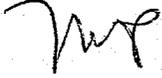


MEMORANDUM

TO: Mayor and City Council 

FROM: Mariel Platt, Sustainability Coordinator

RE: Water Conservation Programs

DATE: May 6, 2013

Hailey has already implemented a few efforts to help curtail excess water use, including installing water meters throughout the city, adopting a conservation-based water rate, requiring water conserving toilets, faucets, and showerheads in all new commercial and residential construction projects (part of the Build Better Program, made mandatory May 1, 2013).

There are still a number of things that can be done to further these efforts and possibly better target the main consumptive use – irrigation. In most cases a multi-pronged strategy is the most comprehensive way to address water conservation. Some possible ideas include the following:

- Use water rate surpluses to create a water conservation rebate fund that would use surplus revenue (beyond the minimum required reserve to expense ratio required by the bond ordinance) to provide rebates to the community to incentivize a multitude of water conservation measures. These could include
 - installing smart controllers,
 - installing moisture sensors,
 - retrofitting water inefficient turf with plant materials with a lesser water demand,
 - retrofitting spray irrigation with drip irrigation systems, and
 - replacing sprinkler heads with more efficient ones.
- Address our own water delivery infrastructure to increase water conservation.
- Create an education and outreach program
- Make changes to the water rate to further increase water conservation. Some ideas include:
 - Base the water rate of off summer usage or create an average between winter and summer usage to more accurately reflect actual water usage and ensure users are placed in the appropriate water rate tier, based on actual usage, not just winter time usage. In many cases, winter time usage is a very small percentage of actual usage; therefore, rates are based on only a small snap shot of yearly water usage, not the entire picture.
 - Increase tiered rate for higher water users to further incentivize water conservation. The fees collected from a surplus could fund a water conservation rebate program.

These are just a few ideas; there are many more examples and tools at local governments disposal that can help reduce water usage and conserve water resources. The degree to which the tools cost, impact users, effect water conservation, etc. are variable and can be tailored to what is deemed important and appropriate for a particular community. Below are just a few examples summarized by EPA's "Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs"

http://www.epa.gov/WaterSense/docs/utilityconservation_508.pdf

Summary of Conservation Case Studies

City	Problem	Approach	Results
Albuquerque, New Mexico	A dry climate and increased population growth put a strain on Albuquerque's water supply.	Albuquerque's Long-Range Water Conservation Strategy Resolution consisted of new conservation-based water rates, a public education program, a high-efficiency plumbing program, landscaping programs, and large-use programs.	Albuquerque's conservation program has successfully slowed the groundwater drawdown so that the level of water demand should stay constant until 2005. Peak demand is down 14% from 1990.
Ashland, Oregon	Accelerated population growth in the 1980s and the expiration of a critical water right created a water supply problem.	Ashland's 1991 water efficiency program consisted of four major components: system leak detection and repair, conservation-based water rates, a showerhead replacement program, and toilet retrofits and replacement.	Ashland's conservation efforts have resulted in water savings of approximately 395,000 gallons per day (16% of winter usage) as well as a reduction in wastewater volume.
Cary, North Carolina	With the population more than doubling during the past 10 years and high water demand during dry, hot summers, the city's water resources were seriously strained.	Cary's water conservation program consists of eight elements: public education, landscape and irrigation codes, toilet flapper rebates, residential audits, conservation rate structure, new homes points program, landscape water budget, and a water reclamation facility.	Cary's water conservation program will reduce retail water production by an estimated 4.6 mgd by the end of 2028, a savings of approximately 16% in retail water production. These savings reduced operating costs and have already allowed Cary to delay two water plant expansions.
Gallitzin, Pennsylvania	By the mid-1990s, the town of Gallitzin was experiencing high water loss, recurring leaks, low pressure, high operational costs, and unstable water entering the system.	Gallitzin developed an accurate meter reading and system map, and a leak detection and repair program.	The results of the program were dramatic. Gallitzin realized an 87% drop in unaccounted-for water, a 59% drop in production, and considerable financial savings.
Gilbert, Arizona	Rapid population growth during the 1980s put a strain on the water supply of this Arizona town located in an arid climate.	Gilbert instituted a multi-faceted water conservation program that included building code requirements, an increasing-block water rate structure, a metering program, public education, and a low water-use landscaping program.	Gilbert has been particularly successful reusing reclaimed water. A new wastewater reclamation plant was built, as well as several recharge ponds that serve as a riparian habitat for a diverse number of species.

If the Council and Mayor like the idea of rebate programs, we already have a template to work from, given the 5 years of energy efficiency rebates the city has offered for both the Community Audit and Retrofit Rebate Program (CARRP) and Save-A-Watt. Administration of a rebate program would be relatively easy, considering the City's experience and history. There are a number of local non-profits with expertise in this area that have expressed an interest to get involved local water conservation programs. This might include providing education, promoting programs, or partnering in some other fashion. There are also many landscaping and irrigation experts in the valley that have shown a great

wishes to consider.

In summary, we have many options and resources to address water conservation in a prioritized and appropriate manner based on Hailey's needs. I recommend the Council and Mayor consider these ideas and others and determine if they would like staff to pursue any of them and to what degree. More information can be compiled and shared at future Council meetings, if the Council and Mayor decide this is a necessary effort.

