Kendall Yards and More
Stormwater in the Eastern Region

Dave Duncan
Municipal Stormwater Permit Implementation Planner,
Eastern Region Water Quality
Washington

Is not the “Evergreen State” that is advertised on our license plates
PRECIPITATION

Precipitation varies widely across the United States, from a low of 2.3 inches per year in California Death Valley to a high of 400 inches on Hawaii's Mount Waialeale, Nevada sees as the driest state, with an average annual precipitation of 3.1 inches, and Hawaii is the wettest, at 70.5 inches. The average annual precipitation for Washington is 48.15 inches.

Average Annual Precipitation (in inches)

- 1000-1099
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Rainfall Regions for Western Washington (North)

LEGEND
Average Annual Precipitation (Inches)
- REGION 1: <30
- REGION 2: 30-40
- REGION 3: 40-50
- REGION 4: 50-70
- REGION 5: 70-90
- REGION 6: >90
Eastern Washington Challenges to Stormwater Treatment

Brandy Reynecke
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What is Stormwater?

Water that originates as precipitation and is collected and conveyed by a stormwater system
Why Treat Stormwater?

- Polluted Stormwater is directly discharged to surface and ground water
- Heavy pollutant loads have severely reduced water quality
What is Stormwater Treatment?

Removing pollutants prior to discharge.
What is LID?

Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. (Ecology, LID Manual for Eastern Washington 2013)

LID = Green Infrastructure
What is LID?

Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible.

LID = Green Infrastructure

Challenges
Cost
Experience
Plants
Space
What Makes Eastern Washington So Special?

EASTERN WASHINGTON IS SPECIAL?

PLEASE, TELL ME MORE.
What makes Eastern Washington so Special?

Variability in:
- Climate
- Geography/Geology
- Logistics
- Education and Attitude
What makes Eastern Washington so Special?

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Education and Attitude
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Education and Attitude
Water is life, and clean water means health.
Audrey Hepburn

I'll just have water, thanks!

Thank You
West Broadway SURGE
(Spokane Urban Runoff Greenway Experiment)

Cynthia Wall
Project Manager,
Eastern Regional Water Quality

DEPARTMENT OF ECOLOGY
State of Washington
Challenges

• Education
• Residential neighborhood/business resistance
• Safety concerns
• Pervious sidewalk installation
• Plant theft
• Long term maintenance
CONCEPTUAL MASTER PLAN MAP

Business District & Residential Legend:
- Townhome Residential
- Low Density Residential
- Mid-Rise Residential
- High-Rise Residential
- Existing Commercial Building
- Future Commercial Building

Greenstone
ENRICHED LIVING. LASTING VALUE.
Challenges

- Public-private partnership
- Perception – developer benefitting from public funds
- Memorandum Of Agreement
- Timing
Riverfront Park Redevelopment

Shannon Petrisor
Construction Stormwater Inspector,
Eastern Regional Water Quality

DEPARTMENT OF ECOLOGY
State of Washington
Riverfront Park Redevelopment
The Great Fire of 1889
Construction of Union Passenger Depot 1914

Northwest Museum of Arts & Culture
Riverfront Park
Making Your Park Work for You During Construction and Events

These bicycle and pedestrian routes are open for use.

Learn more about the voter-approved renovation of Spokane’s treasured downtown park:

RIVERFRONTPARKNOW.COM
Construction Stormwater General Permit

• 5 CSWGP issued

• Constituents of concern identified in the soil

• CSWGP requires compliance with Water Quality Standards for Surface Water of the State of Washington

• Administrative Orders (AO) provide Indicator Levels

• Indicator Levels are derived from the Freshwater Toxic Substances Criteria (WAC 173-201A-240) and practical quantitation level.

• 5 AO
Constituents of Concern at Riverfront Park

- Acenaphthylene
- Benzo(g,h,i)perylene
- Fluoranthene
- Phenanthrene
- Pyrene
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Chrysene
- Indeno (1,2,3-cd)
- Arsenic
- Cadmium
- Chromium
- Lead
- PCBs
- Semi-volatile (diesel) petroleum hydrocarbons

https://www.google.com/?gws_rd=ssl#tbm=lcl&q=spokane,+wa&rlfi=hd;si:15995881897666599345;mv:!1m3!1d83060.59659060985!2d-117.41214994999997!3d47.672840449999995!2m3!1f0!2f0!3f0!3m2!1i316!2i371!4f13.1&spf=1685
