

Local Living Textbook

Online Resources for Community Action (ORCA)

Library Links – Stormwater

1. Learn about the **Clean Water Act** which is the granddaddy of all water pollution laws beginning at the national level and impacting the next three levels of government, the State of Washington, King County and your own city. The Clean Water Act was first established in 1972 and is managed by the Environmental Protection Agency. <http://www.epa.gov/regulations/laws/cwa.html>
2. The landing page for Water Quality from the Washington State **Department of Ecology** outlines all of the different ways that our state manages for clean water. <http://www.ecy.wa.gov/programs/wq/wqhome.html>
3. This page is a dashboard of “**Vital Signs**” used by the Puget Sound Partnership to measure progress towards restoring the health of Puget Sound. The range of indicators listed is bigger than just stormwater but it makes for a really good systems thinking inquiry. <http://www.psp.wa.gov/vitalsigns/index.php>
4. Every two years the Puget Sound Partnership is required by state law to update their Action Agenda for Puget Sound Recovery as measured by the “Vital Signs” dashboard (see #1). The **2012-13 Action Agenda Update** is a fantastic science-based report on where we are and what we need to do next. The link below will take you to a document that covers the highlights of the Action Agenda Update for 2012-13. It’s really well organized. http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%201_Aug%2029%202012.pdf
5. This 8-page **color brochure** from the Department of Ecology, complete with diagrams and photos, is an excellent overview on stormwater issues and solutions. <http://www.ecy.wa.gov/pubs/0710058.pdf>
6. The King County Stormwater website is a **great overview** of local issues and actions: <http://www.kingcounty.gov/environment/waterandland/stormwater.aspx>
7. Check out the student-narrated **Watershed Report videos on Water Water Water**. We use the word water three times because there are three water systems we need to understand: water supply, wastewater and reclaimed wastewater. <http://www.cedarriver.org/programs/watershed-report/video-library-1>
8. Here are a bunch of links to **videos on stormwater**: <http://www.kingcounty.gov/environment/waterandland/stormwater/videos.aspx>
9. A curious video walk inside a typical large stormwater pipe in a typical city. <http://www.youtube.com/watch?v=iYaD-oH9sx4&feature=related>
10. Here is a simple, short list of the top **10 things you can do** to reduce stormwater runoff: http://www.psparchives.com/our_work/stormwater/stormwater_wycd.htm

Stormwater Policy

11. Here is the language in the **actual Stormwater Permit** that the State Department of Ecology issues to all cities in Western Washington. Every local government needs to follow the rules laid out in the permit.
<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phasellww/MODIFIEDpermitDOCS/WWpermitMODsigned.pdf>
12. Check out pages 11-13 on the Stormwater Permit link above to learn about the specific **Public Outreach and Education actions** that cities must do to meet the requirements of their stormwater permit. Then compare that section with the list of Pollution Prevention actions for the **King County Green Schools Level Three, Water Conservation School Criteria on this page**.
http://your.kingcounty.gov/solidwaste/greenschools/water-conservation.asp#criteria_resources
13. This policy paper at the Sightline Institute website is a very **good example of technical writing** with rich descriptive word choice.
http://www.sightline.org/research/environment/stormwater/stormwater_dec10.pdf
14. Explore this page for links to **policy issues**. Sightline Institute is our best local “Think Tank” on sustainability and civic action.
<http://www.sightline.org/research/environment/stormwater/curbing-stormwater-pollution>
15. This page explains the **stormwater fee** that every propriety owner needs to pay. Where does the money from all these fees go? How is it used to help solve the stormwater problem?
<http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee/rates.aspx>
16. This page helps you understand how you can **reduce your stormwater fee** by making improvements on your property to reduce impervious surface area.
<http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee/discount.aspx>

How is my City Government Taking Action?

17. To find out what your local city is doing to reduce stormwater pollution **Google... “City (name) stormwater.”** Every city is working hard on solving the stormwater problem. The actions you take at school, in your community and at home can make a difference.
18. Read the **City of Maple Valley’s Comprehensive Plan** which, by law, must be reviewed and updated every five years: <http://www.maplevalleywa.gov/index.aspx?page=93> Especially the section on the city’s **goals for Environmental Quality**:
<http://www.maplevalleywa.gov/Modules/ShowDocument.aspx?documentid=57>
19. Here is the **City of Maple Valley stormwater homepage**. Learn what your city is doing to solve the stormwater pollution challenge. <http://www.maplevalleywa.gov/index.aspx?page=368>
20. The City of **Maple Valley conducted a survey** to find out what residents already knew about stormwater. Study the results in this report and see how your own projects can help the city improve awareness. <http://www.maplevalleywa.gov/Modules/ShowDocument.aspx?documentid=4556>

21. Here is what the **City of Seattle** is doing. This page includes lots of links for what homeowners can do.
[http://www.seattle.gov/util/About_SPU/Drainage & Sewer System/GreenStormwaterInfrastructure/ResidentialRainwiseProgram/index.htm](http://www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/GreenStormwaterInfrastructure/ResidentialRainwiseProgram/index.htm)

Stormwater Science

22. This page from the King County website is on the **science of stormwater**:
<http://www.kingcounty.gov/environment/waterandland/stormwater/introduction/science.aspx>
23. A one-page overview on how the city of Seattle is **using trees to help prevent stormwater** pollution.
http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/01_013145.pdf
24. Here are several links if you want to learn more about **how salmon are affected by copper**. This first link presents an argument for why we should develop a new law to ban copper in brake pads:
<http://www.psp.wa.gov/downloads/legislative/2010/CopperFactSheet011110.pdf> This page from Sightline Institute reports on the success of passing the new law:
<http://daily.sightline.org/2010/03/09/wa-approves-first-copper-brake-pad-ban/> And this link reports on the detailed scientific research being done:
<http://extension.oregonstate.edu/news/release/2007/03/copper-increases-predation-risk-salmon-other-fish>
25. Learn more about **why groundwater is so important**. This is a goofy animated video, but it's actually really helpful if you want to learn the basics about groundwater.
<http://www.kingcounty.gov/environment/waterandland/groundwater/education/animation.aspx>

Stormwater Engineering Solutions

26. A short video that describes the engineering behind a rain garden that combines **cool art work**:
<http://vimeo.com/42864199>
27. **All about Rain Gardens**: The Stewardship Partners website with lots more about rain gardens and how you can build one at home. http://www.stewardshippartners.org/raingarden_central.html
28. **Green Infrastructure Examples**: The US Environmental Protection Agency has a great overview of various green infrastructure solutions that can be applied and combined throughout a watershed.
http://water.epa.gov/infrastructure/greeninfrastructure/gi_what.cfm
29. This page from the Puget Sound Partnership is a good overview of **LID or Low Impact Development**, which means that when we construct buildings, parking lots, sidewalks and roads we need to make sure that they have a "low" impact on the natural flow of rainwater across our landscape.
http://www.psparchives.com/our_work/stormwater/lid.htm
30. **The Stormwater Pollution Prevention Manual provides the official list of best management practices (BMPs)** for single family residential activities in unincorporated King County. Use the table

of contents to find activity sheets for each stormwater BMP:

<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/pollution-prevention-manual.aspx> This section describes **typical household BMP's** that have the potential to pollute stormwater, surface water and groundwater.

<http://your.kingcounty.gov/dnrp/library/water-and-land/stormwater/docs-archive/2005-residential-bmps.pdf> And here is the section if you want to read the chapter about BMP's for **commercial properties**.

<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/pollution-prevention-manual/commercial-bmp.aspx>

31. **2009 King County Surface Water Design Manual.** This is the actual manual that stormwater engineers use to help them design the right solution for any situation. Its 1,001 pages long but you can find many technical descriptions and drawings. Use the table of contents.
<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/surface-water-design-manual.aspx>
32. To learn more about the **combined sewer overflow** problem in Seattle this is a good place to start.
[http://www.seattle.gov/util/Services/Drainage & Sewer/Keep Water Safe & Clean/CSO/How WeGotHere/index.htm](http://www.seattle.gov/util/Services/Drainage%20&%20Sewer/Keep%20Water%20Safe%20&%20Clean/CSO/How%20WeGotHere/index.htm)

Related Issues

33. **Net Zero Water:** This is a fascinating policy planning paper written by the Cascadia Green Building Council. What if we could use treat and recycle all of our water right in our own buildings and neighborhoods? <http://cascadiagbc.org/resources/TowardNetZeroWater.pdf>
34. **Reclaimed Wastewater:** King County has created a 30-year plan for analyzing how to increase our use of reclaimed water as a way to be more efficient with our supply of fresh water. The plan will evaluate reclaimed water as a means to reduce reliance on discharging to Puget Sound, to enhance the environment through water resource augmentation, and to further prepare the region for addressing the uncertainty of population growth and climate change.
<http://www.kingcounty.gov/environment/wastewater/RWCompPlan.aspx>
35. **Climate Change Impacts in the Pacific Northwest:** Here is a comprehensive but brief overview of projected changes in our region as a result of climate change.
<http://cses.washington.edu/cig/pnwc/ci.shtml>