Water plan: conservation and storage

By Dan MacArthur Fossil Creek Current

Achieving increased water conservation goals will require financial incentives, greater education and limited legislative mandates.

Those are the key recommendations contained in a water conservation plan soon to go before the Fort Collins City Council.

And beyond such conservation strategies, the plan supports the city's effort to develop more storage capacity to capture water when it's available, to use when it's not.

If adopted, rebates of up to \$50 could be available to residents installing high-efficiency toilets or \$150 for "smart" irrigation systems that adjust watering based on conditions. Homeowner associations could get grants of up to \$1,300 for similarly improving their irrigation systems.

Rebates also could be available to restaurants, laundries and other business making similar water-saving investments. The city would get into the act, too, working to reduce losses in its water system.

In addition to such voluntary incentives and educational programs, the plan also offers the potential for stricter regulatory methods in revising city landscaping irrigation codes.

In addition to those efforts, the plan asserts that "additional water storage capacity is needed to increase the yield and reliability of the water system." Both long- and short-term storage are needed, according to the plan, to "increase the reliability and redundancy desired to meet the growing water demands of water customers."

That recommendation goes to the heart of efforts by Fort Collins and its partners to increase the capacity of Halligan Reservoir on the North Fork of the Poudre River. The expansion would create an additional 12,000 acre-feet of storage capacity. An acre-foot is 325,851 gallons of water, about enough to meet the annual needs of a family of four.

"The city of Fort Collins has almost no storage," said water conservation specialist Laurie D'Audney. "We don't feel like we can conserve ourselves out of having Halligan."

Consultants retained by the U.S. Army Corps of Engineers currently are developing a draft environmental statement examining the proposed expansion of Halligan and nearby Seaman Reservoir. Fort Collins hopes to complete the Halligan expansion by 2010.

Developed by a Boulder consulting firm, the proposed water conservation plan is aimed at reducing water use in the city from the current estimated 156 gallons a day per person to 140 gallons a day by 2026.

Thanks to current conservation efforts and adoption of a tiered rate structure, city annual water use already has declined from a peak of nearly 10,295 million gallons in 2000 to a low of almost 7,984 million gallons in 2004 during the depths of the drought. That rate has since crept up to 9,268 million gallons in 2006.

The plan found that Fort Collins household water use was less than some similarsized Front Range cities. Still, it remained about a third greater than the amount the Environmental Protection Agency contends could be achieved - leaving plenty of room for improvement.

Employing the recommended conservation measures, the report predicted, would reduce the per capita use even below the targeted amount - saving an estimated 3,974 acre-feet of water per year.

That's a fraction of the total 400,000 acre-feet available for use annually from the Poudre, noted Fort Collins Water Resources Manager Dennis Bode. But he added that it is significant in terms of operating the water collection and distribution system efficiently.

Further, Bode said, the more water saved through conservation, the more that is available for rent to other users, particularly agriculture.

"People will find different reasons to conserve," Bode said.

The plan's implementation was estimated to cost just over \$700,000. Almost half that amount would go toward reducing utility water losses and updating the landscaping and irrigation standards. The greatest water savings was expected to result from the rebates and incentives for commercial conservation efforts, followed by the rebates for high-efficiency toilets and irrigation technology.

D'Audney said additional information is being gathered for inclusion in the final draft of the conservation plan expected to be completed this spring. Following a final review by the water board, the plan will be forwarded to the city council for consideration at an undetermined date.