

Oregon resort community resolves ongoing pump clogging with Flygt Concertor pumps

Innovative pump technology eliminates clogging, saving time and money

Sunriver, a 3,300-acre planned residential and resort community in Deschutes County, Oregon, has been a favorite vacation getaway since the 1960s. Tucked away in the stately pines of Central Oregon's high country, at the foot of the Cascade Mountains, the scenic resort town offers a wide variety of activities for all seasons, from snowy ski excursions to sunny summer holidays.

One of the largest resort communities in the Pacific Northwest, Sunriver's utilities serve a combined 9,400 connections. The area is home to approximately 1,000 permanent residents, but can swell from 5,000 to 7,000 during holiday weekends and the busy summer season.

Challenge

By 2019, Sunriver's wastewater system needed to be upgraded. The lift stations that serve the vacation community were constantly inundated with clogging, requiring frequent repairs. SunRiver Utilities' Lift Station 3 in particular experienced constant blockages, with modern trash like flushable wipes and other fibrous materials often getting caught in the impeller and mechanical seal. Each repair callout cost in excess of \$7,000 and a replacement pump ran \$25,000.

With the pumps at Station 3 clogging once or twice a week during the off-season, Sunriver Utilities management knew the problem would only be exacerbated with an influx of visitors during the holiday season.

Solution

While Sunriver Utilities was not an existing customer in 2019, a former Xylem employee who worked for the utility's parent company NW Natural Water Company, LLC, learned of the pump clogging issues and put the Sunriver Utilities manager Tim Smith in touch with Xylem sales representative Dave Olson to find a reliable, efficient solution.

"We went out to Sunriver and talked about their pains and where they were spending money and time," Olson explained.



Contractors prepare to install a Concertor pump at Lift Station 3.

CUSTOMER: Sunriver Utilities

CHALLENGE: Sunriver Utilities, which services the resort community of Sunriver, Oregon, experienced frequent clogging issues at several of its lift stations, leading to frequent and costly repairs.

XYLEM SOLUTION: Xylem installed Concertor pumps with a DP control system on a trial basis, which the utility purchased following the end of the trial.

Based on that conversation, Xylem proposed a “try and buy” solution involving two Flygt Concertor 6020.091 pumps set up with a DP control system. The utility agreed to a two-month trial during the months of November and December, when the resort community typically experiences an uptick in holiday travelers.

“Because it was a demo, we wanted to do the least amount of modifications to their existing infrastructure,” Olson said.

The DP control system provided flexibility to ramp the pumps up and down based on their levels. But integrating the DP system into the Sunriver Utilities’ existing control system proved challenging as the utility no longer had the original schematics.

“It was a little touch and go, but we persevered,” Olson said.

Following installation in November of 2019, the Concertor pumps operated without clogging, through the Thanksgiving, Christmas and New Year holidays, surpassing everyone’s expectations.

“The Concertor pump ran for two months taking the load of the station and never once failed.” Said Olson.

Pleased with the Concertor pump’s performance, Sunriver Utilities purchased the pumps outright at the end of the trial. The utility also upgraded its Gannet lift station to Concertor pumps at the same time.

Results

The Flygt Concertor pumps proved to be the reliable, efficient solution that Sunriver Utilities needed to eliminate its ongoing challenge with clogging, while also delivering cost savings.

Since installation, the Concertor pumps have performed flawlessly. Sunriver chose to upgrade the trial DP control system to the full XPC Control Logic system when the utility installed another Concertor pump in late 2020.

“Since the full upgrade, the lift station has performed wonderfully, which has allowed us to install two other 6020.091 pumps at other stations in the system, along with other Flygt 3000 series pumps,” said Olson.

Unlike the fixed performance curves of conventional pumps, Concertor offers an entire performance field from which to choose the right operating point. Not only does this make selection extremely simple, but operating performance can easily be changed and fine-tuned on site or remotely as needed.

With the new wastewater pumping system, pump clogging was completely eliminated, saving time and money and offering new-found peace of mind. The pumping system aims to deliver proven reliability at the lowest total cost of ownership and to achieve this it also, among other benefits, dramatically reduces energy consumption.

As a result of the Concertor pumps’ success at the Gannet station and Lift Station 3, Sunriver Utilities has purchased several other Xylem products, including another Concertor pump for a third lift station, Flygt 3171 pumps for their headworks and a Goulds Water Technology pump for the marina.



Sunriver upgraded from the trial DP control system to the full XPC Control Logic system in 2020.



Before installing the Concertor pumps, Lift Station 3 experienced constant blockages.



During the two-month trial, the Concertor pumps never clogged.

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