



The best way to keep sediments out of the waterway is to have a plan and materials in place to prevent erosion before it can travel offsite.

Planning

An effective plan for runoff management on construction sites will control erosion, retain sediments on site, to the extent practicable, and reduce the adverse effects of runoff.



-Schedule projects so clearing and grading are done during the time of minimum erosion potential (dry season).

Stage construction. Avoid area-wide clearance of construction sites. Plan and stage land disturbance activities so that only the area currently under construction is exposed.

-Clear only areas essential for construction – all other areas should remain undisturbed.

Locate potential nonpoint pollutant sources away from steep slopes, waterbodies, and critical areas. Material stockpiles, borrow areas, access roads, and other land-disturbing activities can often be located away from critical areas such as steep slopes, highly erodible soils, and areas that drain directly into sensitive waterbodies.

-Route construction traffic over areas that must be disturbed for other construction activity. This practice will reduce the area that is cleared and susceptible to erosion.

-Protect natural vegetation

Erosion Control

Erosion controls are used to reduce the amount of sediment that is detached during construction and to prevent sediment from entering runoff.

-Stockpile topsoil and reapply to revegetate site. After a site is cleared, the topsoil is typically removed. Since topsoil is essential to establish new vegetation, it should be stockpiled and then reapplied to the site for revegetation, if appropriate.

-Cover or stabilize topsoil stockpiles. Small stockpiles can be covered with a tarp to prevent erosion. Large stockpiles should be stabilized by erosion blankets, seeding, and/or mulching.

-Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drain. Earth dikes, perimeter dikes or swales, or diversions can be used to intercept and convey runoff above disturbed areas.

-On long or steep, disturbed, or man-made slopes- construct benches, terraces, or ditches at regular intervals to intercept runoff.

-Use check dams across a swale, channel or ditch.

-Seeding and mulching. Seeding establishes a vegetative cover on disturbed areas and the mulch protects the disturbed area while the vegetation becomes established.



Sediment Control

Sediment controls capture sediment that is transported in runoff. Filtration and detention (gravitational settling) are the main processes used to remove sediment from runoff.

-Sediment/silt Basins and Sediment Traps are impoundment structures that allow sediment to settle out of the runoff.

-Silt Fence Sediment is filtered out as runoff flows through the fabric.

-Straw Bale Barrier straw bales can be effectively used as temporary check dams in channels.

-Inlet Protection a barrier placed around a storm drain inlet, which traps sediment before it enters the storm sewer system.



-Construction Entrance located where traffic leaves a construction site. As vehicles drive over the gravel, mud, and sediment are collected from the vehicles' wheels and offsite transport of sediment is reduced.

BEST MANAGEMENT PRACTICES (BMP's) FOR CONSTRUCTION SITES

Pollution Control

Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater flow to mobilize construction site wastes and contaminate surface or ground water.

Pollutants commonly associated with construction sites:

- **Solid and sanitary wastes** – Properly collect and treat any wastewater that you produce.
- **Oil and grease** - Inspect construction vehicles daily and repair any leaks immediately.
- **Disposing of** - all used oil, antifreeze, solvents and other automotive-related chemicals and materials (e.g., oily rags) according to manufacturer instructions.
- **Concrete truck washout** - Washout only in designated areas that are lined to contain the wastes and protect soil. Wet saw cutting Use storm drain protection when working near storm drains and sloped areas.
 - ◇ Use absorbent gels to contain the liquid waste;
 - ◇ Scoop up waste and dispose of properly; and
 - ◇ Small vacuums and vac-trucks can be used.
- **Storing chemicals** – Store construction chemicals off the bare ground and away from vehicular traffic and drainage pathways. Leave chemicals in original, labeled containers and keep Safety Data Sheets on-site
- **Construction debris** - Designate a waste collection area on-site that does not receive a substantial amount of stormwater
- **Containers** - Ensure that all containers have lids to cover them when it rains
- **Prohibit the Discharge of:**
 - ◇ Wastewater from concrete washout, stucco, paint, release oils, or other wastewater materials;
 - ◇ Fuels, oils, or other pollutants used for vehicles; and
 - ◇ Soaps or solvents to wash vehicles and equipment.



For more information:

Linn County Road Department

Stormwater Management Program

Office: 3010 Ferry St SW, Albany, OR 97322

Phone: 541-967-3919

Online materials: <https://www.linncountyor.gov/roads>

