

Stormwater Discussions 2015



Part 2 – Why is Stormwater Important & Stormwater Planning



What's changed since the late 70's?





Stormwater Quantity



Queen Ave. & Walnut St.



Stormwater Quantity



34th Avenue near Geary Street



Albany's
STORM
Water

Stormwater Quantity



Groves Court



Stormwater Quantity



13th Avenue and Thurston Street



Stormwater Quantity Impacts

INSERT CULVERT VIDEO HERE



Stormwater Quantity Impacts



Failed Culvert @ Belmont Avenue



Stormwater Quantity Impacts



BPA Base @ Oak Creek



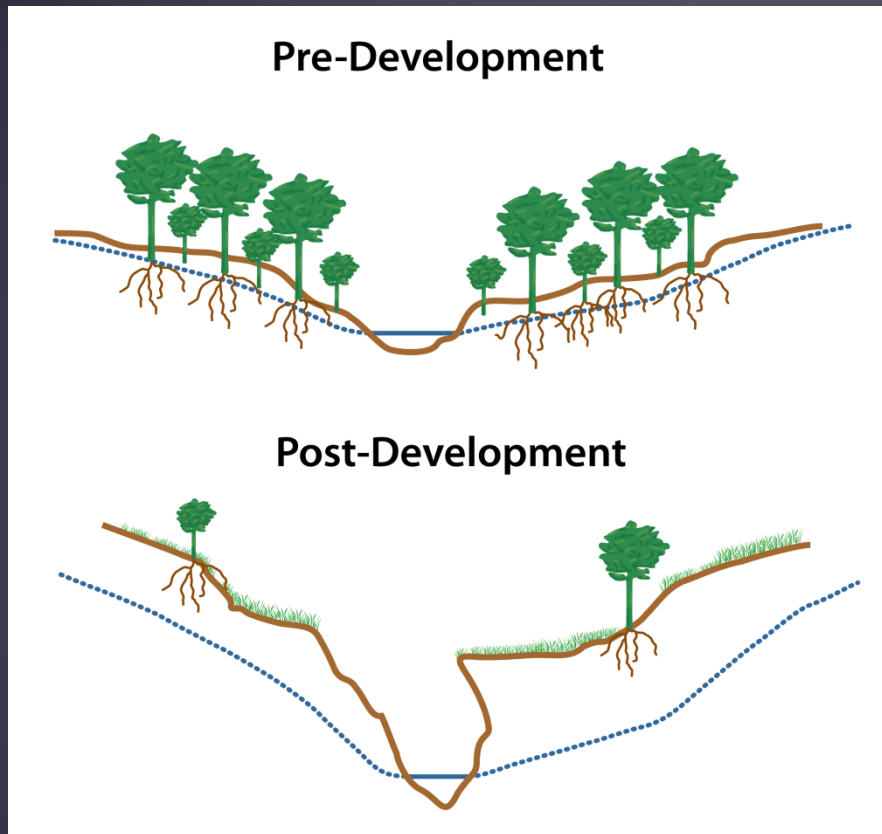
Stormwater Quantity Impacts



Periwinkle Creek



Stormwater Quantity Impacts



It's not just the big storms that damage waterways!



The Importance of Water Quality



Thornton Lakes



8th Avenue Canal



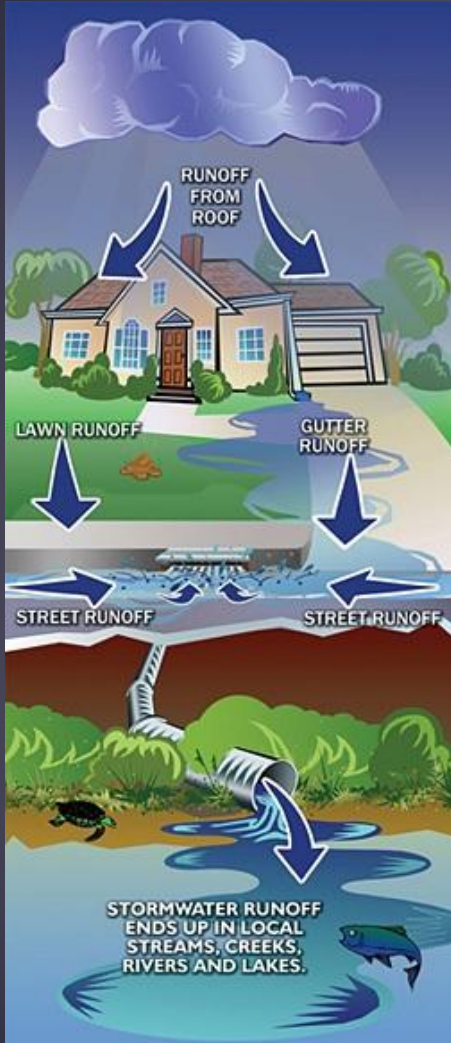
Oak Creek



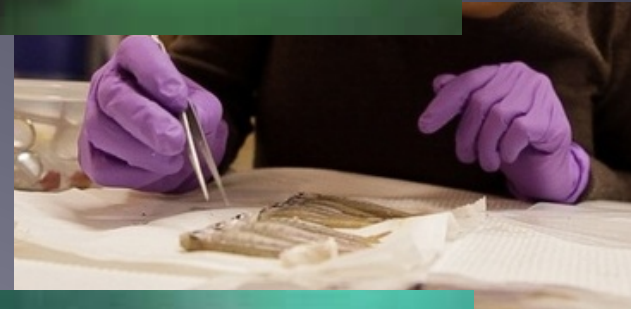
Waverly Lake



Stormwater Runoff & Pollutants



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Urban Stormwater Pollutants

Urban stormwater pollutants	Common sources
Sediments and particulates	Atmosphere, erosion, vehicle wear, industrial activities
Nutrients (nitrogen and phosphorous)	Atmosphere, fertilizers, detergents
Heavy Metals (zinc, lead, iron, mercury, copper, cadmium, chromium, nickel, manganese, cyanide)	Fungicides, insecticides, galvanized building materials, tire wear, motor oil, engine parts, rust, machinery, erosion, industrial activities
Hydrocarbons (petroleum products)	Spills, leaks, antifreeze, hydraulic fluids, asphalt surface leachate
Organic Compounds (phthalate esters, phenolic compounds, and volatile organics)	Pesticides, plastics, cleaners
Microorganisms (bacteria and viruses)	Combined sewer overflows, illicit connections, pet waste
Salts (sodium, magnesium and chlorides)	Road de-icing salts

From OEC Stormwater Solutions: Turning Oregon Rain Back Into a Resource



Visibility of Stormwater Quality Impacts

Not Like
Wastewater



Industrial outfall on Willamette
Circa 1940



Fishing the Willamette at Sewer outfall
Circa 1940



Visibility of Stormwater Quality Impacts



Not Like
Wastewater

Cuyahoga River Fires - Helped fuel 1972 Clean Water Act



Urban Stormwater Pollutants

INSERT STORMWATER QUALITY VIDEO HERE



What are we doing about stormwater?

TMDL Implementation Plan

- *Erosion Prevention and Sediment Control program*
- *Post-Construction Stormwater Quality program*

Stormwater Master Plan Update

- *Data collection – Complete*
- *Hydraulic Model Development – Complete*
- *Identify existing and buildout system deficiencies – In process*

Engaging in Regulatory Processes

- *Future Presentation*

Limited Maintenance Activities and Capital Projects

- *Future Presentation*



How are current efforts funded?



Street Funds



Sewer Funds



No Dedicated Stormwater Funding