

Pacific Northwest Clean Water Association

PNCWA

Newsletter
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SUSTAINABILITY**

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**UTILITY WORKERS
SAVE A LIFE**

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Streamside Restoration: A Viable and Less Costly Option for Regulatory Compliance

As state regulatory agencies set water temperature limits for wastewater treatment facilities and other NPDES permit holders, permittees are looking for practical solutions to minimize the effect of clean, but warm water entering rivers and streams. Historically, temperature regulations meant expensive new facilities to cool the water before entering a stream—but today, conservation organizations and regulatory agencies are working toward a more ecologically beneficial approach to compliance.

In the state of Oregon, regulatory agencies and environmental organizations have built a system in which cities can restore streamside shade in places critical for fish to rest, rear and spawn instead of cooling water directly at a treatment facility's point of discharge. In other words, the increase in overall stream temperature from the facility's effluent is offset by cooling water naturally by planting trees upstream.

So how does the system work? Over the past five years, these organizations have been working on the science to calculate and quantify the benefit that planting trees provides to streams. Regulator-approved protocols can now quantify these benefits into registered "credits" that can be purchased by facilities to comply with temperature—and soon nutrient—regulations. Planting trees upstream not only provides a more natural solution, but in every case the cost to facilities has been one third to one half of a cooling tower, with numerous secondary benefits, such as trees for bird and other species habitat, reducing carbon in the atmosphere,



Volunteers plant native trees to restore stream banks and create shade critical for healthy wild fish habitat on the Salmon River near Portland, OR.

stabilizing banks to control sediment and controlling runoff from agriculture and roads.

With regulator-approved metrics and infrastructure in place to ensure transparency and credibility of this compliance option, facility managers might ask how to actually get the projects done. To remove this uncertainty for municipalities, The Freshwater Trust, an Oregon-based not-for-profit, will finance all project costs on the front-end, and then sell the measured, quantified ecological benefits, or credits, to facilities to meet compliance requirements. With the Department of Environmental Quality set to write permits for this natural compliance solution, cities should consider restoring stream banks as a way to reduce thermal loading.

For more information, please contact David Primozich, Director of Ecosystem Services, The Freshwater Trust, 503-434-8033, primozich@thefreshwatertrust.org.

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