

The New Klickitat Wastewater Treatment Plant

An account of a multifaceted approach of innovation and cooperation



Introduction

Thanks to innovation, community cooperation, and hard work, the old Klickitat wastewater treatment plant was replaced by a new state-of-the-art treatment plant and collection system. This achievement was a long and winding road for the community of Klickitat..

Problem

The Klickitat sewage treatment plant was antiquated and desperately in need of an upgrade. Klickitat County Public Utility District #1 (KPUD) owns and manages the plant. It was built in 1954 and last upgraded in 1972. It also lacked modern operational controls. This caused extra demands on the treatment plant operators. The aging pipes carrying waste from homes to the treatment plant allowed excessive water to leak into the collection system, and this overwhelmed the treatment capacity. KPUD's sewage treatment plants in Lyle and Wishram were also outdated, with many of the same problems as the Klickitat plant.

Improvisation and collaboration to keep an ailing system alive

Doug Miller, along with other KPUD plant operators, worked hard to achieve proper wastewater treatment. However, KPUD lacked resources to hire extra help or pay for plant upgrades. On many occasions Doug called upon his improvising skills to keep the plant operational (see photo above). Despite the operators' best efforts, the Klickitat plant had numerous wastewater discharge permit violations during the 1990s. The Washington Department of Ecology's (Ecology) engineer, Kim Sherwood, and roving treatment plant specialist Otis Hampton worked diligently to assist the treatment plant operators to achieve permit compliance.

A good example of collaboration occurred in January 2005, when Doug reported to Ecology that the plant's aerator stopped running and repairs were impossible. He told Ecology that "a temporary work-around" was devised at the facility, but it wasn't a practical long-term solution. Ecology informed Doug about the possible availability of used floating aerators no longer needed by the Benton City's treatment plant. Ecology facilitated negotiations between KPUD and Benton City, which resulted in the quick purchase of the aerators for KPUD. KPUD was able to obtain the aerators in a few days. This was a great example of Ecology bringing two small cities together to find solutions. KPUD saved the expense of new equipment and the time required for delivery. Benton City was able to assist another small community and get rid of unneeded, but still useful equipment. This combined effort served to protect the Klickitat River in an emergency situation.

A lawsuit leads to a challenge

In 2001, the Columbia Riverkeepers and the Waste Action Project filed a Clean Water Act citizen's lawsuit because of violations to KPUD's National Pollution Discharge Elimination System permit. The parties settled the lawsuit with a consent decree to upgrade the Klickitat plant. In 2002, the KPUD also agreed to an Ecology Consent Order, which required construction of a new treatment plant by May of 2007. The challenge was to fund a wastewater treatment plant to protect water quality, while still being affordable to the community.

Partnership overcomes the challenge

The community formed a working group to advise the KPUD and Ecology about what type of wastewater treatment plant the community wanted. Thanks to the efforts of the community working group, the citizens of Klickitat actively supported the final treatment plant design. Tom Tebb (Ecology) and Cathi Read (Washington State Department of Community, Trade and Economic Development)



met with KPUD and the community members several times to craft reasonable funding packages for the new treatment plant. One of KPUD's engineers was instrumental and effective in applying for funding for the plant. After KPUD secured the finances, construction of a modern treatment plant and collection system began.



Community members actively participated in construction scheduling of the collection system and tank placement. The installation of below-ground interceptor tanks and collection pipes, distributed throughout the community, caused unavoidable disruption to landscaping and access to property. Community support was critical to ensure the project's success.

Construction of the new plant was completed in March 2007. Ecology staff inspected the new plant the same month and found that the project management and cost effectiveness met the required guidelines for publicly-funded projects. The new plant is providing excellent wastewater treatment.

Project highlights

A collaborative working relationship between KPUD's commissioners, staff, treatment plant operators, the community, project engineers and contractors, elected officials, and Ecology has been a hallmark of this success story.

The community has been economically disadvantaged since the lumber mill shut down. The residents of the community did not have the financial means to construct a new plant on their own. All the various participants' shared efforts moved from using improvisation to hold an ailing wastewater treatment plant together, to innovative cooperation resulting in the construction of a new treatment plant, completed on time and affordable to the residents. Also, from 2002 to 2006

KPUD was successful in receiving funds for a new treatment plant in Lyle and an upgraded one in Wishram.



Project Placard

Funding

A total of \$ 6.86 million of state and federal funds for the new plant came from multiple sources:

- State Centennial Clean Water Grant (Ecology)
- State Revolving Fund Loan (Ecology)
- Washington State Special Appropriation Construction Grant
- EPA State and Tribal Assistance Construction Grant
- Community Development Block Grant Planning and Construction Grants
- United States Forest Service (USFS) Pacific Old Growth Fund Planning Grant
- USFS Pacific NW Assistance Planning Grant
- Rural Opportunity Fund / Community, Trade and Economic Development Planning Grant.

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