

STPUD changing how water is distributed in Alpine County

By Kathryn Reed

WOODFORDS – Mark Twain was ahead of his time in so many ways, but as it relates to today, his quote, “Whiskey is for drinking; water is for fighting” may be the most important.

To avoid future fights over the clear liquid, the South Tahoe Public Utility District is being innovative in its approach to trying to stay ahead of the curve, while following the state and federal regulations it must comply with.

The Porter Cologne Act of the 1960s mandates all treated sewage and wastewater be exported out of the Lake Tahoe Basin no matter how clean it is. Some say this water from the South Tahoe PUD is better than what comes out of spigots in San Diego that people are drinking every day.



Harvey Place Reservoir in Alpine County is where treated wastewater from South Tahoe Public Utility District is stored.

Photos/Kathryn Reed

And while district officials thought one day treated wastewater would be able to be used for irrigation in the basin, that day has not come nor is it likely to happen in the foreseeable future.

Considering recyclable water in Palm Springs sells for \$3,000 an acre-foot, this stuff is valuable.

And the district wants to tap into it. For years it has been giving away 2,000 acre-feet of treated water to farmers in Alpine County. It's been a mutually beneficial arrangement with farmers getting water for free and the district able to unload water for free.

But things are likely going to change when the current five-year agreement expires in 2015. That irrigation water for farmers in the Diamond and Ward valleys may go from free to fee.

(Current law prohibits treated California water from being used in Nevada, but the district is working to change those rules because Silver State farmers are interested in using this water.)

The future for STPUD

This summer begins the first of three phases of a project that will ultimately allow South Tahoe PUD the ability to generate power to run the irrigation system on the land it owns in the Diamond Valley as well as eventually sell power back onto the grid.

"Water is more and more valuable," South Tahoe Public Utility District spokesman Dennis Cocking said last week while giving *Lake Tahoe News* a tour of its ranch in the Diamond Valley as well as the farms that benefit from the South Shore's treated wastewater. "Water is no longer cheap and plentiful."

The utility district bought the old Heise Ranch seven years

ago after seeing the writing on the wall that farmers were starting to divvy up their land and therefore there may not be a place for this treated water. Laws require the treated water be sprayed on 100-acre parcels or larger.

Hal Bird with the district is in large part responsible for having the vision for the district to purchase the land and get on the road of being less dependent on others. The goal is self-sufficiency. He is also behind the improvements to make this land function at its highest level.

The original farmhouse is being restored and will one day be his office.

Most of the roads on the farm are dirt or gravel. It looks much like a working ranch. There is no evidence this land belongs to a water-sewer district and not to a bona fide farmer.

Besides giving water to farmers, for Alpine County to say OK to the STPUD-farmers' agreement, the district had to make other concessions – like creating a fresh water fishery at Indian Creek Reservoir, stocking it every year with 15,000 pounds of trout and other commitments.

Had it not been for the federal mandate to pump the water away from Lake Tahoe, STPUD ratepayers would not be funding these improvements to Alpine County. Plus, 38.9 percent of each STPUD sewer bill goes to meet the demands of the Porter Cologne Act.

Alpine County residents weren't thrilled at first with the idea of taking Tahoe's wastewater. "We don't want Tahoe's crap" were common bumper stickers.

Now, though, the relationship between the county and STPUD is amicable.

Before the hydropower project truly gets under way the Army

Corps of Engineers must sign off on the old Heise property not being a wetlands. That is expected in the next year. The land is drying out now – proof it is not a natural wetlands.

The pipes are being put in this summer. Inside them will be turbines that generate power. The in-conduit line generates the hydropower, Cocking explains.

“It’s a great way to get our feet wet in hydropower,” he said.

California keeps mandating power companies acquire more and more power from renewable sources. What South Tahoe PUD generates could help Liberty Energy fulfill this mandate.

Power from this project may be generated in 2014.

(In large part the 5 percent sewer rate the board approved in May that will take effect July 1 is paying for this project by being the money needed to pay back a low interest loan the district has secured from the state.)

Along the lines being installed will be three pivot irrigation systems that will allow for some of the acreage to be irrigated. The alfalfa could be sold or used as pasture land for cattle. Even now some of the district’s land is filled with cows munching away on the grasses or just lounging in this fertile valley – looking like they are sunbathing in this idyllic spot of the Sierra.

Transporting wastewater

The export line leading from the plant in the middle of South Lake Tahoe goes into Meyers, then along Highway 89 over Luther Pass, down to Diamond Valley where it comes out into a creek before going into the Harvey Place Reservoir. This effluent travels 26 miles.

The late Hubert Brons – a farmer, Alpine County supervisor, and Lahontan Water Quality Control board member – came up with the idea of the reservoir as a holding pen of sorts for water

for farmers.

Devices were created so the treated water from STPUD did and still does not flow back into the Carson River – a main source of water for farmers.

As Cocking said, one would think with 5 million gallons a day of water coming out of the pipes, it would be a turbulent affair. Instead it looks like a good flowing mountain stream. And it looks like any other stream – like fresh water that one could use to fill her water bottle with.

The export line started working April 1, 1968. A lot of leaks sprung in the 1980s, necessitating most of the portions within the basin to be replaced in the 1990s. No longer does it go through Grass Lake, but instead skirts this area near the top of Luther Pass.

Grass Lake is one of a handful of identified peatlands areas in the Sierra, with another being the Sagehen Valley near Truckee.

Getting the wastewater pipeline out of this marshy area was of environmental significance.

In the 1990s, Tim Leslie, who at time represented the Tahoe area in the California state Senate, helped STPUD secure a variance to the Porter Cologne Act that allowed for six fire hydrants to be put in along Grass Lake Road that could be tapped in the event of a catastrophic fire. Lake Valley and U.S. Forest Service fire crews have access to those hydrants.

At the end of that road is the Luther Pass Pump Station where two huge tanks sit empty – and ideally always would. But just in case power and all back up power fails the 400,000 gallons intended for the other side of the hill would flow back into the tanks. This is designed to prevent a spill that would contaminate the Upper Truckee River as well as nearby land.

Inside the pump house is the equipment needed to get the effluent over the pass. This water is going up 1,200 vertical feet in six miles.

From Harvey Place Reservoir the water goes out the Diamond Ditch, which if one looks closely enough can be seen along the hillside. It then flows into the Diamond and Ward valleys for farmers to divert as needed.

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