

## Developing a Low Water Use Action Plan

Now you are ready to create a low water use action plan specific to your needs. Consider including the following elements:

- Fix all leaks
- Beautify your yard with low-water-use plants
- Modify how you water your yard
- Upgrade to a water-efficient clothes washer
- Upgrade to water-efficient toilets and shower heads

## Remodel Your Yard for Big Water Savings

Hefty water savings can come from changing your yard. Replace lawn with patios, decks, hardscape pathways, game courts, and drought resistant shrubs and perennials. Water-sensitive landscapes can be beautiful and can be installed over multiple years as time and finances allow. If some grass is a must, choose a drought-resistant variety. The City of Hailey offers rebates for lawn removal; see [www.watersmarty.org](http://www.watersmarty.org) for details.

## How to Water More Efficiently

**CYCLE AND SOAK** – watering in increments gives soil time to soak up water. Instead of one, 14-minute cycle, irrigate for 7 minutes, then let the system cycle through the remaining zones and return for another 7 minutes. Water, rest, water.

**USE A SMART IRRIGATION CONTROLLER** – this type of controller acts like a thermostat for your sprinkler system by telling it when to turn on and off, to save water. The City of Hailey offers rebates for smart controllers; see [www.watersmarty.org](http://www.watersmarty.org) for details.

**RETROFIT POP-UP SPRAY HEADS WITH ROTARY NOZZLES** – Easy-to-install rotary nozzles fit on most pop-up spray heads. Because rotary nozzles apply water more slowly, more water is able to soak into the soil. Other benefits include reduced runoff on slopes, increased radius range, less water flow per minute, and better coverage.

**How to Tell the Age and Flush Volume of Your Toilet** – If your home was built after 1992, then the toilet likely uses 1.6 gallons per flush (gpf), as required by code. From 1980-1992, toilets typically use 3.5 gpf. Prior to 1980, toilets use 5 to 7 gpf. There are two places on your toilet to check for age or flush volume:

- The date the toilet was made should be stamped on the inside of the tank lid.
- The gallons per flush rate is stamped on the bowl rim.

## Resources

### Websites:

Water Smarty Rebates: [www.watersmarty.org](http://www.watersmarty.org)  
 Denver Water: [www.denverwater.org](http://www.denverwater.org)  
 EPA WaterSense Program: [www.epa.gov/watersense](http://www.epa.gov/watersense)  
 Idaho Native Plant Society: [www.idahonativeplants.org](http://www.idahonativeplants.org)  
 Water – Use It Wisely: [www.wateruseitwisely.com](http://www.wateruseitwisely.com)  
 Irrigation Tutorials: [www.irrigationtutorials.com](http://www.irrigationtutorials.com)  
 Wood River Land Trust: [www.woodriverlandtrust.org](http://www.woodriverlandtrust.org)  
 U.S. Composting Council: [www.compostingcouncil.org](http://www.compostingcouncil.org)

### Public Gardens:

E.W. Fox Demonstration Garden: corner of Fox Acres Road and Foxmoor Drive  
 Sawtooth Botanical Garden: 11 Gimlet Road  
 Idaho Botanical Garden: 2355 Old Penitentiary Road, Boise

**WATCH YOUR SPRINKLER SYSTEM** – check your system each spring when you first turn it on. After each mowing, check to ensure sprinkler heads haven't been broken or knocked out of alignment. Re-align any heads that are spraying too high in the air or across pavement. Check for system leaks and repair them as soon as possible.

**USE SOAKER HOSES OR DRIP IRRIGATION** – Consider adding these water-saving systems for flower beds, shrubs and trees.

## Water-Efficient Clothes Washers

An old clothes washer can use 40 to 50 gallons per load. If you are planning to replace an old washing machine, a new front-loading or horizontal axis machine uses as little as 10 gallons per load.

## Water-Efficient Toilets and Shower Heads

Toilets sold today use as little as 0.8 gallons per flush. Old showerheads (pre-1993) use 3 to 8 gallons of water per minute. High-efficiency showerheads use no more than 2.0 gallons per minute; some models use as little as 1.5 gallons per minute.



# LOW WATER USE ACTION PLAN

A Guide for City of Hailey Water Customers and Homeowners



**W**ater rates rise, drought plagues the West, and water right disputes lead to cuts in available water. What's the average person to do? One thing you can do is resolve to use less water. It will save money on your utility bill and conserve a valuable resource.

## Getting Started

This guide will help you to:

- Understand your water bill
- Look for water loss and identify savings opportunities
- Compare your water use to other customers
- Develop a low water use action plan specific to your needs
- Explore further water conservation resources

## Understanding Your Water Bill

Your water bill is a good source of information that takes only moments to read. The two examples below can help you determine just how much water you are using.

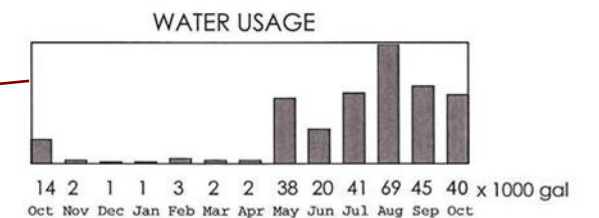
### WHERE DOES ALL THAT WATER GO?

- In the summer, in a typical household, most of your water goes to outdoor watering. Your home lawn sprinkler system uses about 10 gallons per minute. A broken sprinkler head can lose up to 12 gallons per minute.
- A 1/2" diameter garden hose delivers 5 to 8 gallons of water per minute or over 300 gallons of water per hour.
- Toilets commonly account for the highest percentage of water used indoors.
- A fixture with a slow-dripping leak can use as much as 450 gallons per month.
- Personal consumption is about 5% of your total water usage.

METER READINGS		GALLONS USED
PREVIOUS	PRESENT	
1,764	1,804	WATER 40,000

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There is a table at the top of the bill that shows the previous and current monthly meter reading; the difference between these numbers (x 1000) equals the gallons used.



Usage for the current month and the previous 11 months is shown on the first page of your bill. This information may be useful in determining if your current usage is higher than it typically has been in the past.

## Look for Water Loss and Identify Savings Opportunities

Leaks account for about 12% of the average American home's indoor water use. So it makes sense to fix those leaks and reap easy water savings.



### CHECKING FOR TOILET LEAKS

- Remove tank cover. Is the water level in the tank too high and spilling into the overflow tube? If it is you have an improperly adjusted or broken fill (ball cock) valve.
- Place a leak detection tablet in the toilet tank. (Alternative method: turn water off at toilet; if tank drains, you have a leak.)
- After 15 minutes, check the water in the bowl for color.
- If you see color in the bowl, you have a silent leak. This is the most common type of toilet leak, and can often be repaired by changing the flapper.

### CHECKING FOR FAUCET LEAKS

- Turn off the faucet completely and place a glass under the faucet.
- Check the glass in 15 minutes. 1 cup = 300 gallons a month.
- Many faucet leaks can be repaired by the homeowner; otherwise, call a professional.



### CHECKING FOR LANDSCAPE LEAKS

- Check for leaks around the hose and sprinkler connection.
- Look for standing water on the surface near irrigation system spray heads.
- Check for any sticky sprinkler valves; they can stick open.
- If you see areas of the lawn that are brighter green than others, you may have a leak.
- Check that your irrigation timer is programmed properly (sprinklers watering too often and/or too long). Reprogramming may be necessary if the power has been off.

### CHECKING FOR MISCELLANEOUS PLUMBING AND SERVICE LINE LEAKS

- Check the piping in your crawl space, and any other visible piping.
- Check your water heater and water softening system.
- Check for wet spots in your yard between the meter vault and your house.
- Check for water leaking into your crawl space or basement near the location where the service line enters the house.



### IDENTIFYING HARD TO FIND LEAKS

Some leaks can be very difficult to find. If you have done as much as possible on your own, but still feel you must have a leak somewhere, you have a couple of options:

- The City of Hailey can help determine if your leak is in the house, in the service line, or in the irrigation system. This service relies on the property owner to shut off the water main under the house and shut off the irrigation system main. City personnel will monitor the water meter during the leak check process.
- To pinpoint the exact location of a leak, you may need to call a professional leak detection service and/or a plumber.

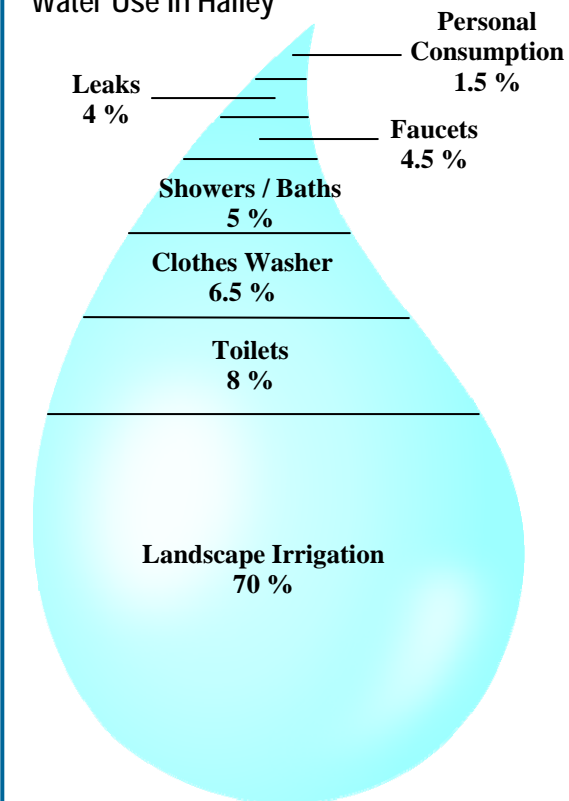
	Leak Size	Gallons / Minute	Gallons / Day	Gallons / Mo
●●●	Dripping leak	.01	15	450
●	1/32 in. leak	.18	264	7,920
●	1/16 in. leak	.65	943	28,300
●	1/8 in. leak	2.6	3,806	114,200
●	1/4 in. leak	10.6	15,226	456,800
●	1/2 in. leak	42.3	60,900	1,827,000



## Compare Your Water Use to See Where You Stand

Usage during the winter months mainly reflects the demand for water used inside. That usage will remain fairly constant unless you implement some indoor water-saving strategies. The seasonal demand for irrigation, particularly in the arid West, will cause higher usage during the summer months.

### Typical Annual Average Domestic Water Use In Hailey



The annual average residential water use in Hailey is 164 gallons per person per day, but may be 245 gallons per day (or more) for a high-use household or 115 gallons per day (or less) for a more water efficient household. These figures are rough estimates and can vary greatly based upon factors such as:

- Number of people living in or visiting the home.
- Size and type of landscaping and how it is irrigated.
- Water efficiency of plumbing fixtures.
- Personal habits.
- Whether leaks are present.

Using the water bill on page one, the following example shows how to figure out your average daily usage per person per day for any given month.

$$40,000 \div 4 \div 29 = 345$$

Gallons used each month	÷	# of people in household	÷	Days in billing cycle	=	Gallons per person per day
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### Potential Causes of High Water Use

- Leaking toilet, or a toilet that continues to run after being flushed
- Dripping faucet (indoor or out) or leaking hot water heater
- Leak in the automatic irrigation system
- Leak in the water service line between the meter and your home
- Watering the lawn, new grass, or trees; or open hose bib
- Change in the number of people in the household (guests, etc.)
- Caretaker watering the property or changing the irrigation system settings
- Automatic devices such as irrigation controllers and water softening systems working improperly
- Seasonal change in water use habits

