

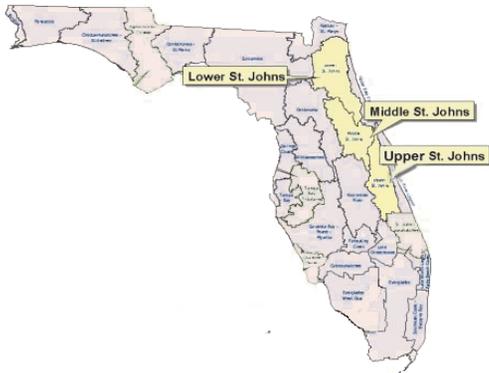
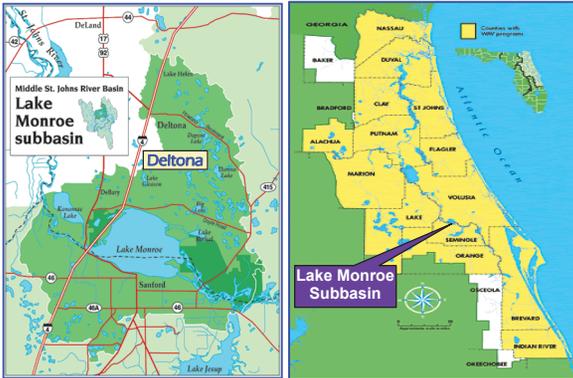
## Our Watershed

Within the City of Deltona there are 4 watersheds that stormwater from every house, street, and neighborhood drains to, they are McGarity, Gleason, Theresa, and Providence. These 4 watersheds drain into a larger watershed called the Lake Monroe Subbasin, which, along with several other subbasins, makes up the Middle St. Johns River Basin. The Middle, along with the Upper and Lower, makes up the entire St. Johns River Basin.

The St Johns River is one of the few rivers in the United States that flows North, so the Lower Basin is actually to the North, near Jacksonville, where it discharges into the Atlantic Ocean.

Over the entire 310 mile length of the river the total drop in height is less than 30ft. That equals a drop of about 1 inch per mile of river.

This low drop in elevation makes the river one of the laziest rivers in the world. However, it also makes it more difficult for the river to clean itself of pollutants.



## Explore More! Links and References

### Volusia County Environmental Management:

<http://volusia.org/environmental/>

### St. Johns River Water Management District:

<http://sjr.state.fl.us/>

<http://sjr.state.fl.us/programs/outreach/pubs/>

### State of Florida Department of Environmental Protection:

<http://www.dep.state.fl.us/water/>

<http://www.dep.state.fl.us/secretary/cs/default.htm>

### Environmental Protection Agency:

<http://www.epa.gov/>

<http://www.epa.gov/ebtpages/water.html>

### Other Links:

[http://www.brevardcounty.us/storm\\_water/faq.cfm](http://www.brevardcounty.us/storm_water/faq.cfm)

<http://www.cityofinvernessonline.com/ReadArticle.asp?id=428>



With just a little time and  
commitment you can  
make a big difference.



## Stormwater Facts



City of Deltona  
Public Works—NPDES Inspector  
201 Howland Blvd.  
Deltona, FL 32738  
Phone: 386-878-8962



## Stormwater Facts



Gone, are the days when  
corporations were the major  
adversary in our fight for  
clean water.

In today's battle, we are our  
own worst enemy.



From the City of Deltona  
NPDES Inspector's Office



In recent years it has been our action and inaction toward stormwater runoff that has caused the greatest amount of pollutants to enter our waters.

## Stormwater Runoff

Stormwater runoff is also called non-point source discharge (NPS), because it cannot be traced back to a specific starting point, it runs off of large areas of impervious surfaces, which is more apparent in urban areas.

Homes, construction, and other impervious surfaces, such as roads and driveways, are part of urban development and have a direct impact on the amount and quality of stormwater runoff that enter our nation's waterways.

A common misconception is that stormwater enters the sewage treatment system, it does not. Stormwater is directed to the Lakes, Rivers, and Ponds near us.

### NPS Pollution Facts

- 💧 The first inch of stormwater runoff carries 90% of the pollutants from our streets, homes, yards, industrial activities and constructions sites.
- 💧 At least 50% of water quality problems in the U.S. result from NPS pollution.
- 💧 Stormwater contributes about 80 to 95 percent of the heavy metals that enter Florida's waterways. Some examples of heavy metals are: Arsenic, Lead, and Mercury.
- 💧 Fertilizer runoff from residential areas is responsible for 1/3 of the excess nitrogen polluting our waterways.

## What Has Been Done?

In 1972 the NPDES was created in section 402 of the Clean Water Act, to help combat the effects of stormwater pollution on the nation's waters.

1987—NPDES permits for stormwater discharges into waterways were established.

1990—Municipalities with populations over 100,000 must have Phase I MS-4 permits

1999—Municipalities with populations over 50,000 must have Phase II MS-4 permits

2004—The City of Deltona is granted a Phase II MS4 permit to discharge stormwater by the State of Florida.

## What is NPDES?

NPDES stands for the National Pollutant Discharge Elimination System. The NPDES system issues permits that allow others to discharge stormwater following certain rules; these permits include:

- ◆ Construction—Construction Generic Permit (CGP)
- ◆ Industrial—Multi-Sector Generic Permit (MSGP)
- ◆ Municipalities—Phase II (MS4)

The MS4 permit for municipalities, like Deltona, must follow 6 minimum control measures:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Control Construction Site Runoff
5. Post-construction Stormwater Management
6. Municipal Operation Pollution Prevention

*For more information visit the links on the back of this brochure, or contact the City NPDES Inspector's Office.*

### NPDES Runoff Facts

- 💧 Because of impervious surfaces, such as pavement and rooftops, a typical city block generates 9 times more runoff than a woodland area of the same size.
- 💧 Untreated stormwater runoff is now considered the state of Florida's leading source of water pollution.
- 💧 Wetlands receive significant amounts of NPS pollution because they are typically the lowest point on the landscape.

## Some Common Pollutants found in stormwater runoff are:

- USED MOTOR OILS & GREASES
- FOAM CUPS, PLASTICS, PAPER & CIGARETTE BUTTS (GENERAL TRASH)
- TRIMMINGS FROM LAWNS, TREES & LANDSCAPING
- ANTIFREEZE, CLEANERS, & SOLVENTS
- PESTICIDES, FERTILIZERS, & HERBICIDES
- EROSION & MATERIALS FROM CONSTRUCTION
- PET DROPPINGS & BACTERIA



## What Can We Do?

Lawn Care	Auto Care	Septic System	Chemicals
Don't over water lawns	Use a car wash or wash your car on the lawn so that water can soak-in	Inspect and maintain your septic system at least every 3 years	Recycle household chemicals or dispose of properly
Use pesticides and fertilizers sparingly	Repair leaks and recycle used fluids or dispose of properly	Don't dispose of household hazardous waste in sinks or toilet	Try to purchase more environmentally friendly products
Cover piles of dirt or mulch to prevent erosion	Recycle batteries or dispose of properly	Purchase cleaners, and products that will not harm septic systems	Do Not pour them onto the ground or into storm drains



Let only rain  
down  
the storm drain