Section:Contaminants

**TITLE: Construction and Maintenance Environmental Requirements - BMPs Manual: Massachusetts**

**WEB LINK:** <http://www.transmission-nu.com/contractors/pdf/MA_BMP.pdf>

**ISSUES:** pollutant/contaminant removal and containment, construction

**DESCRIPTION:** Prepared for the Northeast Utilities Environmental Licensing and Permitting Group, this manual focuses on minimizing the environmental impacts of construction. It includes information on sediment and erosion controls, rehabilitation and restoration, and construction considerations. These BMPs protect the watershed by minimizing pollutant/contaminants from entering the environment.

**TITLE: University of California San Diego Pollution Prevention BMPs Handbook**

**WEB LINK:** <http://www-ehs.ucsd.edu/SWPPBMP_Handbook.pdf>

**ISSUES:** pollutant/contaminant removal and containment

**DESCRIPTION:** Developed for university staff, this handbook is focused on the management of hazardous waste to prevent pollutants from entering storm drains and waterways. This handbook was created by the University of California San Diego.

**TITLE: Wellcare information for you about protecting groundwater through agricultural best management practices**

**WEB LINK:** <http://www.watersystemscouncil.org/documents/AgriculturalBMPOverview.pdf>

**ISSUES:** Pollutant/contaminant removal and containment, agriculture

**DESCRIPTION:** This is a series of guidelines for the protection of groundwater from agriculture prepared by a non-government organization, the Water Systems Council. This document covers everything from pesticide use and excessive nutrients on pastures to manure on streams and leakage from storage tanks.

**TITLE: Emergency preparedness: Using well water after a flood**

**WEB LINK:** <http://0-fs01.cito.gov.ns.ca.legcat.gov.ns.ca/deposit/b10650520.pdf>

**ISSUES:** Pollutant/contaminant removal and containment

**DESCRIPTION:** Developed by the Nova Scotia government, this brochure provides directions on well water use after a flood to prevent illness from bacteria and chemicals. This is relevant to all those that use well water.

**TITLE: North Carolina Division of Water Quality: Stormwater BMPs Manual**

**WEB LINK:** [http://www.ncsu.edu/ehs/environ/DWQ\_StormwaterBMPmanual\_001[1].pdf](http://www.ncsu.edu/ehs/environ/DWQ_StormwaterBMPmanual_001%5B1%5D.pdf)

**ISSUES:** stormwater treatment/management, pollutant/contaminant removal and containment

**DESCRIPTION:** North Carolina Department of Environment and Natural Resources (NCDENR) developed this manual of BMPs for stormwater management that is relevant to municipalities. Some of the design components included are geosynthetics, flow splitters, forebays, and curb diversion devices.

**TITLE: Taking care of your home sewage disposal system**

**WEB LINK:** <http://www.novascotia.ca/nse/water/docs/OnSiteSewageMaintenance.pdf>

**ISSUES:** wastewater treatment/management, pollutant/contaminant removal and containment

**DESCRIPTION:** The Nova Scotia Department of the Environment developed these suggestions for maintaining private property sewage disposal systems as improper management may result in water contamination. Recommendations on how to maintain home sewage systems, recognizing warning signs of an issue, and things that should not be done while maintaining home sewage systems are all included.

**TITLE: Pesticide safety in the garden**

**WEB LINK:** <http://www.novascotia.ca/nse/pests/docs/PesticideSafetyGarden.pdf>

**ISSUES:** pollutant/contaminant removal and containment, gardening

**DESCRIPTION:** Water contamination can affect the entire watershed and enter the marine environment. This fact sheet by the Nova Scotia Department of the Environment is focused on pesticide use and its environmental implications. Recommendations to minimize environmental impacts of pesticide use include selecting the least toxic and most specific control for the pest, correctly identifying the pest, purchasing just enough pesticide for the job/season, etc.

**TITLE: A homeowner’s guide to septic systems**

**WEB LINK:** <http://www.novascotia.ca/nse/wastewater/docs/Homeowners.Guide.to.Septic.Systems.pdf>

**ISSUES:** wastewater management, pollutant/contaminant removal and containment

**DESCRIPTION:** Waste Water Nova Scotia Society and the Nova Scotia Department of Environment partnered up to develop a guide for homeowners which reduces water contamination by septic systems. Top things you can do for your septic system: inspect and pump every 3-5 years, do not dispose of hazardous waste in septic systems, plant grass and keep large roots out of disposal fields, spread water use over time.

**TITLE: Before you construct an on-site sewage system- Facts a homeowner should know**

**WEB LINK:** <https://www.novascotia.ca/nse/water/docs/OnSiteSewageConstruction.pdf>

**ISSUES:** wastewater management, pollutant/contaminant removal and containment

**DESCRIPTION:** This manual is a collaborative effort between Nova Scotia Environment and the Waste Water Nova Scotia Society and is relevant to homeowners with on-site sewage system. This document describes standards for Nova Scotia as well as information on maintenance and care of sewage system for optimal productivity and environmental protection.

**ISSUES:** wastewater management, pollutant/contaminant removal and containment

**TITLE: Boater Fact Sheets**

**WEB LINK:** <http://www.mass.gov/eea/docs/czm/cwq/marinas/cmg-factsheets.pdf>

**ISSUES:** wastewater management, pollutant/contaminant removal and containment, invasive species, boating

**DESCRIPTION:** The Boater Fact Sheets provide user-friendly BMPs for owners and operators of personal watercrafts. The series covers boat operation and fueling, waste disposal, wastewater management, vessel maintenance, and non-toxic cleaning alternatives. Developed by the Massachusetts government, these fact sheets are targeted towards marinas, municipalities, and vessel owners/operators.

**TITLE: Massachusetts clean marina guide: Strategies to reduce environmental impacts**

**WEB LINK:** <http://www.mass.gov/eea/docs/czm/cwq/marinas/cmg-complete.pdf>

**ISSUES:** wastewater management, pollutant/contaminant removal and containment, invasive species, boating

**DESCRIPTION:** The Massachusetts Clean Marina Guide covers a variety of activities with environmental implications including hull maintenance, boat cleaning, engine maintenance, fueling, and wastewater management. Published by the Massachusetts Executive Office of Environmental Affairs and the Massachusetts Office of Coastal Zone Management, this guide is geared towards marinas, municipalities, boatyards, and vessel owners/operators.

**TITLE: A guide to selecting pressure washing management practices and technologies**

**WEB LINK:** <http://www.mass.gov/eea/docs/czm/cwq/marinas/pressure-washing-guide.pdf>

**ISSUES:** wastewater management, pollutant/contaminant removal and containment, invasive species, boating

**DESCRIPTION:** The wastewater produced by power-washing contains microbial pathogens and toxic components therefore it must be properly managed. This guide includes information pertaining to why the management of pressure washwater is important, basic principles of pressure washwater management and some specific technologies that can be utilized. The Massachusetts Office of Coastal Zone Management produced this guide as a tool for marina operators and vessel owners/operators.

**TITLE: Best management practices to minimize agricultural phosphorus impacts on water quality**

**WEB LINK:** http://www.sera17.ext.vt.edu/Documents/BMPs%20for%20P,%20ARS%20163%202006

**ISSUES:** Pollutant/contaminant removal and containment, agriculture

**DESCRIPTION:** The application of phosphorus is a common practice in many types of agriculture but it can result in eutrophication if phosphorus enters water bodies. This guidebook, prepared by the U.S. Department of Agriculture, covers techniques for controlling phosphorus at the source, transportation of phosphorus, and the implementation of phosphorus BMPs.

**TITLE: Low Impact Development Stormwater Management Planning and Design**

**WEB LINK:** http://www.creditvalleyca.ca/low-impact-development/low-impact-development-support/stormwater-management-lid-guidance-documents/low-impact-development-stormwater-management-planning-and-design-guide/

**ISSUES:** local land-use planning, stormwater management, pollutant/contaminant removal and containment

**DESCRIPTION:** This manual, which is a collaborative effort between the Credit Valley Conservation Authority and Toronto and Region Conservation Authority, focuses on the management of stormwater. Of particular interest are Chapters 3 and 4 which introduce Low Impact Development (LID) practices and design considerations for structural components. The information provided in this document could be of interest to coastal land/property owners, developers, and municipalities.

**TITLE: Using Smart Growth Techniques as Stormwater BMPs**

**WEB LINK:** <http://www.epa.gov/dced/pdf/sg_stormwater_BMP.pdf>

**ISSUES:** local land-use planning, stormwater management, pollutant/contaminant removal and containment

**DESCRIPTION:** This document is specifically focused on how smart growth development techniques can act as stormwater best management practices. Specific techniques are included in the guidebook: regional planning, infill development, redevelopment, development districts, tree and canopy programs, parking policies, street designs, and stormwater utilities. Developed by the U.S. Environmental Protection Agency, this document is targeted at coastal land/property owners, developers, and municipalities.

**TITLE: The use of BMPs in urban watersheds**

**WEB LINK:** <http://medina.cee.duke.edu/CE123/600r04184.pdf>

**ISSUES:** stormwater management, pollutant/contaminant removal and containment

**DESCRIPTION:** The United States Environmental Protection Agency has developed this manual of BMPs for urban watersheds. There are a variety of BMPs; one of particular note is dry extended-detention ponds which are stormwater basins that intercept stormwater runoff and temporarily hold it for gradual release to the receiving storm sewer system. Modified dry ponds detain urban runoff allowing solids and associated pollutants time to settle out. This manual is aimed at municipalities.