

BEST MANAGEMENT PRACTICES

Also known as BMPs, Best Management Practices really do make a difference! They reduce construction-related pollution by minimizing land clearing to preserve natural vegetation; managing clearing or grading in phases to minimize the amount of bare soil; building and maintaining proper site entrances to prevent sediment from being tracked onto streets; stabilizing steep slopes; installing sediment trapping devices and perimeter controls like silt fences and sediment basins; and stabilizing areas as soon as possible after land-disturbing activities.

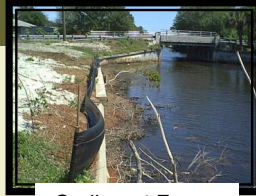
Clean up trash and spills - Waste and recycling receptacles should be placed around the site. Clean up spills and leaks immediately using dry methods. Check dumpsters for leaks. Never clean a dumpster by hosing it down on site. Clean the site of waste and recyclables at the end of each day. (Provide separate containers for recyclables). Properly dispose of hazardous waste. Do not place contaminated soil in dumpsters with general trash. **NEVER BURY OR LEAVE WASTE AT THE WORK SITE.**

Cover construction materials—Secure construction materials and dumpsters with tarps, plastic sheeting or temporary roofs.

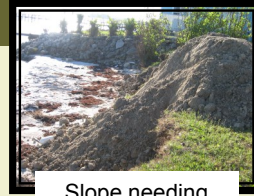
Keep vehicles well maintained—Select an area away from gutters, storm drains or water bodies to designate for parking, vehicle maintenance or routine equipment maintenance.

Educate your workers! - Training is available by the Florida Department of Environmental Protection. FDEP provides a two-day Stormwater, Erosion, and Sedimentation Control Inspector Training & Certification Program free of charge at various locations. Visit their website for information:

www.dep.state.fl.us/water/nonpoint/erosion.htm



Sediment Fence



Slope needing Stabilization

Why Construction Control?

It's the law. Uncontrolled soil erosion is a major concern in Florida because of its effect on the environment.

If your construction site disturbs one or more acres of land you need NPDES permit coverage, issued by FDEP. If your site is less than one acre, but part of a larger, common plan of development that disturbs a total of more than one acre, you need permit coverage, issued by FDEP. For more information, visit our website: www.cityofsebastian.org

Inspections:

Sites are routinely inspected for compliance. Plans are required to be ONSITE at all times. Contact your inspector with any questions.

Reports of Compliance: A report of compliance is required from The City of Sebastian before the construction official can issue a Certificate of Occupancy. Inspection requests are to be faxed to the Stormwater Department at 772-228-7079 with 3-5 days notice.

The City of Sebastian's Ordinance for Violators states, "Owner must fix violation in a given amount of time, failure to comply could result in a lien of your property, a notice to appear in City court, or fines of up to \$250.00 a day, every day the violation exists."

Revised: 6/20/16

MANAGING YOUR CONSTRUCTION SITE *A Guide to Erosion & Sediment Control and Construction Waste Management*



City of Sebastian
Engineering Department
1225 Main Street
Sebastian, Florida 32958

What is Construction Activity?

Any on-site activity which will result in the creation of a new storm water discharge, including the building, assembling, expansion, modification or alteration of the existing contours of the site, the erection of buildings or other structures, or any part thereof, or land clearing.

Controlling Erosion and Sediment on Construction Sites

When building, amending, or altering property in any way, soil erosion control is an extremely important practice that can improve land investments in various ways. Not only is soil erosion control important to maintain the health of local and global waterways the proper control can sustain and improve crop yields, reduce drainage costs, retain nutrients when applied and reduce hazards of eroding soil.



This brochure provides information regarding strategies to address soil erosion and sediment control on construction sites. Engineering staff will visit and inspect development and construction sites as needed to ensure proper erosion control measures are in place with proper installation of silt fencing and BMP devices.

Why Control Erosion?

Understanding how erosion occurs is essential to the design and implementation of effective erosion control plans. Two main keys to erosion control are preventing the detachment of soil particles and reducing the volume of runoff. Erosion control may also be achieved by establishing protective cover such as temporary or permanent seeding, mulching, applying a compost blanket, or installing rolled erosion control products (mats or blankets).

Erosion control should be emphasized as the primary design goal before sediment control in a soil erosion and sediment control plan. Once erosion control is implemented, sediment control should be utilized. Controlling erosion is easier and less expensive than sediment control. By preventing soil particles from being detached, less sediment will need to be controlled.

Other Erosion Control Practices

- Dust Control,
- Temporary/Permanent Vegetation,
- Mulching,
- Rolled Erosion Control Products (R.E.C.P.), Compost Blanket,
- PAM (polyacrylamide) Application for Erosion Control,
- Outlet Protection

What is Erosion Control

There are three basic definitions of erosion. The first is "Natural Erosion" which occurs at a slow rate. There is "Accelerated Erosion" which is primarily caused by vegetation being removed or the alteration of the ground contour by land disturbing and construction activities. Simply put, it is the process of rainfall, wind and water impacting exposed soil particles, and the particles dislodge and splash into the air. The dislodged particles can become suspended in the water and can easily be transported great distances by surface water runoff. There are five different types of erosion:



1. Splash erosion— Disbursement and mobilization of soil particles by the impact of raindrops
2. Sheet & Rill erosion—Sheet erosion is the uniform movement of a thin layer of soil from sloping, bare, unprotected land. Falling raindrops detach soil particles which go into solution as runoff occurs. Detached particles are transported down slope/grade to a point of deposition. Rills form with longer, harder rains when runoff volumes accelerate. Erosion increases as slope/grade becomes steeper and with longer slope length.
3. Gully & Rill erosion evolves into gully erosion as runoff increases, from one heavy rain or a series of storms over time. A gully is generally defined as a scoured out area that is not crossable with tillage or grading equipment.
4. Stream bank erosion—is the removal of soil by high-energy wave action, resulting in sloughing and mass wasting.
5. Shoreline erosion—The removal of soil by high-energy wave action, resulting in sloughing and mass wasting.

What is Sediment?

Sediment is the result of erosion. It is soil particles suspended in, or moved by, storm water runoff. Once soil particles have detached from the surface, they are transported from their site of origin and come to rest on other ground surfaces or in lakes, ponds, watercourses, or wetlands. The process of soil particles being transported and deposited is known as sedimentation.

What is Sediment Control?

Sediment control, which is often confused with erosion control, is trapping detached soil particles that are already moving in the erosion process. Slowing the velocity of runoff and providing vegetative filtering helps trap sediment on-site, but typically, sediment control is achieved by temporarily impounding flows to allow sediment to settle out.

It is critical that effective sediment control practices be installed and maintained when soil is exposed to the erosive force of rain and wind. Sediment control should be a secondary design goal in a soil erosion and sediment control plan, after erosion control is addressed to the extent practical.

The Facts:

- **Sedimentation destroys wildlife habitat.**
- **Sediment reduces property values**
- **Sediment can carry harmful pollutants.**
- **Soil erosion removes the most valuable soils needed to grow plants and food.**
- **Soil erosion removes soil that cannot be replaced for generations.**