Whitefish Pilot

GRANT COULD MEAN WHITEFISH WATER SYSTEM IMPROVEMENTS

May 11, 2016

The Flathead Conservation District is applying for a grant on behalf of the city of Whitefish that could allow the city to perform improvements to its water treatment plant.
The district is submitting an application to the state for a Renewable Resource Grant and Loan Program, which was established by the Montana Legislature to enhance the state's renewable resources. The program provides grants up to $125,000.

Public Works Director Craig Workman said the improvements to the plant could result in economic and ecological benefits. "We have a relatively complex system," Workman said. "We need to look for ways to optimize the system and protect the resources we are responsible for." Workman said the grant money would go toward design and construction of improvements to optimize certain operations at the city's water treatment plant. Whitefish Lake Institute would like to partner in the project.

"This plan will serve as an integrated engineering/natural resource investigation to increase water consumption efficiencies at the plant for long-term cost savings to municipal rate payers and to protect in-stream flows and water quality in Haksill Creek, Viking Creek and Whitefish Lake," Workman said.

City Council May 2 approved a contribution of up to $10,000 to be used for projects if the city is awarded the grant. A cost estimate has not been established for the list of projects, Workman noted, but that would be one of the first tasks of the management plan.
If the grant is obtained, the Public Works Department has a list of five primary goals it would like to establish.

Two options look to improve the system with the goal of reducing water treatment costs, and thus reducing water rates. The city wants to more efficiently manage source waters from Haskill Basin and Whitefish Lake, along with creating an extension of the water intake device to a deeper portion of the lake to reduce organics, thus reducing treatment costs of lake water. Also implementing software and telemetry devices to control head gates in Haskill Basin to maximize water use consumption and diversion management.

The city would also like to prevent seepage that is occurring at the base of the city reservoir. Finally, it would also look to optimize its hydropower production. Workman said the list of projects would generate a number of environmental and ecological benefits, including retention of in-stream flows in Haskill Creek could improve cutthroat trout fishery, reduction of fluctuating flows to Viking Creek could control sediment loading to the lake, and building upon past restoration success in lower Haskill Creek. In addition, preparing a preliminary readiness plan for the city should a catastrophic fire occur in Haskill basin resulting in large sediment loading.

The city's water supply serves about 6,500 residents through roughly 3,500 connections. The city obtains about 90 percent of its water from intakes on Haskill Creek and its tributaries. Water is also obtained from an intake in Whitefish Lake.

The system includes the water treatment plant with an 8 million gallon reservoir, two steel tanks on Grouse Mountain, the lake pumping station, four pressure boosting stations and 44 miles of distribution piping.

The plant uses a contact absorption clarifier process which uses a two-stage filtration process and requires a routine backwashing process, where backwash from the cleaning cartridge units is conveyed to a settling pond before being discharged into Viking Creek.

In 2013, a report by Applied Water Consulting estimated a considerable amount of excess water being used in the treatment process, according to Workman.