

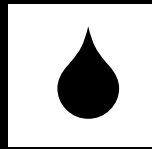


POLLUTION PREVENTION FACT SHEET

Pollution Prevention Program - Federal Programs Division

Fact Sheet

#15:



Clean Marinas: Storm Water Runoff Control

This Pollution Prevention Fact Sheet is one in a continuing series prepared under the Pollution Prevention Program of the Federal Programs Division of Environment Canada, Ontario Region. This Program is intended to help federal departments in Ontario become model environmental citizens by managing beyond compliance. This Fact Sheet presents the following:

- A description of storm water runoff concerns at marinas
- Processes that may reduce the harmful influence of storm water runoff on marinas' receiving waters



The Problem:

Oil, grease, fuel and antifreeze that leaks from car and truck engines can pose a serious threat to the environment. Such leaks onto parking lots and roads can be flushed directly into the marina basin. Once in the water, these contaminants can seriously degrade the marine environment.



The Objective:

Reduce the rate of contaminant runoff from parking lots and roads by creating buffer zones and other storm water controls around the edge of the marina basin.



The Process:

To reduce the amount of contaminated runoff from road surfaces at their facility, Bay Port Marina engineers built a four phase buffer zone around several sections of the marina basin. The first phase consists of a two meter wide zone of fine/medium gravel, used to slow runoff from the roadway. The second section consisted of two metres of coarse riprap, overlaying a 30cm catchment trough lined



Bay Port's Four Phase Buffer

with filter cloth. The trough is connected to a series of pipes that discharge into the marina basin. The function of this zone is for the riprap to slow the rate of runoff and allow water to percolate down into the catchment trough where the suspended materials are captured by the filter cloth. The filter water is then directed through the pipes into the basin. The final, fourth phase is made up of another layer of riprap. Basin side riprap is half a meter wide at the water's edge, but angles down into the marina basin to a total width of five meters. This four phase system provides excellent runoff control for the road and parking areas.



Gravel-Surfaced Boat Yard

In addition, fishermen enjoy the fact that the added basin-side riprap provides excellent habitat for spawning bass! Bay Port also took steps to reduce runoff from their boat storage areas. Instead of paving the area with asphalt, they used gravel, which allowed surface water to percolate down into the soil below. Bay Port Marina is currently planning to install a trough and filter cloth assembly near the boat launch to help keep paint chips and boat washing debris out of their basin.

Success Stories

Does your department have a pollution prevention success story to share? Other government departments in Ontario would like to hear about your experience in dealing with a particular problem. Please provide relevant information to the Pollution Prevention Advisor, Federal Programs Division, Environment Canada. We will ensure that all interested parties receive this information.

Further Sources of Information

For more information on the benefits of Pollution Prevention at Marinas, please contact:

The Ontario Marina Operators' Association

Box 105, 2 Poyntz Street
Penetanguishene, ON, L9M 1M2
1-888 579-BOAT
Internet: www.letsgoboating.com

For 2 Poyntz Street further information about the Pollution Prevention Program for federal facilities in Ontario, please contact:

Environment Canada
Ontario Region - Environmental Protection Branch
Federal Programs Division
49 Camelot Drive
Nepean, Ontario, K1A 0H3
phone: (613) 952-8675
fax: (613) 952-8995
e-mail: fpd@ec.gc.ca

All Fact Sheets can be found on the Internet at:

www.on.ec.gc.ca/epb/fpd
(aussi disponible en français)