Best Management Practices (BMPs) for Handling Storm Water at Boat Access Sites

Technical standards for storm water management can be found on the Department's web site by searching "storm water."



Currently found at http://dnr.wi.gov/topic/stormwater/standards/

At some sites, specifying BMPs that provide treatment to a level of MEP may be applicable (Refer to pg. 3 of this report, "Runoff Management"). Several practices suitable for boat access site design and potential BMPs from a post construction storm water handling perspective are presented below:

Parking Area

The parking area is the primary water quality concern associated with boat access site projects. Dripping motor fluids from parked vehicles may present a source of oils, grease, and other pollutants detrimental to water quality. As a result, runoff from parking areas should be minimized if possible and should be treated using BMP's before storm runoff enter lakes and streams.

Boat Launch

In order to minimize the delivery of oils and greases from parking area runoff to the boat launch and adjacent water body, travel surfaces upslope of the boat launch should be crowned or otherwise pitched to redirect runoff away from the launch ramp.

Perimeter Stabilization

Areas of land disturbance from equipment access ways or material staging should be stabilized, preferably in vegetation. This can entail seeding with a native grass mix or, in the case of steeper slopes, the use of textile-mesh erosion mats. In areas that are subject to short term water level fluctuations due to wind action or storm surge (seiche) effect or influenced by watercraft wakes, heavy stone or riprap should be considered for stabilization.

Vegetated Filter Strip - Serving Parking Area

In cases where a boat access site or parking area slopes toward the adjacent water body, a vegetated strip that runs the length of a parking area between it and the water body can be provided to create a low-maintenance solution to protecting water quality. Slope and type of vegetative cover are factors that would influence the effective width of the filter strip.

Sediment/Storm Water Basin/Pond

Storm water infiltration and sediment detention basins and ponds are effective in allowing for storm water infiltration and sediment reduction prior to runoff.

<u>Above Waterline – Seeding/Erosion Mat Shoreline Stabilization</u>

In non-channelized areas of milder slope (e.g., <10%), stabilization with seed and mulch can be effective. For steeper slopes, seed and erosion mats may be necessary.

Near Waterline - Riprap Shoreline Stabilization

Installation of heavy stone of varying sizes (e.g., 6-24" dia.) is one approach to shielding the shoreline from boat wake and lake seiche effects.

Storm Water Diversion Structures (Diversion of Offsite Runoff)

Minor ditching or earthen diversionary berms may prevent runoff from areas adjacent to pervious surfaces. Note: Care must be taken to prevent erosive conditions at the point of discharge to a waterbody.