

APPENDIX B

BEST MANAGEMENT PRACTICES AND RESOURCES FOR POLLUTION CONTROL

BEST MANAGEMENT PRACTICES TO REDUCE ALGAL AND CYANOBACTERIA GROWTH

♣ FERTILIZERS

- DO NOT APPLY FERTILIZER WITHIN 25 FT. OF THE SHORELINE.
- USE ONLY LOW PHOSPHORUS, OR NO PHOSPHORUS, SLOW RELEASE NITROGEN FERTILIZERS BEYOND 25 FT. OF THE SHORELINE.
- TEST YOUR SOIL: YOU MAY NOT NEED FERTILIZER!
- RECOMMENDED: DON'T USE FERTILIZERS IF YOU OWN WATERFRONT PROPERTY!
 - *WD-SP-2 Proper Lawn Care in the Protected Shoreland*
<http://des.nh.gov/organization/commissioner/pip/factsheets/sp/documents/sp-2.pdf>
 - *Green Grass and Blue Water: Water Friendly Lawn Care Recommendations*
<http://des.nh.gov/organization/commissioner/pip/newsletters/greenworks/documents/201003grnworks.pdf>
 - *New England Regional Nitrogen and Phosphorus Fertilizer and Associated Management Practice Recommendations For Lawns Based on Water Quality Considerations* http://www.lawntolake.org/PDFs/NE_WQ_Fert_Rec.pdf

Rain Garden

♣ STORMWATER

- MANAGE AND REDUCE STORMWATER RUNOFF FROM YOUR WATERFRONT PROPERTY (obtain permits if necessary).
- PLANT RAIN GARDENS AND WATERFRONT BUFFERS
- INSTALL RAIN BARRELS
- CONSTRUCT VEGETATED SWALES AND INFILTRATION TRENCHES
- USE PERVIOUS PAVEMENT OR PAVERS
- *Homeowners Guide to Stormwater Management: Do-It-Yourself Stormwater Solutions for Your Home*
<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-11-11.pdf>
- *A Shoreland Homeowner's Guide to Stormwater Management*
<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/nhdes-wd-10-8.pdf>
- *Best Management Practices to Control Nonpoint Source Pollution A Guide for Citizens and Town Officials*
<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-03-42.pdf>



BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL

♣ STABILIZE SHORELINES

- LEAVE TREES AND SHRUBS IN PLACE
- PLANT VEGETATED BUFFERS
 - *Landscaping at the Water's Edge: An Ecological Approach*
<http://extension.unh.edu/resources/>
 - *WD-SP-5 Vegetation Maintenance within the Protected Shoreland*
<http://des.nh.gov/organization/commissioner/pip/factsheets/sp/documents/sp-5.pdf>

Vegetated Buffer



♣ MANAGE STEEP SLOPES

- PLANNING AND DEVELOPMENT
- ORDINANCES
 - *Innovative Land Use Planning Techniques*
http://des.nh.gov/organization/divisions/water/wmb/repp/innovative_land_use_e.htm
 - *WD-WMB-16 Watershed Districts and Ordinances*
<http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-16.pdf>
 - *EPA New England*

♣ REDUCE IMPERVIOUS COVER

- LOW-IMPACT DEVELOPMENT
- ORDINANCES
 - *Innovative Land Use Planning Techniques*
http://des.nh.gov/organization/divisions/water/wmb/repp/innovative_land_use_e.htm
 - *New Hampshire Stormwater Manual Volumes I, II and III*
<http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>
 - *UNH Stormwater Center*
<http://www.unh.edu/unhsc/>
 - *EPA Low Impact Development*
<http://water.epa.gov/polwaste/green/>

Pervious Pavement



♠ **MANAGE ROADWAYS**

- CONSTRUCTION
- ON-SITE STORMWATER TREATMENT
- CULVERT INSTALLATION AND MAINTENANCE
 - *New Hampshire Stormwater Manual Volumes I, II and III*
<http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>

Vegetated Swale



BEST MANAGEMENT PRACTICES TO MINIMIZE PHOSPHORUS LOADING

♣ FERTILIZERS

- DO NOT APPLY FERTILIZER WITHIN 25 FT. OF THE SHORELINE.
- USE ONLY LOW PHOSPHORUS, OR NO PHOSPHORUS, SLOW RELEASE NITROGEN FERTILIZERS BEYOND 25 FT. OF THE SHORELINE.
- TEST YOUR SOIL: YOU MAY NOT NEED FERTILIZER!
- RECOMMENDED: DON'T USE FERTILIZERS IF YOU OWN WATERFRONT PROPERTY!



- *WD-SP-2 Proper Lawn Care in the Protected Shoreland*
<http://des.nh.gov/organization/commissioner/pip/factsheets/sp/documents/sp-2.pdf>
- *Green Grass and Blue Water: Water Friendly Lawn Care Recommendations*
<http://des.nh.gov/organization/commissioner/pip/newsletters/greenworks/documents/201003grnworks.pdf>
- *New England Regional Nitrogen and Phosphorus Fertilizer and Associated Management Practice Recommendations For Lawns Based on Water Quality Considerations* http://www.lawntolake.org/PDFs/NE_WQ_Fert_Rec.pdf

♣ SEPTIC SYSTEMS

- KNOW THE BASICS! TYPE, AGE, SIZE, AND LOCATION!
- INSPECT YOUR SEPTIC TANK ANNUALLY AND PUMP AT LEAST EVERY TWO TO THREE YEARS.
- REPLACE ANTIQUATED/FAILED SYSTEMS!
- SEPTIC SITE ASSESSMENT REQUIRED WHEN SELLING WATERFRONT PROPERTY.
 - *WD-SSB-2 Care and Maintenance of Your Septic System*
<http://des.nh.gov/organization/commissioner/pip/factsheets/ssb/index.htm>
 - *WD-SSB-10 Selling Developed Waterfront Property Site Assessment Required*
<http://des.nh.gov/organization/commissioner/pip/factsheets/ssb/documents/ssb-10.pdf>
 - *WD-SSB-13 You and Your Septic System*
<http://des.nh.gov/organization/commissioner/pip/factsheets/ssb/documents/ssb-13.pdf>
 - EPA Fact Sheet: Preventing Septic System Failure
<http://cfpub.epa.gov/npdcs/stormwater/menuofbmps/index.cfm?action=rowse&Rbutton=detail&bmp=25>

♠ SAND DUMPING

- PERMITS REQUIRED FOR BEACH CONSTRUCTION!
- CONSTRUCT PERCHED BEACHES IF POSSIBLE.
- PERMITS REQUIRED FOR BEACH REPLENISHMENT IF MORE FREQUENT THAN ONCE EVERY SIX YEARS!

- Administrative Rules

<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt100-900.pdf>

- *WD-BB-15 Beach Construction-Water Quality Impacts of Dumping Sand*
<http://des.nh.gov/organization/commissioner/pip/factsheets/bb/documents/bb-15.pdf>

Sand Pile near Water



♠ AGRICULTURE

- PROPERLY STORE AND MANAGE MANURE PILES!
- CONTROL RUNOFF FROM FIELDS, PASTURES AND ROOFS!
- LIMIT AND RESTRICT ACCESS OF LIVESTOCK TO SURFACE WATERS!
- LIMIT AND CONTROL FERTILIZER USE!
- MANAGE DOMESTIC PET WASTE!

- NH Department of Agriculture Best Management Practices

<http://www.nh.gov/agric/divisions/markets/documents/bmp.pdf>



Uncovered Manure Pile next to Stream

BEST MANAGEMENT PRACTICES FOR BOAT OWNERS AND MARINAS

♣ BOAT WASHING AND CLEANING

- DON'T WASH NEAR OR DUMP WASH WATER IN STORM DRAINS!
- DON'T WASH BOATS IN THE WATER!
- WASH BOATS FAR FROM SURFACE WATERS AND/OR IN DESIGNATED AREAS!
- USE ENVIRONMENTALLY FRIENDLY CLEANER IF NECESSARY.
- USE A BUCKET AND SPONGE TO WASH THE INTERIOR AND DISCHARGE WASH WATER APPROPRIATELY!
- DO NOT DISCHARGE BILGE WATER OVERBOARD!
- USE BILGE SOCKS TO SOAK UP PETROLEUM WASTE.
- USE NON-TOXIC, ENVIRONMENTALLY SAFE BILGE CLEANERS.

- *WD-BB-58 Boat Washing and Engine Winterization for Boat Owners*

<http://des.nh.gov/organization/commissioner/pip/factsheets/bb/documents/bb-58.pdf>

- *WD-WMB-12 Management of Bilge Water for Marinas*

<http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-12.pdf>



♣ SEWAGE AND GREY WATER DISPOSAL

- IT IS ILLEGAL TO DISCHARGE SEWAGE AND/OR GREY WATER TO SURFACE WATERS OF THE STATE!
 - USE DESIGNATED SEWAGE PUMPOUT STATIONS LOCATED AT MARINAS!
 - CALL A MOBILE SEWAGE PUMPOUT BOAT!
 - *WD-WMB-2 Marine Sanitation Devices-Equipping Your Boat to Comply with the Law*

<http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-2.pdf>

 - *WD-WMB-22 No Discharge Areas in New Hampshire*
- <http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-22.pdf>

♣ ENGINE MAINTENANCE

- PERFORM MAINTENANCE ACTIVITIES ON IMPERVIOUS SURFACES.
- DO NOT WASH ENGINE OVER BARE GROUND OR WATER!
- USE BILGE SOCKS ROUTINELY TO ABSORB OIL AND PETROLEUM PRODUCTS.
- ANTIFREEZE IS NOT NECESSARY TO WINTERIZE ENGINES!
- USE PROPYLENE GLYCOL TO WINTERIZE ENGINE, IF YOU MUST!
 - *Best Management Practices for New Hampshire Marinas*

<http://des.nh.gov/organization/commissioner/pip/publications/co/documents/co-06-2.pdf>

BEST MANAGEMENT PRACTICES FOR ROAD SALT

♣ ROAD SALT

- REMOVE SNOW FIRST; DON'T USE SALT TO DO THE JOB.
- CALIBRATE EQUIPMENT FOR AN ACCURATE SALT APPLICATION RATE.
- CHOOSE THE RIGHT DE-ICING MATERIAL FOR THE JOB!
 - *WD-WMB-4 Road Salt and Water Quality*
<http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-4.pdf>
 - *Technology and BMPs for Salt Reduction*
<http://des.nh.gov/organization/divisions/water/wmb/was/salt-reduction-initiative/tech-assist-bmp-practices.htm>

♣ SNOW DUMPING

- STORE SNOW 25 FT. FROM HIGH WATER MARK NEAR FLOWING SURFACE WATERS.
- DON'T STORE WITHIN CERTAIN DISTANCES OF PRIVATE WELLS, COMMUNITY WATER SUPPLY WELLS AND MUNICIPAL WELLS.
- INSTALL A SILT FENCE BETWEEN STORAGE AND SURFACE WATER.
- CLEAR ANY DEBRIS BEFORE AND AFTER USE OF STORAGE SITE.
 - *WD-WMB-3 Snow Disposal Guidelines*
<http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-3.pdf>

♣ SALT STORAGE

- STORE SALT PILES ON AN IMPERVIOUS SUFACE!
- LOADING AREAS SHOULD HAVE IMPERVIOUS SURFACES AND SHOULD BE SLOPED AWAY TO PREVENT STORMWATER FROM ENTERING THE STRUCTURE.
- ALL SALT STORAGE AREAS SHOULD BE COMPLETELY ENCLOSED BUT AT A MINIMUM MUST BE COVERED!
- STORAGE AREAS SHOULD BE LOCATED AWAY FROM SURFACE WATERS, WELLS, RESERVOIRS, AND STRATIFIED DRIFT AQUIFERS.
- INSPECT STORAGE STRUCTURES ANNUALLY FOR MAINTENANCE.
- BRINE HOLDING TANKS SHOULD BE MAINTAINED TO PREVENT RELEASE TO DRAINS, GROUNDWATER AND SURFACE WATER.
- BRINE COLLECTION BASINS MUST BE LINED AND MAY NEED TO BE COVERED.
 - *WD-DWGB-22-30 Storage and Management of Deicing Materials*
<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-22-30.pdf>
 - *WD-DWGB-22-10 Wastewater Discharged from Vehicle Washing*
<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-22-10.pdf>

Salt Storage Facility

