites/default/files/registered/docs/FSE\\_v12n02.pdf](http://www.watersheded.com/sites/default/files/registered/docs/FSE_v12n02.pdf) .
- **Pesticide BMPs** - To purchase or use pesticides classified as restricted-use by the US EPA, pesticide applicators must pass a written examination to obtain the required license. Applicators must re-certify either by re-examination or by attending pesticide education programs to acquire continuing education credits. To learn about exam prep classes and test dates call (772) 462-1660 or email Ken Gioeli, SLC Extension Agent/ Natural Resources at [kgioeli@ufl.edu](mailto:kgioeli@ufl.edu)

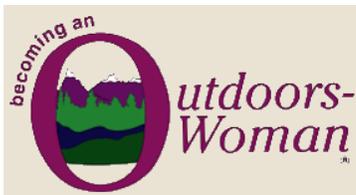
## ***EVENTS, TRAININGS & MORE***

- **Seasonal Hikes offering opportunities to learn about the Indian River Lagoon Watershed** are held on St. Lucie County's environmentally sensitive lands. Programs are free and open to the public, but

reservations are required at least one day in advance. Proper footwear and water are also required. Unless otherwise noted, hikes target ages 13 and older. While pets are typically welcome on SLC lands, we ask that as a courtesy to fellow participants, please leave pets at home. For more information see program brochure at [http://www.stlucieco.gov/pdfs/WEBSITE - 11-12 - Nature Programs.pdf](http://www.stlucieco.gov/pdfs/WEBSITE%20-%2011-12%20-%20Nature%20Programs.pdf)

**January 7, 2012 9:00am-10:00am Indrio Scrub: *Exotic Invaders: Plants Gone Bad!***  
**January 14, 2012 9:00am-1:00pm Pinelands: *Day Hike***  
**January 21, 2012 9:00am-10:30am Spruce Bluff: *Discovering Florida's Biodiversity***  
**January 28, 2012 8:30am-10:00am Sheraton Scrub: *Our Native Scrub Jay***

- **January 23 - Florida Master Naturalist Program (Uplands Habitats Module) Begins** - presented by the University of Florida / IFAS – St Lucie County Extension, Wrensong Science & Environment Education and partnering agencies. This FMNP Module is a 40-hour educational program designed to teach students about Florida's natural systems. Through classroom, field trip, and practical experience, this uplands habitats module provides instruction on the general ecology, habitats, vegetation types, wildlife, and conservation issues of upland areas in Florida. The program also addresses society's role in natural areas, develops naturalist interpretation skills, and discusses environmental ethics. Upon completion of the course, participants receive a certification as a "Florida Master Naturalist", complete with certificate, patch and pin. **Classes meet** Monday evenings (6-9pm) & Saturdays (9-3:30) at Savannas Preserve State Park. **Cost:** \$225.00 . **To register**, or to learn more about the Florida Master Naturalist Program, please go to [masternaturalist.org](http://masternaturalist.org). Questions? Call Wren Underwood 772-971-5611 or Ken Gioeli 772-216-1000
- **Register Now to participate in the "Art on a Rain Barrel Contest"**  
<http://artonarainbarrelcontest.eventbrite.com/>
- **YEAR-ROUND FDEP Stormwater & Erosion Inspector Certification Classes** .... address 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. A list of classes held year-round is available at <http://www.dep.state.fl.us/water/nonpoint/erosion.htm> .



**WOMEN OVER 18 WHO LOVE NATURE**.... If you'd like to gain a greater understanding and appreciation of the "great outdoors" consider attending one of the Florida Fish and Wildlife Conservation Commission's "**Becoming an Outdoors-Woman**" weekend educational programs. Visit <http://myfwc.com/education/outdoor-skills/outdoors-woman/>.

### **SAVE THESE DATES:**

- **Sat. March 17 (10 am – 5 pm) 20th annual Pelican Island Wildlife Festival** to be held in Riverview Park, Sebastian. Exhibitors that have an environmental theme and/or exhibit animals or products that are native to Florida are welcome to participate. The "green" theme is in recognition of environmental awareness and in celebration of St. Patty's Day. For details contact Pelican Island Preservation Society [www.firstrefuge.org](http://www.firstrefuge.org) Phone - 772-202-0697

- **Saturday, April 21, 2012 - Nation-wide Hook Kids on Fishing program.** Anglers for Conservation - Creating New Generations of Marine Stewards <http://www.anglersforconservation.org/> is in the process of coordinating these programs in each community in celebration of Earth Day. **The goals are to multiply marine stewards while setting a one-day Guinness World Record for the number of kids and families fishing together at one time.** These 3-hour workshops teach children ages 6 – 16 and their parents the fundamentals of fishing, including casting, fishing techniques, habitat restoration, conservation, fishing safety, knot tying, and catch and release tactics. For more information contact Rodney Smith [rodney@coastalanglermagazine.com](mailto:rodney@coastalanglermagazine.com).

### More FUN Ways to Learn About Water Quality

By Foot, By Canoe, By Kayak,  
By Land, By Sea...it's all by the ELC!  
For a complete schedule of  
Ecology Adventures (EcoVentures)  
visit [www.DiscoverELC.org](http://www.DiscoverELC.org)  
Pontoon Boat Excursions ~ Hikes & Walks  
Green Living Workshops  
Grandparent/Grandchildren Programs  
Kayaking & Canoeing ~ Campouts & More

- **Team ORCA provides opportunities to participate in educational events and outings,** such as a bioluminescence kayaking trip led by senior scientist Dr. Edie Widder; local environmental boat cruises with an ORCA scientist; Team ORCA cookouts & outings; VIP lectures and tours; and members-only invitations to other special events. For more information on how to become a Team ORCA member, call 772-467-1600 or go to [www.teamorca.org](http://www.teamorca.org).
- “Ocean Motion” events on the calendar at [www.barrierislandcenter.com](http://www.barrierislandcenter.com)
- Be sure to check out the list of volunteer opportunities at [www.ircstormwater.com/volunteer.htm](http://www.ircstormwater.com/volunteer.htm)
- Visit these COMMUNITY EVENT CALENDARS  
Indian River County Cultural Arts Calendar <http://www.cultural-council.org/>  
UF/IRC Extension Service Calendar - <http://indian.ifas.ufl.edu/>

## **What you can do to prevent water pollution...BMPs**

BMPs = Best Management Practices: methods to prevent pollutant discharges to storm drain systems. BMPs are listed by category at [www.ircgov.com/stormwater](http://www.ircgov.com/stormwater)

### **From the front page... Make a tiny trash container**

Learn a few crafty ways to make your tiny trash receptacle more fun, personal, and portable:  
<http://keepthecoastclear.org/take-action/1-month-1-minute-1-thing.html>

## Answer to "DID YOU KNOW" (from page 3)



### Is pet waste a fertilizer?

Being the eco-minded organization that we are, we wish we could tell you to compost and re-use dog waste. All of the research we did confirmed the fact that **PET WASTE IS NOT HEALTHY FOR THE ENVIRONMENT**. This includes lawns, gardens, compost piles, bushes, waterbodies, etc. The big danger is the organisms living in the waste that can get you and your pets sick. Most compost piles do NOT get hot enough to kill these organisms. Stick to the classic manures and organic fertilizers for your landscaping and bag and trash your pet waste.

### Am I going to pollute by putting dog poop in the landfill?

No, landfills have liners and treatment systems, so pollutants won't leach into the environment. We certainly want to reduce our waste stream to landfills wherever possible. When it comes to pet waste, however, there is currently no better alternative.

If you bury pet waste in your own yard you may cause health problems, especially if it is close to a garden or play area. In many places in Indian River County the groundwater is close to the surface or only protected by sandy soils that allow pollutants to quickly travel to our drinking water, so burying it on your own isn't the best solution. Source:

<http://www.alachucounty.us/Depts/EPD/WaterResources/Pages/PetWaste.aspx>

Composting  
yard wastes  
= GOOD

Composting  
pet wastes  
= BAD

## You Might Be an Indian River County Water Polluter if.....



*...you can always tell where  
your car has been parked...*

Keep your car well maintained and correct any leaks as soon as possible. Gas, oil, antifreeze and other fluids can be extremely detrimental to the environment.

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**Absorb spilled brake fluid, oil, grease, and antifreeze  
by applying sand or kitty litter and sweep it up.  
Do not hose them into the street.**

## Improper Disposal



Improper disposal causes poor water quality  
and is unlawful in Indian River County

**Improper disposal** occurs when people do not properly discard trash, yard and household chemicals, debris, and other materials that they do not want. Instead, they improperly dump it in a location where it comes in contact with stormwater and enters the storm drain system. Local ordinances prohibit dumping.

### **Report Suspected Water Pollution – Call the IRC Pollution Reporting Hotline**

Reporting what you see in your community is important to helping protect water quality!

*Call 226-1888 or on [www.ircstormwater.com](http://www.ircstormwater.com) to report a violation.*

Photo source: [www.jeffco.jccal.org](http://www.jeffco.jccal.org)

## “Slow the Flow on Your Property” Tip:

### Keep Your Yard at Home

Mulch, Mulch, and  
Mulch Again

- Create absorbent beds
- Protect your pore space
- Use what you've got!

**PREVENT YOUR  
VALUABLE SOIL  
FROM ERODING**



Learn more at [www.tappwater.org](http://www.tappwater.org)

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## **Learn By Watching**

### **On TV:**

- **New stormwater programs on IRC TV schedule.** As part of Indian River County's stormwater runoff education and awareness efforts, a variety of educational and entertaining videos and public service announcements (PSAs) on stormwater runoff topics air 5:00 pm – 11:30 pm Wednesday evenings on the County's TV Channel #27. These "visual learning tools" teach how citizens how can make simple behavioral changes that result in the reduction of contaminated stormwater runoff reaching our waterways.
- **Watch "Your Florida Yard" TV Show On-line**  
This monthly TV program features tips and ideas for making your yard and your neighborhoods beautiful and environmentally friendly. Hosted by Florida Yards & Neighborhoods Agent, Fred Burkey, videos of the show can be accessed at [http://www.martin.fl.us/portal/page?\\_pageid=357,2119332&\\_dad=portal&\\_schema=PORTAL](http://www.martin.fl.us/portal/page?_pageid=357,2119332&_dad=portal&_schema=PORTAL) .

### **On-line:**

- Here are two visual education tools that can serve as powerful ways to remind citizens about the importance of clean water and encourage them to adopt practices to protect our water resources.
  - ["Rubber Ducks" television PSA \(30 seconds\)](#)
  - ["Fish Bowl" television PSA \(30 seconds\)](#)Sources of PSAs: The Clean Water Minnesota Media Campaign.

## **HOW TO REPORT POLLUTION ON LAND OR IN WATER:**

To report pollution or learn ways to prevent stormwater runoff pollution leaving your property visit [www.ircstormwater.com](http://www.ircstormwater.com). Pollution reports can also be made anonymously by calling the Indian River County Pollution Hotline during working hours, Monday – Friday, 8:30 a.m. – 5 p.m. After hours report pollution to municipal police or call 911.

## Topic To Consider for Your Next Meeting: **Your Behaviors Influence Florida's Water Quality**



**Diane Wilson, Stormwater Educator**

The stormwater division offers free seminars to nonprofit organizations, HOAs, schools and businesses.

Many people think they know what pollution is. But unfortunately many people do not realize the Indian River Lagoon is seriously impaired and how pollution is reaching the Lagoon (and other surface waters) faster and more intensely than ever before.

Audiences will learn the causes, effects and ways they can prevent water pollution.

To schedule a presentation email  
[dwilson@ircgov.com](mailto:dwilson@ircgov.com)