

For More Information

FDOT District Five NPDES Coordinator
(386) 943-5000

Spill Hotline/State Watch Office
(>25 gallons)
1-800-320-0519

**Florida Department of Environmental
Protection**
(407) 897-4100

FDOT Maintenance Facilities

Brevard Operations
(321) 634-6100

Ocala Operations
(352) 620-3000

Leesburg Operations
(352) 326-7777

DeLand Operations
(386) 740-3400

Oviedo Operations
(407) 278-2800

Orlando Operations
(321) 319-8100

Other Important Contacts

FDEP NPDES Stormwater Program

2600 Blair Stone Road Mail Station 2500
Tallahassee, FL 32399
Phone (850) 921-9904

Southwest Florida WMD

2379 Broad Street
Brooksville, FL 34604-6899
(352) 796-1211

South Florida WMD

1707 Orlando Central Parkway
Orlando, FL 32809
(407) 858-6100

St. Johns River WMD

975 Keller Rd
Altamonte Springs, FL 32714
(407) 659-4800

FDOT District Five
719 South Woodland Blvd
DeLand, Florida 32720
(386) 943-5000

**Serving the community by protecting the environment through
education, participation, and conservation**



Stormwater Compliance

FDOT District 5



**Developers, Contractors
and Business Owners
NPDES Information Handbook**

Florida Department of Transportation—District Five has a variety of lakes, streams, rivers, and wetlands that are used for recreational enjoyment, sustaining ecosystems, filtering, storing, controlling stormwater, and recharging groundwater. These surface waters are part of what makes Central Florida such a unique place to live. Most of the surface waters are replenished by stormwater, which is an excellent solvent that picks up, dissolves, and carries a wide variety of materials including heavy metals, solvents, soaps, sewage, pesticides, herbicides, waste oils, and large amounts of suspended solids commonly called turbidity. These contaminants, along with improperly controlled development, degrade water quality, diminish recreational use, pose risks to human, plant, and animal populations, and cause flooding. The control of pollution in stormwater discharge is critical to protecting the quality of surface waters, and is of growing concern as our developed areas increase. In populated areas, stormwater flows along yards and paved surfaces to a man-made system of ditches, curbs, pipes, and treatment ponds eventually discharging into natural surface waters. To protect surface waters, the Florida Department of Transportation—District Five has been delegated the responsibility of enforcing requirements of the National Pollutant Discharge Elimination System (NPDES) relating to stormwater discharges from its jurisdiction. Other aspects of NPDES, such as permitting of direct discharges to “waters of the United States” are regulated by the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (USEPA).

Surface waters are
part of what makes
Central Florida
Such a unique place
to live.



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What is an illicit discharge?

Any discharge to a storm sewer system, surface water, that is not composed entirely of stormwater runoff. It must be stopped in order to ensure that our stormwater discharges do not pollute the waters of the State.

What are signs of illicit discharge?

- Unusual water color, oil sheen, foam, suds, turbidity
- Smell or vapors
- Discarded drums or other containers and materials
- Brown or dead plants around an outfall
- Sick or dead animals around an outfall
- Personal symptoms (burning eyes, nose or skin, nausea or headache)

What should I do if I find a suspected illicit discharge?

Contact the District Five NPDES Coordinator at (386) 943-5000. After hours, contact the nearest FDOT Maintenance Facility for an emergency on-call number. The on-call personnel will determine if immediate action is needed. A quick response may prevent serious damages.

What information should I report?

Report any wastewater or other polluting material that you see being discharged into a street, alley, or storm drain. If you see a violation occurring, call (386) 943-5000 and provide the following information:

- Location of the discharge (physical address or directions to the location)
- What you observed and the date and time
- Identifying names, marks, or numbers on the vehicle or facility
- License tag number

Violations that are reported while they are in progress can often be corrected quickly and may result in little or no pollution entering a lake or other surface waters.

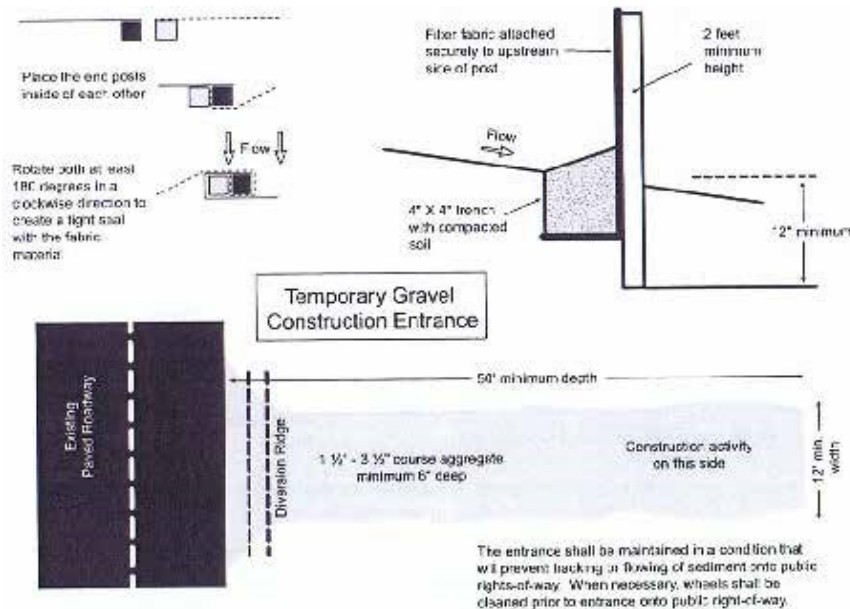
Help protect
our water
Help protect
our future



Construction Issues: Best Management Practices

All erosion protection devices must be maintained and remain in place until proper vegetation has been established!

Silt Fence Connecting Sections & Trenching Detail



Typical Construction Site Entrance and Silt Fence Installation

(Source: City of Orlando)

Check BMPs weekly and after every major storm event (1/2" or more of rain), and keep a log tracking the BMP maintenance schedule and rainfall.

(District Five uses FDOT Form 650-040-03 for the inspection reports)

The Clean Water Act

Congress enacted the Clean Water Act (CWA) in 1972 to ensure minimum water quality standards for the waters of the United States. The NPDES program has become an important part of the CWA, which became effective in Orange and Seminole in 1996 and in Brevard, Flagler, Lake, Marion, Osceola, Sumter and Volusia in 2003. The purpose of the NPDES program is to reduce stormwater pollutant discharges to the maximum extent practicable in order to minimize the **eutrophication** of receiving waters.

The CWA prohibits anyone from discharging **pollutants** into **waters of the United States** without the authorization of an NPDES permit. Facilities which discharge pollutants from point sources (discharge pipes from a manufacturing plant) and non-point sources (sheet flow over construction sites), are required to obtain an NPDES permit from the FDEP. The NPDES permit contains monitoring and reporting requirements, limits on discharges, and other provisions. The permit criteria ensure that the State of Florida's standards and the Federal Government's criteria for clean water are being met.

District Five currently operates under multiple NPDES Municipal Separate Storm Sewer Systems (MS4) permits, and is responsible for inspecting, identifying, and controlling illicit discharges to the MS4. Under these rules and guidelines, the following general criteria can be used:

No person shall deposit, or cause to be deposited by draining, dumping, spilling, leaking, pumping, pouring, emitting, discharging, leaching, disposing, or otherwise introducing any of the following substances into receiving waters or into a MS4.

- Any industrial waste
- Any domestic or industrial sewage from a septic tank, drain field or other source;
- Used motor oil or any other petroleum product or waste;
- Garbage;
- Any untreated wash-water. Wash facilities must provide a recycle system, or have a recapture system to collect and treat the soapy water;
- Substances in concentrations that injure, are chronically toxic to, or produce adverse physiological or behavioral response in humans, plants, or animals;
- Substances that will affect the oxygen levels of the receiving waters by changing the Biological Oxygen Demand, Chemical Oxygen Demand and Dissolved Oxygen;
- The turbidity of discharge water may not exceed state water quality standards as established under 62-302.530 FAC.

Eutrophication is the decrease in water quality. It occurs naturally but is accelerated by land development and the release of nutrients and wastes into the environment.

The **MS4** is the entire stormwater control system that collects, treats, and conveys stormwater runoff from the urbanized areas to surface waters.

Pollutant includes any uncontrolled discharge product that has deleterious effects to plant or animal life.

Waters of the United States are defined as navigable waters, tributaries to navigable waters, interstate waters, the oceans out to 200 miles, and intrastate waters which are used by interstate travelers for recreation or other purposes, as a source of fish or shellfish sold in interstate commerce, or for industrial purposes by industries engaged in interstate commerce.

NTU is a Nephelometric Turbidity Unit. A measure of water clarity.

For further information please refer to the Code of Federal Regulations (CFR), 40 CFR Part 122, the Florida Administrative Code (FAC) Chapter

Used Oil, Petroleum Products, Antifreeze

Do

- Labels all waste containers
- Use approved waste haulers
- Clean up spills immediately
- Store chemicals in approved storage containers.
- Drain or crush oil filters to remove free oil
- Recycle antifreeze and store in closed containers protected from the elements
- To prevent cross contamination, only use dedicated equipment for antifreeze

Don't

- Do not mix used oil with even small amounts of solvents (brake cleaners)
- Do not use gasoline or oil to kill weeds and ants, or to keep dust down
- Do not mix used oil with other solid waste going to a landfill
- Do not mix antifreeze with used oil or other wastes
- Do not dispose of antifreeze on the ground, into storm drains or septic systems

Parts Cleaners / Washers

Do

- Use mineral spirits as long as possible before exchanging
- Use the minimum number of parts washers necessary
- Use high flash mineral spirits
- Determine by testing whether wastewater sludges are hazardous waste

Don't

- Do not mix dirty mineral spirits with any other waste (e.g. used oil)
- Do not evaporate dirty mineral spirits or pour into drains
- Do not dispose of wash water to the ground, septic system or storm drain
- Do not place sludge in dumpster

Vehicle / Floor Cleaning

Do

- Catch leaks before they reach the floor and manage properly
- Verify drains go to sanitary sewer
- Use an oil / water separator and maintain it regularly
- Contact your local municipality's utilities department and inform them of your waste content

Don't

- Do not discharge oil containing substances to the ground, septic system, or storm sewer
- Do not discharge soapy water to the storm sewer

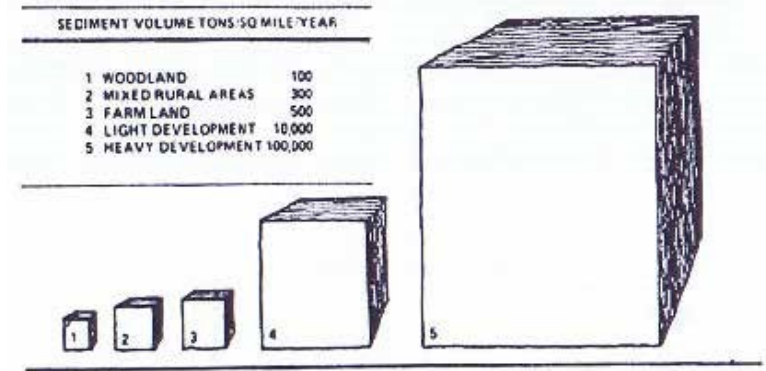
Sump Sludges

Do

- Have sludge tested prior to having it pumped out
- Know where it is going for disposal and keep a receipt or manifest

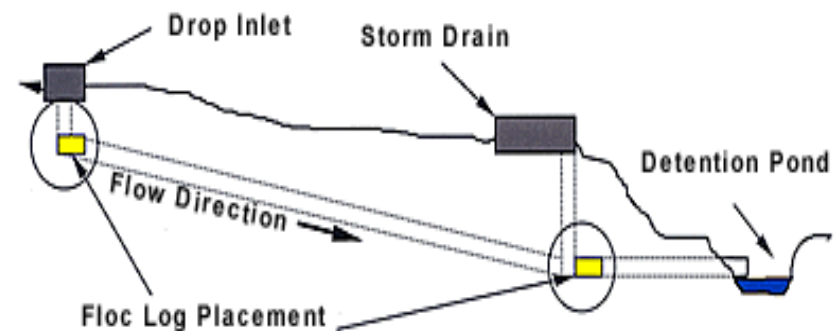
Don't

- Do not use septic tank pumping service to remove the sludge if it is hazardous or industrial waste
- Do not place sludge on the ground or in the dumpster

Construction Issues:
Best Management Practices

Typical volumes of sediment eroded from different uses. Note: heavy development may cause significant sedimentation effects offsite. Special Best Management Practices must be applied in development sites with large disturbed areas.

(Source: Guidelines for Sediment control Practices in the Insular Caribbean)



(Source: <https://www.siltstop.com>)

Polyacrylamide (PAM)

PAM assists in the reduction of turbidity by causing small floating particles to clump together and fall out of the water column. PAM is formulated for the specific soil and water chemistry of the usage area. Soil and water samples are required for geographical areas not previously tested before using PAM. Pam comes in liquid or solid form. In solid form, called Floc Logs®, they may be staked in place in a location close to active earth moving activities and may also be used in drop inlets, storm drains, retrofits, and slope drains. In liquid form, PAM may be mixed with water and sprayed directly onto affected water bodies.

Construction Issues: Best Management Practices

There are a number of standard BMPs that can be used to prevent erosion and sedimentation to avoid water quality violations during construction. The following is an abbreviated list of practices that should be addressed by the contractor or engineer involved with the construction planning and process.

Phase construction - Phase 1. Install perimeter erosion controls before land clearing begins. Phase 2. Install interim stormwater management to be maintained during major portions of the construction process, and only clear land that is to be developed immediately. Phase 3. Install and finalize stormwater system at the end of the construction process.

Stabilize points of Ingress and Egress - Use a 6" thick layer of 2" rock (For entrances use Geotextile or cow fencing under the rock for added stabilization).

Silt fence barriers - To control and prevent migration of sediment during construction activities.

Storm drain inlet protection - on-site

Temporary Diversion Dikes - to minimize and direct sheet flow over disturbed areas

Temporary Sediment Traps and Basins - to allow time for silt and sediment to settle out of the water column

Temporary Slope Drains - to control stormwater stream flows over a slope

Temporary Check Dams - to decrease water flow velocity through swales or canals

Dewatering - to lower the ground water table

Floating Turbidity Barriers - run along the shore in a water body to control sediment flow and turbidity

Regular street sweeping - to control off-site tracking of sediment onto roadways

Regular watering schedule - to prevent wind erosion on large denuded areas

Other helpful suggestions:

- During the planning stage prepare for management of stormwater on site during all project phases.
- Inspect and maintain erosion and sediment controls at least once every 7 calendar days and within 24 hours of a 0.50" rain event.
- Stabilization measures should be initiated as soon as practicable, but in no case more than 7 days, in portions of the site where construction activities have temporarily or

Turbidity

All discharges leaving a construction site must be no more than 29 NTU's above the receiving waters.

Any discharge to Outstanding Florida Waters (OFW's) must not be greater than the NTU's of the receiving waters (OFW's in District Five include the Butler and Clermont Chains of Lakes, the Big and little Econlockhatchee River, the Saint Johns River, the Wekiva River, Rock Springs Run, the Oklawaha River, the Tomoka River, Silver River, Crooked Lake, Lake Disston, Spruce Creek, and all connected wetlands). Special protection of these surface waters are mandatory. Please see FAC 62-307.700(9) F.A.C. for further information.

If all BMPs are used and a significant rain event occurs, inspectors may take into account acts of God if turbidity violations occur (A consistent rain gauge log must be maintained at all times and presented in a timely manner upon request).

What to do with Waste?

Be part of the solution

Practice Good

Housekeeping

Label all containers

Keep containers closed when not in use

Use drip pans

Examine for leaks and spills daily

Clean up spills immediately

Do not mix unknown materials together

Keep your receipts for all hazardous waste disposal

Hazardous waste is identified in one of two ways. It can be found on lists published in the Code of Federal regulations (40 CFR Part 261), or it might exhibit one or more characteristics of **ignitability, corrosivity, reactivity or toxicity.**

Conditionally Exempt Small Quantity Generators (CESQGs) generate less than 220 pounds of hazardous waste per month and less than 2.2 pounds of acute hazardous waste such as some pesticides, toxins or arsenic and cyanide compounds) per month.

Small Quantity Generators (SQGs) generate 220 - 2,200 pounds of hazardous waste per month.

For more information on SQGs and CESQGs, contact the Florida Department of Environmental Protection Bureau of Solid & Hazardous Waste at (850) 245-8707.

Large Quantity Generators (LQGs) generate 2,200 pounds or more of hazardous waste per month or 2.2 pounds or more of acute hazardous waste per month. For more information on LQGs, contact the Florida Department of Environmental Protection Office (407) 894-7555.

Household Hazardous Waste (HHW) many homeowners have some form of hazardous material that they wish to discard. Generally if a container has any of the following words: Pesticide, Caustic, Poison, Danger, Acid, Warning, or Flammable it is probably a hazardous material and should be disposed of at the Household Hazardous Waste Center. For more information on HHW, call the Florida Department of Environmental Protection Bureau of Solid & Hazardous Waste at (850) 245-8707.

Common Hazardous Wastes

- | | |
|--|------------------------------|
| • Pesticides | • Solvents |
| • Oil based paint | • Flammable liquids |
| • Paint thinner/stripper | • Pool chemicals |
| • Varnishes and stains | • Brake fluid and antifreeze |
| • Cleaning fluids | • Used oil and oil filters |
| • Chemical drain cleaners | • Photographic waste |
| • Auto and furniture polish | • Fluorescent lamps |
| • Household, vehicle, and boat batteries | • Computers and cell phones |

Anyone who discharges pollutants into surface waters, an MS4, or other conveyance system may need an NPDES permit. Remember, discharges may involve stormwater runoff (non-point sources), or wastewater/drain discharges (point sources). Construction sites that disturb 1 acre or more of soil and discharge to surface waters are required to obtain an NPDES permit. Please contact the FDEP NPDES permitting section for more information and refer to FDEP document 62-621.300(4)(a) F.A.C. It is the business owner, manager, and landowner's responsibility to ensure that work is properly permitted. Failure to comply with these rules may result in fines and stop work orders.

Where do I apply for an NPDES permit, or get more information?

To obtain an NPDES Point Source Permit, please contact the FDEP Central District in Orlando at (407) 897-4100. For information on Non-Point Source (Construction) Permits, please contact the FDEP Tallahassee office at (850) 245-2836 or refer to the FDEP website:

<https://floridadep.gov/water/stormwater> and

<https://floridadep.gov/water/stormwater/content/construction-activity-cgp>

For more NPDES information: www.epa.gov/npdes

Who is responsible for obtaining coverage under the NPDES permit?

The contractor, owner, and operator will be responsible to ensure that proper permits are obtained for the business, industry, or construction practice that will be occurring. The liability for following permit criteria may be split between each involved party, but primarily rests upon the party who has direct authority over the construction site and Best Management Practices (BMPs).

State Requirements

The FDEP has a Generic Permit for Stormwater Discharges from Construction Activities. This is known as the NPDES Construction Generic Permit (CGP). There are also Environmental Resource Permits (ERPs) and Dewatering Permits which are issued by the FDEP and the Water Management Districts (South Florida Water Management District, SFWMD, and the Saint John's River Water Management District, SJRWMD). For more information please contact the individual Water management Districts and the FDEP (see back of pamphlet).

The Process*

The following process should occur for compliance with stormwater permit coverage:

- Obtain copies of the CGP and the NOI from the FDEP website, carefully read and complete them, and develop a Stormwater Pollution Prevention Plan (SWPPP)
- Complete and submit a Notice of intent (NOI) to the FDEP and send a copy to the MS4 Operator
- Reapply for permit coverage every five years as needed, or file a Notice Of Termination (NOT) upon completion of work

*This process may be changed or updated by the FDEP

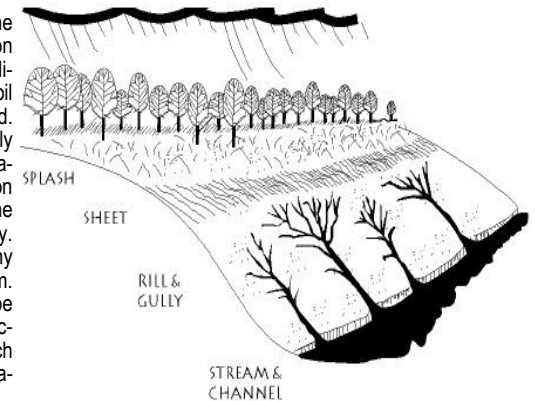
NOIs

Notice of intents (NOIs) for Stormwater Discharges Associated with Construction or Industrial Activity General Permits and SWPPPs must be filled out and filed with the FDEP. The FDOT District Five and MS4 Operator must receive a copy of the NOIs (Please contact the FDEP or review their website for more information), and the SWPPPs must be available on site for review.

EPA: http://www.epa.gov/npdes/pubs/cgp_appendix.pdf
FDEP: <http://www.fldeportal.com/DepPortal/go/apply-build/>

Erosion and Sedimentation

Soil erosion is the process by which the land surface is worn away by the action of wind, water, ice, and gravity. Sedimentation is the settling out of the soil particles transported by water and wind. Accelerated erosion is caused primarily by disturbance and removal of vegetative ground cover. This type of erosion accounts for a large percentage of the sediment generated in this country. Overland erosion can occur in many ways; splash, sheet, rill, and stream. There are various BMPs which can be used to stop such erosion, and contractors must be aware of and use such methods to avoid water quality violations and clogging of the MS4.



Types of Soil Erosion

(Source: <http://www.cep.unep.org/pubs/Techreports/tr41en/Image11.gif>)

SWPPPs

All FDOT District Five construction sites that require coverage under the NPDES CGP must have a SWPPP on site and available for review. The SWPPP will contain specific erosion control measures that apply to your work site, please refer to your approved erosion control plan and SWPPP as required by FDOT, the FDEP, and the Water Management Districts.

Discharge of sediment and construction debris from your construction site is a violation of federal, state, and county codes.

*Due to NPDES MS4 Permits FLS000011, FLS000038, and FLS04E024