

Wastewater option awaits OK

Firm says it can help meet new limits cheaply

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To help clean up the Spokane River and nip summertime algae blooms on Long Lake, communities in Kootenai County must clean up their wastewater. Really clean it up.

Within a decade, Coeur d'Alene and Post Falls will be required to meet what are believed to be the most stringent wastewater purity standards in the nation, if not the world, said Sid Fredrickson, Coeur d'Alene's wastewater superintendent. Similar requirements are also expected to be unveiled soon for Spokane.

Upgrading Coeur d'Alene's sewage treatment plant is expected to cost residents between \$30 million and \$60 million. Post Falls expects to spend \$15 million. But a small technology firm in Hayden believes the answer is much, much cheaper.

Using a process developed at the University of Idaho, Bluewater Technologies could help Coeur d'Alene meet the tougher Clean Water Act standards for about \$5 million or \$6 million, said Don Baldwin, company president. What's the hitch?

None, according to Baldwin, who previously served as an executive in the semiconductor industry. Yet Baldwin said wastewater plants across the region continue to focus on more expensive purification technology to help purify discharge water.

Bluewater's sand-filtration system uses a natural, iron-based compound that binds with phosphorus, effectively sucking it out of the water. It's cheap and has no moving parts, Baldwin said. One of the biggest operational costs is hauling in the occasional truckload of replacement sand for the filter. The process has been in use for two years in Hayden, where "it's performed flawlessly," Baldwin said.

Two communities in Massachusetts are in the process of pilot-testing the company's technology. There's growing interest nationwide in Bluewater, Baldwin said, particularly because the purification process is also capable of removing a host of other pollutants.

"I don't understand why the cities here are reluctant to use it," Baldwin said.

Although a Fortune 500 environmental services company is in the process of buying a stake in Bluewater – a move that could help boost the small firm's credibility among wastewater plant operators – Baldwin said it's been tough to compete with the large engineering firms that typically handle municipal contracts. Although these firms have proven track records, they also have no incentive to push an inexpensive technology, Baldwin said.

"Not a lot of engineering firms have the taxpayers' bottom line in mind. They have the corporate bottom line," Baldwin said. "They're not out there looking for the cheapest solution."

Fredrickson said he's actually leaning toward using Bluewater's process, though the final decision will need to be made by the City Council. Bluewater performed well during a recent pilot test alongside three other processes, he said.

"It really does look very promising," Fredrickson said.

But Fredrickson is also uneasy at being the first city to purchase the system. When public dollars are being spent, proven reliability is vital, he said.

The main pollutant targeted by the proposed tougher federal guidelines is phosphorus, which acts as a fertilizer for algae. Coeur d'Alene discharges about 900 parts of phosphorus per 1 billion parts of water. Under the proposed federal guidelines, the city would have about a decade to reduce this level to 50 parts per billion during summer months.

"There's not a plant in the world that has to meet that standard yet," Fredrickson said in comments Thursday at a meeting of the Kootenai Environmental Alliance in Coeur d'Alene. "What we're talking about is building the most advanced treatment plant in the world."

Terry Werner, public works director for Post Falls, said the city is also looking at Bluewater, but no decisions have been made.

Post Falls and Coeur d'Alene are also looking at ways of discharging less water into the Spokane River. Instead, the treated effluent could be used to irrigate golf courses, parks, cemeteries or even the grass along Interstate 90.