Resources for design guidance and stormwater calculations

Where can I go to learn more about the various types of LID and find design guidance?

To be eligible for the RiverSmart Communities rebate, LID practices must be designed to manage the 1.2" storm event. For design support, please consult the Draft Stormwater Guidebook. The Draft Stormwater Guidebook also contains maintenance criteria and direction for stormwater calculations. Of particular interest for the RiverSmart Communities rebate application are:

- Chapter 3.2 Rainwater Harvesting
- Chapter 3.4 Permeable Pavement Systems
- Chapter 3.5 Bioretention (rain gardens)
- Stormwater Management Calculator Spreadsheets and Worksheets

Additional Resources:

General Information

EPA Low Impact Development Manuals Center for Watershed Protection Stormwater Center Urban Design Tools LID Techniques

Rain gardens and bioretention

EPA Stormwater Technology Fact Sheet: Bioretention Low Impact Development Center: How to Design a Rain Garden NCSU Cooperative Extension: Designing Rain Gardens (Bio-retention areas) Virginia Department of Forestry Rain Garden Technical Guide

Permeable pavement

NCSU Cooperative extension: Research Update and Design Implications Urban Design Tools: Permeable Paver Specifications Virginia DCR Stormwater Design Specification No. 7 Oregon State University: Porous Pavement Hydrologic Calculator

Rain cisterns and water harvesting

Raindrops Cisterns Rainwater Harvesting Calculator

Other Practices

EPA Stormwater Technology Fact Sheet: Vegetated Swales