## Our City

Consider these numbers 12, 88, 134, 168, 319 and 453 as you read. Sorry, they aren't winning lottery numbers.

The Natural Resources Conservation Service just released the first water supply outlook report for the 2016 water year. Precipitation since the water year started on October 1, 2015, varies across the state with the majority of the watershed basins at 95 to 175% of normal. "January 15th marks winter's halfway point which is when Mother Nature has usually deposited half of the winter's snowfall in our mountains," said Ron Abramovich, Water Supply Specialist with the Idaho Natural Resources Conservation Service. "So far Idaho snowpacks are off to a great start this year thanks to El Nino. Most basins are between from 110 to 190% of average, although several basins are just below normal."

Typically north Idaho receives more precipitation than southern Idaho; however, this year the highest snowpack is in the state's Owyhee and Bruneau basins with close to 150% of average. The lowest snowpacks are between 90 and 99% of average in the Panhandle Region, Clearwater, Upper Snake and Bear River basins. This snow pattern is the opposite of the past two years which saw better snowfall in the basins along the continental divide. Based on Idaho's Surface Water Supply Index, water supplies around the state should be adequate with some exceptions for the central Idaho basins. With early snow accumulation generally higher across most of the state, water supplies look hopeful, but due to lack of snow recently, I still have drought concerns. According to Abramovich, "We're in the fourth inning of the game. With half the winter still to come, expect the water supply outlook to change."

Keep in mind that surface water runoffhelps resupply the Snake River Plain Aquifer from which we pump our City water. Also consider that water averages are calculated as 30 year averages. According to the USGS statewide the 1981 to 2010 surface water runoff average is 11% less than the 1971 to 2000 average. Today's average is about 89% of that of 10 years ago. The average storage levels in American Falls reservoir are six percent less. Then consider that from 2005 through 2015 the average per capita use of water in the City of American Falls is 453 gallons per day (GPD). If irrigation water is subtracted from the water we each use in American Falls the average is around 134GPD.Interestingly, my Honors Biology class did a personal water use study last fall that is well in line with the above numbers. Molly Maupinof the USGS figures the State average including irrigation is 168 GPD per capita. Why are we so out of line even within our own State? As the City looks for ways to reduce our pumping of water by 12% in accordance to State mandates, the how becomes paramount.

According to the USGS Water Science School, each person uses about 80-100 gallons (<u>88</u> U.S. average) of water per day in the United States. Idaho is the highest per capita user of water in the country. Would you be surprised to know that the largest use of household water is to flush the toilet, and after that, to take baths and showers? That is why, in these days of water conservation, we are starting to see toilets and showers that use less water. Across the country many local governments now have laws that specify that water faucets, toilets, and showers only allow a certain amount of water flow per minute. Water agencies in some areas even offer rebates if you install a water-efficient toilet or appliance.

The data that follows is very general in nature. It is intended to give you an idea of your water use (USGS Water Science School):Toilet flush: Older toilets 3~4 gallons. Most new toilets use 1.6 gallons per flush.Tip: Old toilet? Check for toilet leaks! Adjust the water level as low as you can.

Bath / Shower: A "full tub" varies, of course, but 36 gallons is a good average amount.Tip: Taking a shower instead of a bath should save a good bit of water.Old showers used about 5 gal/min.; water-saving shower heads about 2 gal/min.

Teeth brushing: 1-2 gallon. Tip: Simply turn the faucet off when brushing.

Dishwasher: 6-16 gallons. Newer, EnergyStar models use 6 gallons or less per wash cycle, whereas older dishwashers might use up to 16 gallons per cycle. Tip: EnergyStar dishwashers not only save a lot of water but also save electricity.

Dishwashing by hand: About 8-27 gallons. Tip: Efficient hand-washing techniques include installing an aerator in your faucet head and scraping food off, soaking dishes in a basin of soapy water before getting started, and not letting the water run while you wash every dish. And it's best to have two basins to work in--one with hot, soapy water and the other with warm water for a rinse.

Clothes washer: 25 gallons/load for newer washers. Older models might use 40 gallons/load.Tip: EnergyStar clothes washers not only save a lot of water but also save electricity.

Outdoor watering: 2 gallons per minute, depending on the force of your outdoor faucet. This may not sound like too much but the large size of lawns and yards means outdoor water use can be a significant use of water. We use <u>319</u> gallons per day for lawn and garden irrigation. Which means the average property owner waters about 2.66 hours per day; granted that the City and School District are our largest users. The City and School District are not always the most efficient water users either. Speaking for the City we have to do better. Speaking as someone who drags a hose from place to place and manually turns water on and off as is convenient I could be a lot more efficient with a sprinkler system that watered at night.

There is nothing I can do that has an immediate impact on our local weather, snow pack or reservoir levels; we are at the mercy of a much larger dynamic. However, as the City Council begins to deliberate and revise our Strategic Plan, the ideas generated therein could make a difference in our overall use of water. As I researched this column a few things caught my eye as a means to incentivize homeowners to conserve on their water use. Specifically, a discount on the water rates for the installation of 1.6 gal toilets, water efficient appliances and maybe a one-time rebate for installing a water meter that would allow property owners to monitor their own water use. I have not presented any of these ideas to the Council but I plan to as we meet for our first Strategic Planning meeting on February 3<sup>rd</sup>. With still more than half the winter ahead of us, I too expect our water supply outlook to change and will continue to hope for the best and plan for the worst. I know I have written about it before but given our history, water use in American Falls must become more efficient. I hope you are able to work with me to make it happen.

Until next week...