

Center for Watershed Protection
Stormwater Retrofitting Design Webcast
October 14, 2009

Retrofit Resources

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Stormwater Retrofitting Resources

- Manual 3: Urban Stormwater Retrofit Practices - Detailed guidance on how to effectively retrofit urbanized subwatersheds
<http://www.cwpp.org/PublicationStore/USRM.htm#usrm3>
- EPA Webcast: The Art and Science of Stormwater Retrofitting (presented by CWP), April, 2008 (scroll down to "Training Resources, Archived Webcasts" – Post Construction).
http://cfpub2.epa.gov/npdes/outreach.cfm?program_id=0&otype=1

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Selected Stormwater Practice Design Resources

- Virginia Stormwater BMP Clearinghouse – Provides up-to-date standards and specifications for wide range of BMPs, including innovative practices.
<http://www.vwrrc.vt.edu/swc/NonProprietaryBMPs.html>
- Maryland Stormwater Design Manual - Provides design guidance on effective structural and non-structural stormwater management practices
http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp
- Minnesota Stormwater Manual - Provides detailed information that can be used to select and design stormwater BMPs
<http://www.pca.state.mn.us/water/stormwater/stormwater-manual.html>
- Western Washington Stormwater Management Manual - Provides guidance on the selection, design and maintenance of stormwater BMPs
<http://www.ecy.wa.gov/programs/wq/stormwater/manual.html>
- Portland, OR Stormwater Management Manual - Provides design guidance on a variety of stormwater BMPs, including LID practices
<http://www.portlandonline.com/bes/index.cfm?c=35122&>
- Philadelphia, PA Stormwater Management Guidance Manual - Presents technical design guidance for managing stormwater and designing stormwater BMPs
<http://www.phillyriverinfo.org/>

Stormwater Practice Performance Resources

- Stormwater BMPs in Virginia's James River Basin: An Assessment of Field Conditions & Programs – Results from a field survey conducted by CWP of nearly 200 BMPs; provides recommendations for BMP design, installation, and maintenance.
<http://www.cwp.org/>
- Urban BMP Performance Tool - Provides simple, easy access to stormwater BMP performance information
<http://www.epa.gov/npdes/urbanbmptool>
- International BMP Database - Provides information on over 300 studies of BMP performance
<http://www.bmpdatabase.org>
- National Pollutant Removal Performance Database - Summarizes the results of over 160 different BMP performance studies
<http://www.cwp.org>

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Other Watershed Restoration Practice Resources

- US EPA Green Infrastructure
http://cfpub.epa.gov/npdes/home.cfm?program_id=298
- Manual 1: An Integrated Framework to Restore Small Urban Watersheds - Introduces the basic concepts and techniques of watershed restoration and provides a framework that can be used to evaluate subwatershed restoration potential
<http://www.cwp.org/Store/usrm.htm#1>
- Manual 4: Urban Stream Repair Practices - Provides information about practices that can be used to enhance the appearance, stability, structure and function of urban streams
<http://www.cwp.org/Store/usrm.htm#4>
- Manual 8: Pollution Prevention Practices Manual - Contains information about methods that can be used to prevent or reduce polluting behaviors and operations
<http://www.cwp.org/Store/usrm.htm#8>
- Illicit Discharge Detection and Elimination Manual - Outlines practical, low cost, and effective techniques that can be used to detect and eliminate illicit discharges
http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/idde.htm
- Urban Watershed Forestry Manual - A three-part manual on using trees to protect and restore urban watersheds
http://www.cwp.org/Resource_Library/Special_Resource_Management/forestry.htm

Stormwater Retrofit Case Studies and Examples

- Charlottesville, VA - Stormwater Stewardship on Public Lands Program
<http://www.charlottesville.org/index.aspx?recordid=259&page=635>
- Portland, OR - Clean River Rewards Program
<http://www.portlandonline.com/BES/index.cfm?c=edeef>
- Portland, OR - Downspout Disconnection Program
<http://www.portlandonline.com/BES/index.cfm?c=edaib>
- Seattle, WA - Natural Drainage Systems Program
http://www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/Natural_Drainage_Systems/index.asp
- Montgomery County, MD - Rainscapes Program
<http://www.montgomerycountymd.gov/Content/DEP/Rainscapes/home.html>
- Catskill Watershed Corporation (NY) - Stormwater Retrofit Grant Program
http://www.cwconline.org/programs/strm_wtr/strm_wtr1.html#retro
- Villanova University (PA) - Best Management Practice Demonstration Park
<http://www3.villanova.edu/VUSP/>

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- Fairfax County, VA - Merrifield Fire Station 30
<http://www.fairfaxcounty.gov/nvswcd/newsletter/providence.htm>
- Massachusetts Institute of Technology (MIT) - Stata Center
<http://web.mit.edu/environment/ehs/topic/stata.html>
- Sanitation District No. 1 of Northern Kentucky (KY) - Public Service Park
<http://sd1.org/stormwater/psp.asp>

This resource list is an excerpt from the resources presented at StormCon 2009 pre-conference workshop: The Art & Science of Stormwater Retrofitting, presented by the Center for Watershed Protection and Biohabitats, Inc. Thanks to Jennifer Zielinski from Biohabitats for helping to compile these resources.