

SAM managers zero in on recycled water plan

Tertiary treatment could be boon to farmers, creek

By JEANINE GORE
Half Moon Bay Review

Brows furrowed, pencils in hand, Sewer Authority Mid-coast side board members spent most of Monday night crunching numbers in hopes of pinning down the least expensive recycled water facility possible.

In the end, they were pleased with the calculations.

They're leaning toward a \$5 million wastewater recycling facility, the smaller and most economical of two options presented by Carollo Engineers.

The reclaimed water would, in turn, be sold to local farmers and floriculture operations at cost — somewhere between \$340 to \$500 an acre-foot, according to preliminary estimates. The figures reflect operations and maintenance expenses to run the upgrade to a tertiary treatment plant.

"Actually that (\$340 to \$500 number) is very close to where we've wanted to be for a few months now," said SAM Director Mike Ferreira.

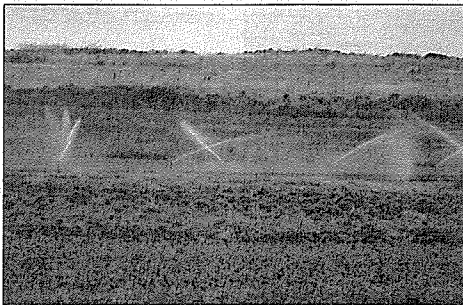
"We need to keep it low in order to encourage the cessation of pulling from the creek," he said, "and in order for ag to be competitive."

No final decisions were made Monday. Carollo Engineers was asked to plan for a facility that would produce water year-round. The engineering firm had presented scenarios for a seasonal plant running eight months of the year, which is not what SAM prefers.

Ultimately, whatever is decided, a recycled water facility would take years to reach fruition.

Sewer board members anticipate federal and state grants would cover construction costs. Ratepayers would not pay a cent for the recycling facilities, they say.

If the rate were brought low enough, recycled water could be a boon to the agricultural industry, golf courses and city of Half Moon Bay, serving as a reliable



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Farmland along the San Mateo County coast may one day be irrigated with less expensive recycled water if the Sewer Authority Mid-coast side eventually goes ahead with a proposal for tertiary treatment.

and less costly water source for irrigation of fields, container crops, pastures, and possibly even ballparks or medians.

Bay City Flower Company and Nurserymen's Exchange, the two largest agricultural operations on the coast and, incidentally, the only ones to buy water from Coasts County Water District, are now paying about \$1,500 an acre foot after a recent 19-percent CCWD rate increase. That translates into some of the highest agriculture water rates in the state.

By using recycled water, they could cut overhead dramatically.

Cost isn't the only attraction of recycled water, though. Even the farmers and smaller nursery operations which pull low-cost water directly from the banks around Pilarcitos Creek have expressed interest in recycled water, SAM officials say — because recycled water is a year-round source.

Unlike groundwater sources, tertiary-treated sewer water doesn't disappear during the dry season; it isn't susceptible to seasonal droughts and typically the water is a higher quality than well water for irrigation.

"If the price were right — if it's competitive, if it saves me pumping costs, I might be interested," said Stan Pastorino, who runs one of the largest nursery operations along Pilarcitos Creek.

While admitting that he's "not

that interested" in buying reclaimed water, for him there was one primary incentive.

"If it were good water — that's the other thing with the water up here, it's not that good," he said.

One other big potential benefit is saving Pilarcitos Creek.

The creek, which emerges high in the green hills overlooking Half Moon Bay, dries up at certain times of the year before reaching the ocean. Federal agencies suspect the relatively new phenomenon is caused by excessive competition for water.

Bigger isn't always better

Carollo Engineers presented the district with two options for upgrading the local sewer plant to tertiary treatment: the larger and more permit-intensive project costs \$14.5 million, produces 3 million gallons of reclaimed water per day and demands construction of two 3.5-million-gallon storage tanks and two new pump stations. Construction of those tanks on-site would be daunting, as California red-legged frog habitat reportedly surrounds the SAM site. To build them close by, the sewer authority might need to think outside the box of SAM lands, possibly striking a deal to build the tanks underground, beneath nearby farmland.

The scaled-down facility — and one the board preferred —

costs roughly \$5 million, produces 1.65 million gallons per day and does not demand that SAM build additional tanks.

The catch is that recycled water customers must provide the storage basins. Half Moon Bay Golf Links, which currently draws from Pilarcitos Creek watershed to irrigate its two 18-hole courses, is awash with artificial ponds and basins, potentially providing ample storage for reclaimed water. Some other growers either have storage capabilities or are reportedly willing to build them.

Both options involve conversion of existing structures and adding pumping and filtration facilities, chemical systems, on-site pipelines and other improvements.

No wastewater in the creek

Despite being a surefire cure for Pilarcitos Creek's low water levels — that is, if large creekwater users such as the golf course and upstream farmers can be weaned off their creekside wells — it is unlikely that recycled sources would be dumped directly into the stream.

That plan is next to impossible. It involves wrangling for permits from a bevy of local, state and federal agencies, most of which do not look kindly on augmenting freshwater streams with treated wastewater.

The city of Pacifica succeeded in emptying its recycled water into a streambed because the waterway had completely dried up. The treated wastewater was considered an enhancement to the habitat rather than a liability.

The SAM board directed staff and Carollo to return with updated figures, taking into account a number of changed assumptions, including yearlong production, continuous delivery rather than sending bursts of water to customers and the cost of solar panels. The board also requested answers to questions about safe uses.

"They need to fine-tune it and bring it back to us," said Chairman Scott Boyd, "The bottom line really is important. This has to be affordable for the ag users ... It has to be affordable and we have to have numbers we can count on."