



WHY IS THE DISTRICT BUILDING A NEW WASTEWATER PLANT?

The Snoqualmie Pass Utility District (District) owns and operates the water and wastewater facilities serving the community of Snoqualmie Pass, Washington and the ski resorts located primarily on the south side of I-90 at Snoqualmie Pass in the Cascade mountain range. The District is a special purpose district established to provide water and sewer services to the summit of Snoqualmie Pass, with approximately 65% of their collection system located in Kittitas County and the remainder in King County.

The existing wastewater treatment plant (WWTP) is a 2-cell aerated lagoon with a discharge to a land application site, owned by the United States Forest Service (USFS). Concerns have been raised that the spray field may not adequately treat the wastewater during the winter months when the ground is covered with snow. Until 1983, when the spray field was completed, the wastewater discharge point was Coal Creek. Coal Creek is a small stream with dramatic seasonal variation in flow, discharging to Gold Creek and Keechelus Lake. Keechelus Lake is a water control reservoir in which the elevation drops throughout the irrigation season. Limited data is available for Coal Creek, so assumptions regarding water quality were made using data from other streams in the Cascades.

The District was notified by the USFS that wastewater spray fields on their properties is being phased out. An alternative to the spray field is a discharge to Coal Creek as previously practiced by the District prior to 1983. To discharge through the outfall, water quality requirements need to be met using available treatment technologies. The existing outfall discharges into Coal Creek, just upstream the creek's confluence with Gold Creek and Keechelus Lake. Unfortunately, the existing treatment process is not capable of meeting the required discharge limits to discharge to Coal Creek per Ecology current criteria.

The District also has a limited number of new connections they can sell since the water rights for the domestic water system are nearly expended by the existing customers and approved developments the district is obligated to serve. As an alternative to purchasing water rights to meet current and future water needs of the District's customers, the wastewater treatment process selected which treats to a quality standard allowing the effluent to be discharged to Coal Creek will allow them to obtain a foreign water right credit. These additional water rights will allow the District to support the development and expanded ski resort operations and will provide funds needed to finance the other necessary improvements.



The Phase 1 improvements includes a skid mounted MBR treatment system installed in a new building located adjacent to the existing lagoons. The new building will include new District offices, lab, maintenance and equipment storage areas designed to be expandable for the full MBR WWTP. A new MBR headworks to screen the effluent from Lagoon 1, sized to accommodate the full facility flow will also be constructed. Piping to convey the Lagoon 1 effluent to the new process equipment, the existing outfall, and to convey the waste activated solids removed by the MBR process equipment to the existing lagoon system.

Once the full MBR facility is constructed, upgrades to Lagoon 1 and cleaning Lagoon 2 will be performed to allow Lagoon 2 to be used for treated effluent storage for the purpose of stream augmentation during the late summer, early fall fish migration period, in conjunction with the Department of Fish and Wildlife.