

Low Impact Development Resources for San Juan County

Listings of companies do not constitute an endorsement or guarantee of the quality of the product offered, nor do they necessarily represent the only available suppliers.

GENERAL LID PRACTICES

- *Low Impact Development Technical Guidance Manual for Puget Sound* at: http://www.psat.wa.gov/Publications/LID_tech_manual05/lid_index.htm
- San Juan Islands Conservation District: www.sanjuanislandscd.org 360-378-6621

LID Technical Assistance and information

- City of Seattle Green Building Program: <http://www.seattle.gov/dpd/GreenBuilding/OurProgram/Overview/>
- Seattle Public Utilities/UW Botanic Gardens Design Seminars: <http://depts.washington.edu/urbhort/html/education/stormwater.htm>
- “A Sustainable Approach to Stormwater Management,” Portland Bureau of Environmental Services. <http://www.portlandonline.com/bes/index.cfm?c=34598>
- Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices EPA case studies and fact sheet: <http://www.epa.gov/owow/nps/lid/costs07/>

NEW CONSTRUCTION ON AN UNCLEARED LOT

- Technical Guidance Document for Clearing and Grading in Western Washington, Washington, Department of Community, Trade and Economic Development, May 2005
http://cted.wa.gov/CTED/documents/ID_2062_Publications.pdf
- “Making a Home in the Woods,” <http://www.greenbeltconsulting.com/articles/homeinthewoods.html>
- “Value, Benefits and Limitations of Vegetation in Reducing Erosion”
<http://www.greenbeltconsulting.com/articles/valuesbenefits.html>

Slopes and replanting

- “Living on the Shore: A Resident’s Guide to Creating & Managing a Sound Landscape,” available at: www.nativeplantsalvage.org

Washington Department of Ecology Publications:

Slope Stabilization and Erosion Control Using Vegetation

Vegetation Management: A Guide for Puget Sound Bluff Property Owners

Surface Water and Groundwater on Coastal Bluffs: A Guide for Puget Sound Property Owners

All available at: <http://www.ecy.wa.gov/programs/sea/pubs/93-30/using01.html>

Salvaging Plants Before Clearing

Washington State University Extension Gardening in Western Washington:

<http://gardening.wsu.edu/text/nvsalvag.htm>

Grow Your Own Native Landscape: A Guide to Identifying, Propagating, and Landscaping with Western Washington

Native Plants, Edited by Michael Leigh, WSU Thurston County Native Plant Salvage Project, 1999. Available from local libraries, WSU Publications (800-723-1763)

SOILS

- Seattle Public Utilities’ “Growing Healthy Soils” & “Get to Know Your Soils”:
http://www.seattle.gov/util/Services/Yard/Natural_Lawn_&_Garden_Care/Growing_Healthy_Soil/index.asp
 - Washington Organic Recycling Council, “Soils for Salmon”: <http://www.soilsforsalmon.org/>
- Best practices for new construction and redevelopment—includes specifications, compost sources, soil labs, and calculators for builders and designers.
- Soil Science Society of America www.soils.org
- USDA-Natural Resources Conservation Service Web Soil Survey: <http://soils.usda.gov/>

- For illustrated Soil Biology Primer, see: http://soils.usda.gov/sqi/concepts/soil_biology/biology.html

Soil Texture

Soil triangle and calculations http://www.pedosphere.com/resources/bulkdensity/triangle_us.cfm

Nutrient testing

Soiltest Farm Consultants, Inc, Moses Lake, WA (509) 765-1622 <http://www.soiltestlab.com/>
Contact the San Juan Islands Conservation District for other soil testing options.

Composting

- San Juan Islands Conservation District 360.378.6621
<http://www.sanjuanislandscd.org/Information/Composting/Composting.html>
- Workshops & Sales: San Juan County Public Works Solid Waste Facilities, (360) 370-0500,
<http://www.sanjuanco.com/publicworks/solid-waste.aspx>
- Seattle Public Utilities' Guide:
<http://www.seattle.gov/util/Services/Yard/Composting/index.asp>
- Washington Department of Ecology permitted composting facilities:
<http://www.ecy.wa.gov/programs/swfa/compost/>
- Washington State University Extension of San Juan County 378-4414
<http://sanjuan.wsu.edu>
- Gardening in Western Washington <http://gardening.wsu.edu> (Enter keyword "composting")
- WSU Extension of Whatcom County <http://whatcom.wsu.edu/ag/compost/index.htm>

Structural Soils

Engineered soils use stone aggregate, soil and other materials to create a compact base that can support traditional and pervious roads and sidewalks, but still have pores for water, airflow and nutrients. One good reference is Cornell University (CU Structural Soil) <http://www.hort.cornell.edu/uhi/outreach/index.htm#soil>

IDENTIFYING & ERADICATING WEEDS/INVASIVE PLANTS

- Washington State Noxious Weed Board: <http://www.nwcb.wa.gov/>
- San Juan County Noxious Weed Control Board 376-4095
<http://sanjuan.wsu.edu/noxious/index.html>
- *Invasive Species in the Pacific Northwest*, Edited by P.D. Boersma, S.E. Reichard and A.N. Van Buren, University of Washington Press, 2007.
- *Grow Smart, Grow Safe: A Consumer Guide to Lawn and Garden Products*. Washington Toxics Coalition. Includes product reviews and sources for least-toxic products. Available at:
http://savingwater.org/docs/Grow_Smart_Grow_Safe.pdf
- Flame Weeders, useful for killing weeds between pavers or in gravel in walkways or driveways, are available through garden-supply and hardware stores or via the Internet.

SUSTAINABLE LANDSCAPING IDEAS

- San Juan Islands Conservation District Low Impact Development Program 360.378.6621
http://www.sanjuanislandscd.org/District_Programs/Building_Programs/Building_Programs.html
- Thurston County Common-Sense Gardening Program: <http://www.co.thurston.wa.us/health/ehcsg/index.html>
- City of Seattle Natural Yard Care:
http://www.seattle.gov/util/services/yard/natural_lawn_&_garden_care/Natural_lawn_care/index.asp
- *The Common Sense Gardening Guide to Natural Lawn Care*, Thurston County:
http://www.co.thurston.wa.us/health/ehcsg/pdf/lawn_care.pdf
- *Ecologically Sound Lawn Care for the Pacific Northwest*, Seattle Public Utilities, David McDonald, 1999.
http://www.seattle.gov/util/stellent/groups/public/@spu/@csb/documents/webcontent/ecological_2003120212_55394.pdf (89 pgs.)

Landscape Planning

- City of Portland Naturescaping program: <http://www.portlandonline.com/bes/index.cfm?c=dcbec>

Water-wise/Drought-tolerant/Native Plants

- Washington Native Plant Society www.wnps.org - under “Gardening”
- Thurston County Common Sense Gardening (1999):
http://www.co.thurston.wa.us/health/ehcsg/pdf/Plant_Lists/CSG_plants.pdf
- Saving Water: http://www.savingwater.org/outside_garden.htm
See “Choosing the Right Plants” and “The Plant List” (2002)
- WSU Extension Native Plants database: <http://gardening.wsu.edu/nwnative/>
- King County’s Native Plant Guide: <http://green.kingcounty.gov/GoNative/Index.aspx>
- Saving Water Partnership: <http://savingwater.org/outside.htm>

Obtaining Plants

Master Gardener Foundation and the San Juan Islands Conservation District’s Annual Native Plant Sale:

http://www.sanjuanislandscd.org/Information/Native_Plants/Native_Plants.html

Native Plant Nurseries & Other Sources:

http://www.wholeislandscatalog.net/index.php?option=com_mtree&task=viewlink&link_id=378&Itemid=53
<http://fourthcornernurseries.com/>

Street Trees

Urban Horticultural Institute <http://www.hort.cornell.edu/UHI/>
<http://www.seattle.gov/transportation/treplanting.htm#recommend>
<http://www.ci.olympia.wa.us/cityservices/urbanforest/neighborwoods/>

NATURAL DRAINAGE, RAIN GARDENS, BIORETENTION

- *Rain Garden Handbook for Western Washington Homeowners: Designing your landscape to protect water*
<http://www.pierce.wsu.edu/Lid/index.html>
- Overview of City of Seattle’s Natural Drainage Projects:
http://www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/GreenStormwaterInfrastructure/NaturalDrainageProjects/index.htm
- Maintenance Guide “Practically Easy Landscape Maintenance Manual for Natural Drainage Systems,” Fall 2006.
http://www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/GreenStormwaterInfrastructure/NaturalDrainageProjects/OperationsMaintenance/index.htm

Bioretention: Slowing down runoff and treatment

<http://www.bioretention.com/> and <http://www.epa.gov/owm/mtb/biortn.pdf>

RAINWATER HARVESTING

General

There are many companies that sell rain barrels and larger storage systems. Check your local hardware stores or search the Internet for “rain barrels,” or “cisterns”.

- information on cisterns and options for building your own or buying rain barrels: “Rain Barrel Information and Sources” <http://www.kingcounty.gov/environment/stewardship/nw-yard-and-garden/rain-barrels.aspx> or http://www.seattle.gov/UTIL/Services/Yard/Natural_Lawn_&_Garden_Care/Rain_Water_Harvesting/index.asp
- Seattle Rain Barrels offers general installation instructions and directions for determining how much rainwater your roof will generate at each downspout. <http://www.seattlerainbarrels.com/index.html>
- Garden Watersaver site provides instructions for building your own rain barrel and linking systems. <http://www.gardenwatersaver.com/1.html> or 604-274-6630.
- Rainwater harvesting basics: <http://www.oas.org/usde/publications/Unit/oea59e/ch10.htm>

Downspout diverters

Some companies offer downspout diverters. Check local hardware stores or the following:

- Downspout Diverter, closes when barrel is full - Gardener's Supply Company, 888-833-1412, <http://www.gardeners.com/Downspout-Diverter/default/33-991.prd>
- "Garden Watersaver," closes when barrel is full from Clean Air Gardening, 214-363-5170, <http://www.cleairgardening.com/gawadoat.html>
- "Drought Buster," downspout rainwater redistributor, for use with or without rain barrels to direct roof runoff into a stormwater feature. <http://www.cleairgardening.com/gawadoat.html>

Rain barrel linking systems

- Check local hardware stores for supplies for making your own.
- Directions available at: <http://www.gardenwatersaver.com/30.html>
- Rain Barrel Linking Kit, from Gardener's Supply Company, 888-833-1412, <http://www.gardeners.com/Downspout-Diverter/default/33-991.prd>

PERVIOUS PAVEMENTS

- *Low Impact Development Technical Guidance Manual for Puget Sound* at: http://www.psparchives.com/our_work/stormwater/stormwater_resources.htm
- Case Studies: <http://www.kitsaphba.org/LID/showcase.html>
- ToolBase Resources, overview of several systems and manufacturers: <http://www.toolbase.org/Technology-Inventory/Sitework/permeable-pavement>

Permeable Pavers:

- Interlocking Concrete Pavement Institute: <http://www.icpi.org/node/553>
- Ecostone Pavers: http://www.mutualmaterials.com/Professional_product.asp?pt_id=123&p_id=304

Porous aggregate-containment or reinforced turf systems:

- Invisible structures: <http://www.invisiblestructures.com/GV2/gravelpave.htm>
- TerraFirm EcoGrid: <http://www.terrafirmenterprises.com/ecogrid.html>
- Interlocking Concrete Pavement Institute: <http://www.icpi.org/node/553>

Pervious Concrete

- Concrete Council: <http://www.perviouspavement.org/>
- National Redi-mix Concrete Association (www.nrmca.org) + "pervious concrete certification" program
- Washington Aggregates & Concrete Association <http://www.washingtonconcrete.org/>

Porous Asphalt

- Asphalt Pavement Alliance: http://www.pavegreen.com/water_quality.asp
- Associated Asphalt, Inc. <http://www.associatedasphalt.net/products.html>

GREEN ROOFS

- Green Roof Industry Resource Portal www.greenroofs.com
- Green Roofs for Healthy Cities (GRHC) www.greenroofs.org
- Northwest Eco Building Guild www.ecobuilding.org
- Ecoroofs Everywhere www.ecoroofofseverywhere.org

Research on Green Roofs:

- City of Portland Bureau of Environmental Services: <http://www.portlandonline.com/bes/index.cfm?c=36055&>

MINIMAL-EXCAVATION FOUNDATIONS

- Pin Foundations, 253-858-8809: www.pinfoundations.com.