Kootenai County Water & Land: The Surf and Turf of Sealing the Deal









Introduction Part II

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Watersheds and Nonpoint Source Pollution



Water quality matters to property value

Water quality attribute	% change at mean property values	Marginal implicit price (in 2010 constant dollars)			
Secchi depth (1 meter increase)					
4 meters->5 meters	5.97%	\$27,096			
5 meters->6 meters	4.32%	\$22,033			
6 meters-> 7 meters	3.64%	\$18,568			
7 meters->8 meters	3.15%	\$16,406			
8 meters-> 9 meters	2.77%	\$14,127			
Invasive species					
Milfoil (presence->no presence)	12.67%	\$64,444			



The Most Common Pollutants Impacting Idaho's Water

Sediment
Temperature
Nutrients
Oil and Grease
Hazardous Waste
Invasive Species



Sources of Sediment: Construction





Sources of Nutrients: Fertilizers







Nutrients: Excessive aquatic plant and algae growth



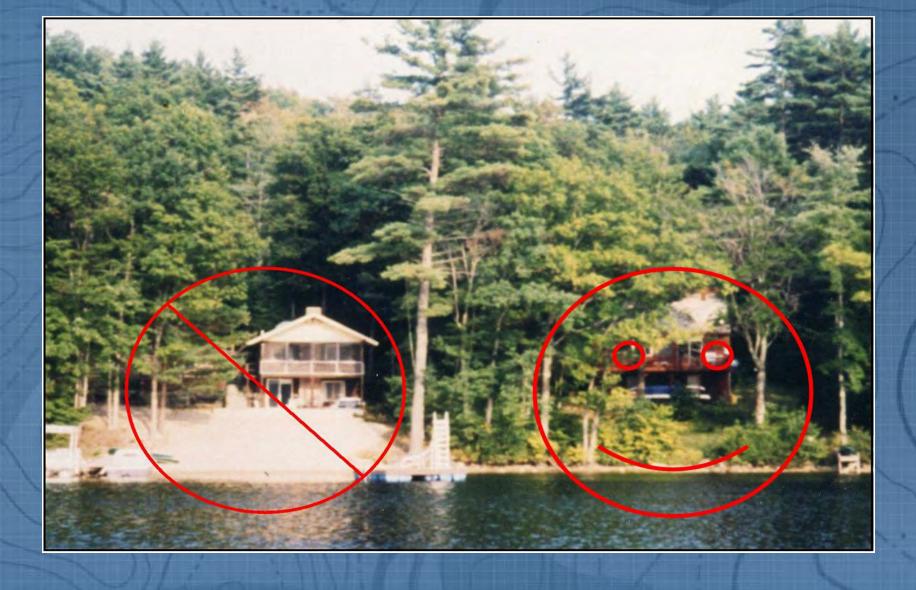






Solutions to these Common Issues

- Riparian/Shoreline Vegetation
- Proper Planning
- Nonpoint Source Pollution Prevention (Best Management Practices)
 - Spills (pesticides, fertilizers, petroleum products, etc.)
 - Stormwater Runoff
 - Soil Erosion
 - Lawn and Garden Fertilizer
 - Animal and Human Waste



Best solution: keep existing vegetation so it doesn't need to be replaced.



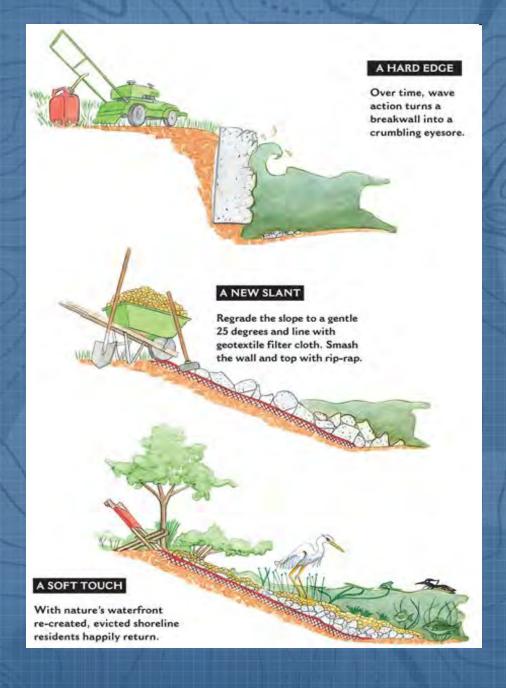






If property has an eroding shoreline, it will cost money to stabilize. Know your numbers \$\$\$\$





"Seawalls" – not encouraged, rarely permitted unless replacing one built pre 1975. Need to replace with a different stabilization technique.

Rip Rap: \$45/ sq. ft

Some rock may be necessary. Vegetation for "roughness" and wildlife habitat is best. Also approx \$50/ft.



Responsible development will:

- Reduce amount of water entering storm drains and culverts.
- Allow water to infiltrate
- Slow water down

Proper Planning

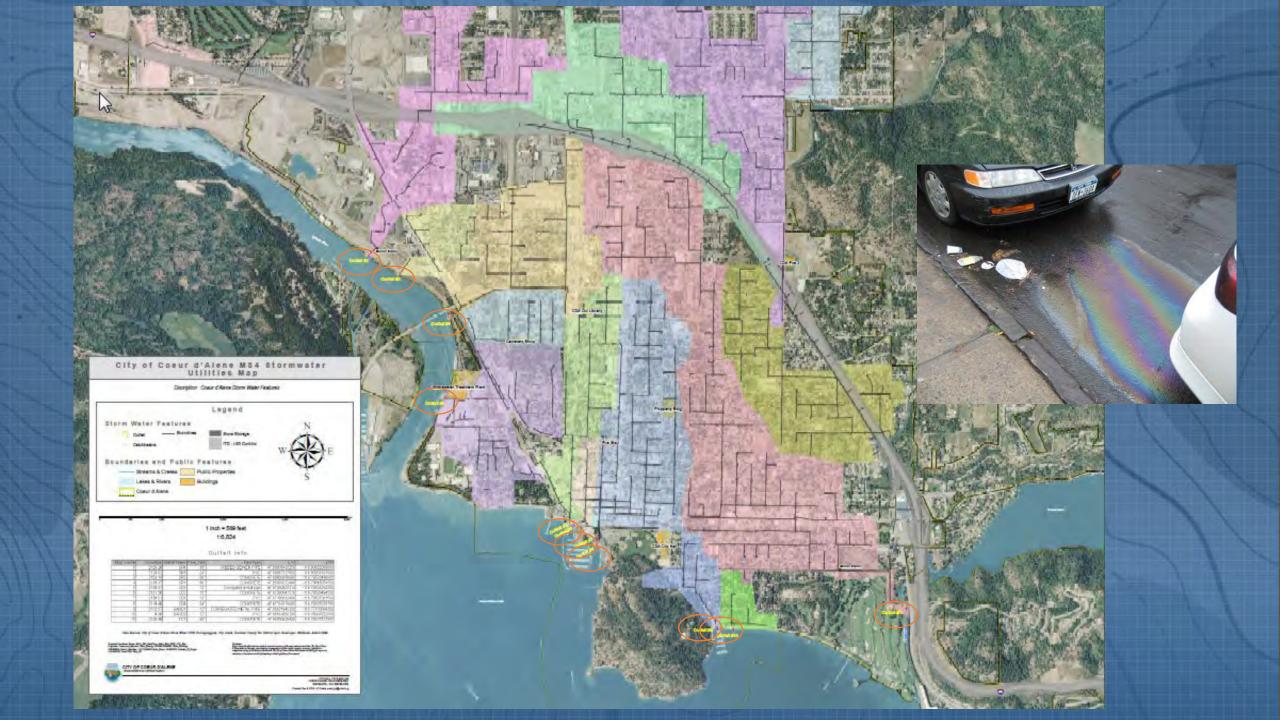


Flooded parking lot (Sandpoint)

Permeable pavers allow water to infiltrate.

Proper Planning

Swale Rosedale Way-Google earth © 2014 Google Imagery Date: 7/11/2014 48°15'49.94" N 116°33'47.05" W elev 2089 ft eye alt 4005 ft O Culvert Outfall



Best Management Practices: Fertilizing Solutions

- Fertilize at least 25' from water
- Choose phosphorus free fertilizers
- Get a soil test!
- Know what your lawn service is using
- Install a vegetative buffer



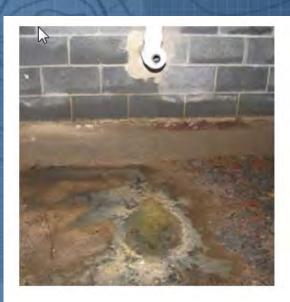




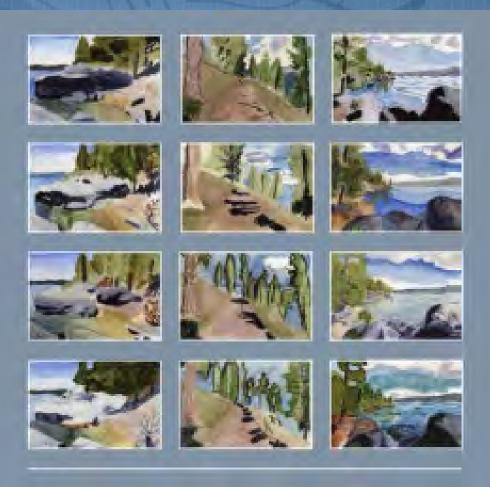
Best Management Practices: Septic System Maintenance











Coeur d'Alene Lake Management Plan

Lake a. Syst

A Landowner's Guide to Protecting Water Quality

OurGem.org

Risk Assessment Worksheet Access Roads and Driveway Runoff

Assessment Worksheet 1 - Condition of Access Roads and Driveways

The assessment worksheet below will help you identify potential environmental risks related to the management of your property's access roads and driveways. For each question indicate your risk level in the right-hand column. Some choices may not correspond exactly to your situation. Choose the response that best fits. When finished, turn to the Access Roads and Driveway Runoff Action Worksheet on page 7-14 and record your medium and high-risk practices. The goal is to lower your risks. Use the BMP recommendations provided in this section to help you decide how to best reduce pollution associated with water runoff.

	LOW RISK	MEDIUM RISK	HIGH RISK	YOUR
Access road type and slope of road to home	I have a paved road; or my road has a good gravel base.	My road is compacted dirt, and its slope is 0% -15%.	My road is compacted dirt, and the slope is >15%.	Low Medium High
Condition of un- paved road into home	Little erosion is on my road, with no obvious gullies or road wash channels.	My road has some signs of erosion with loss of soil.	Obvious erosion is evident on my road, with deep gullies and wash channels.	Low Medium High
Condition of road cut bank (above slope) and fill bank (below slope)	The banks of my road are relatively flat and well vegetated, with no obvious signs of erosion.	My road banks are steep but well protect- ed with vegetation and only some signs of erosion.	My road banks are steep and generally bare. Erosion is evi- dent with gullies and soil slumps.	Low Medium High
Condition or exist- ence of structures for water runoff management	My drainage ditches are deep and vegetat- ed. I maintain my culverts. I use water bars or rolling dips on steep slopes to slow runoff velocity.	My drainage ditches and culverts show evidence that they are not completely effec- tive in runoff man- agement.	My drainage ditches are shallow or flat allowing road wash; my culverts are plugged or there are no culverts. My road needs water bars or rolling dips.	Low Medium High
Where does storm- water runoff from roads and road banks end up?	Most of my storm- water flows over for- ested land where sedi- ment can drop out before reaching any surface water.	A good deal of my stormwater flows di- rectly into surface water; the water is only slightly turbid (dirty).	Most of my storm- water runoff is chan- nelized and flows directly into streams or the lake; the water is turbid.	Low Medium High

Action Worksheet Safe Drinking Water

What can you do to reduce the risks?	Set a target date for action.	
Contact IDEQ or PHD for information on water testing.	One week from today.	
	Contact IDEQ or PHD for information on	

Remember: Environmental regulations are also part of the solution to pollution!

