Willamette River Alliance  
Local Governments and Partners in 
Action to 
Restore Cold Water Fish Habitat 
Within Our Reach Conference – December 14, 2018 

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ACWA
Who We Are...
> Private Non-Profit
> Formed in 1987
> Our Members:
  --Over 100 public wastewater treatment &
  stormwater management agencies
  --Associate members (consultants)

Our Mission...
Protect & enhance Oregon's water quality

www.oracwa.org "Oregon ACWA"
How We Work…
Professional Volunteers/Board Committees:
- Biosolids & Recycled Water
- Education
- Energy
- Groundwater
- Legal
- Legislative
- Pretreatment
- Stormwater
- Water Quality
- Utility Management
How Public Wastewater Treatment Plants Tackle Water Quality Challenges…

> Focus on watershed-based solutions that achieve multiple environmental objectives

> Operate under Clean Water Act NPDES permits issued by DEQ

> CWA reflects an era when major focus was on basic sanitation—bacteria and pathogens

> Today’s challenges not addressed by traditional technology-based treatment

> Regulatory framework hasn’t kept pace with new approaches
Temperature—Not Your Typical Pollutant!

>Centuries of human alteration of streams and the landscape have warmed rivers across Oregon beyond levels that are safe for native cold water fish.

>While it’s not a pollutant to humans, it is to fish and other aquatic life.

>Homes, businesses and industries discharge wastewater warmer than stream capacity to assimilate.

>Willamette River is not the only place in Oregon we have this challenge...important place to figure it out!
Our Challenge…

>Treatment requirements for temperature are based on biological needs of salmonids

>Some municipal/domestic dischargers to the Willamette won’t be able to comply with the biological criteria...at least a few weeks a year

>Technology-based treatment (i.e. cooling towers or chillers) won’t improve the river temperature and would not improve conditions for fish

>Local governments want compliance paths that enable investments in meaningful improvements to the river system, supporting its cold water functions
Options…

--Available today:

> Chillers or cooling towers
> Recycled water programs
> Natural treatment systems (e.g. wetlands)
> Water quality trading (i.e. compliance credit for riparian shading)

--Future???

> Expanded WQ trading program
  - Cold water refuges for fish
  - Increased channel complexity
  - Restoring hyporheic flow through floodplains
> Variances with pollution reduction plans
ACWA Willamette River Alliance…

--Local governments and partners working since 2015 for a regulatory framework that provides best outcomes

  > Benefits to river and the environment
  > Effective investment of public $ in sustainable science-based solutions
  > Long-term affordability of water reclamation services

--How the options stack up…

  > Natural treatment systems
  > Recycled water programs
  > Riparian restoration/shading
  > Improvements to cold water function
  > Chillers, cooling towers, heat exchangers
Willamette River Alliance Action Plan…
Teaming up with DEQ, Willamette Partnership and other partners

1) Assess temperature compliance issues
2) Provide outreach and deploy ACWA Temperature Compliance Guidance Manual and support dischargers with evaluating strategies
3) Engage independent science stakeholders to help define parameters for river projects to help improve cold water functions
4) Support DEQ in developing WQ trading and variance tools
The End Game--A Heavy Lift!

> Identify and credit flood plain and river restoration projects that help achieve temperature reduction goals

> Wastewater utility investment in sustainable environmentally beneficial outcomes

> Avoid regulatory fall back to grey infrastructure not beneficial to the environment

> Clear path to NPDES permits with regulatory certainty

> Success in the Willamette that enables replication in other river basins throughout the state
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