

Water Use in School Districts

- Terry Shoemaker, Utah School Superintendents Executive Director
- Larry Bergeson, Superintendent of Washington County School District
- Christopher Eppler, Energy Specialist, Canyons School District

Conservation Efforts

- Smart clocks and systems (Weathertrac)
- Use of well water to irrigate
- Water sensors in fields
- Installing turf athletic fields
- Xeriscape landscaping in non-play areas
- Water reductions required by municipalities
- Delaying sprinkler starts, ending sprinkling earlier
- Installing low-flow faucets and toilets

More Conservation efforts

- Installing master valves on main lines
- Maintain cooling towers
- Reduce the acreage of shrub beds
- More watering at night (sometimes not allowed)
- Use additional personnel to monitor
- Taller mowing heights
- Reducing water days and run times
- Fertilize more often
- Monitoring abnormalities in billing cycles
- Custodial equipment that reduce water usage

The Increasing Cost of Tiered Water Rates

Sunrise Elementary in Sandy City

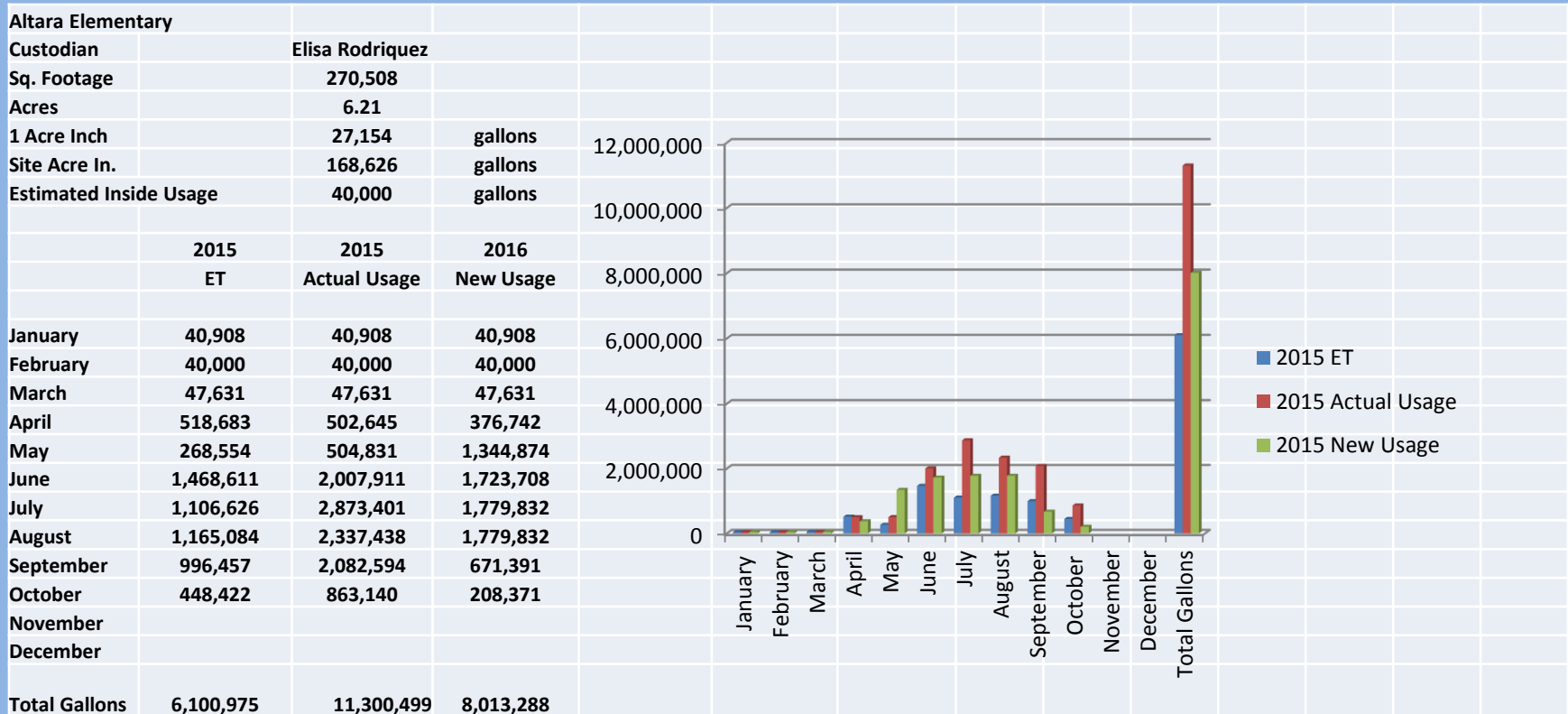
Comparison FY 2014 and 2018

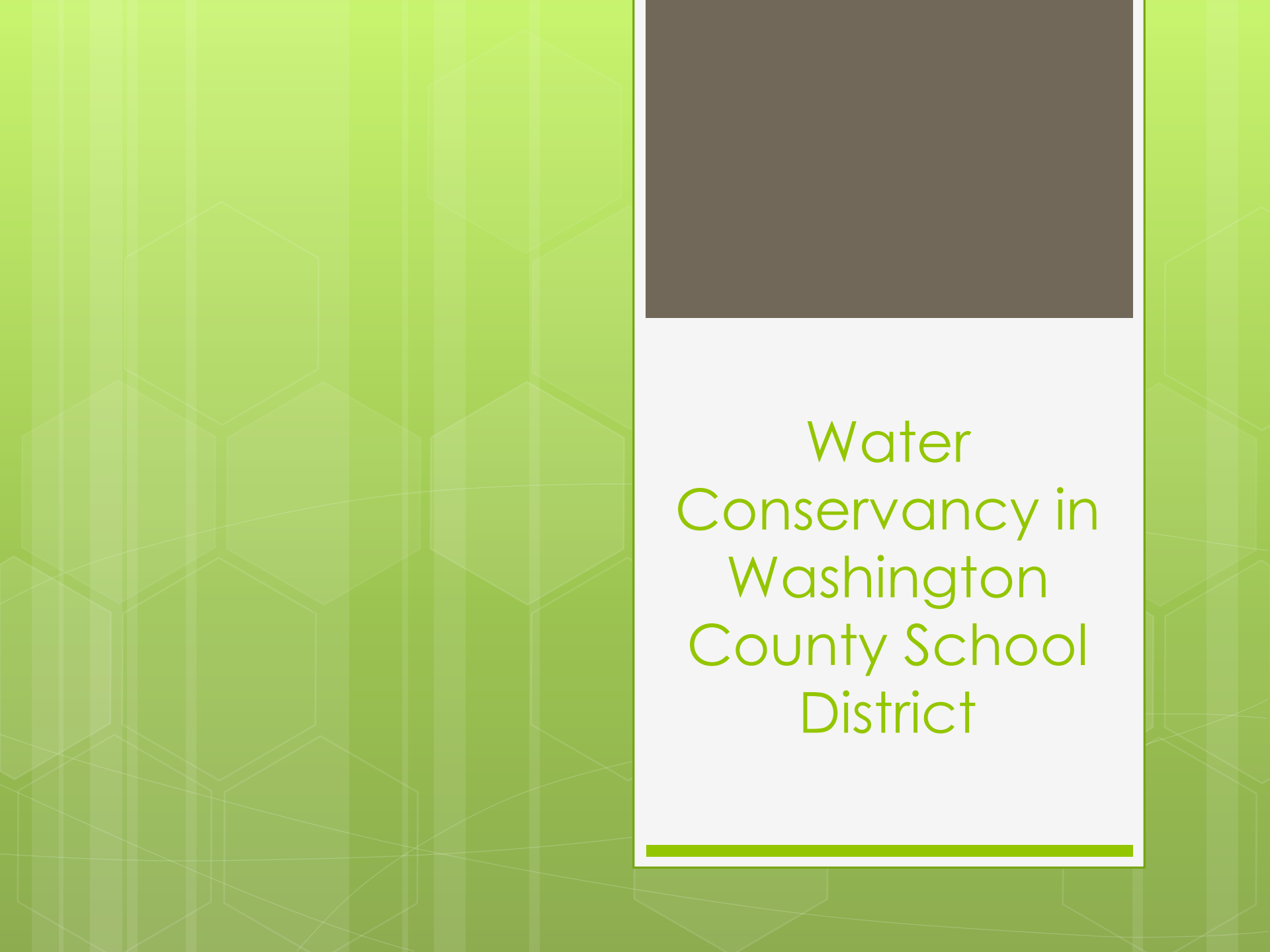
Up 18.4%

| 2014 Water Bill Breakdown | | | | | |
|---------------------------|----------------------|----------------|--------|--------------|-------------------|
| Block | Max Gallons | Range (gal) | Rate | Per Unit | Estimated Cost |
| Basic Fee | | flat Rate | 299.25 | | 299.25 |
| Schools | | >6000 | \$2.39 | 1,000 | \$5,219.76 |
| | | | | Total | \$5,519.01 |
| | | | | | |
| | | | | | |
| 2018 Water Bill Breakdown | | | | | |
| Block | Range (gal) | Gallons Billed | Rate | Per Unit | Estimated Cost |
| Basic Fee | flat rate | | 123.34 | | 123.34 |
| Block 1 | <=80,000 | 80,000 | \$1.64 | 1,000 | \$131.20 |
| Block 2 | 80,000 to 740,000 | 660,000 | \$2.53 | 1,000 | \$1,669.80 |
| Block 3 | 740,000 to 1,480,000 | 740,000 | \$2.98 | 1,000 | \$2,205.20 |
| Block 4 | > 1,480,000 | 704,000 | \$3.42 | 1,000 | \$2,407.68 |
| | | | | Total | \$6,537.22 |

Student Intern Program

Step 5: Compare Estimated Turf Water Requirement to Actual Water Use





Water
Conservancy in
Washington
County School
District

What are we doing?

- 5-year program to replace irrigation control systems with water smart controllers. This will enable us to utilize the latest technology for landscaping
- Increasing irrigation employees and requiring employees to attend education programs and attain certifications in utilizing weather stations and moisture sensors to minimize water usage.
- New landscape construction using significant amounts of organic matter to ensure water is retained in soil and root zone.
- New high school and middle school will be using well water to water all large turf areas.

What are we doing?

- Replaced 287 toilets from 3.5 gallon flush to 1.6 gallon flush as well as 100 urinal flush valves from 1.5 gallon flush to 1 gallon flush.
- Implementation of energy program – District has added about a million square feet to our water usage and stayed consistent.

2018 Fees

Fees may differ based on the size of the irrigated area and other factors. More specific quotes are available by calling the district at 435.673.3617.

Culinary Water Impact Fees

\$8,417 3/4" meter

\$18,181 1" meter

\$60,350 1.5" meter

\$97,132 2" meter

Information from: www.wcwcd.org/business-growth/impact-fees/ -
used with permission of WCWCD.

General Water Service Rate

| Monthly Base Charge | |
|---------------------|----------------|
| Meter Size | Monthly Charge |
| 5/8 X 3/4" & 3/4" | 24.72 |
| 1" | 52.03 |
| 1-1/2" | 96.80 |
| 2" | 186.34 |
| 3" | 332.15 |
| 4" | 699.38 |
| 6" | 1439.90 |

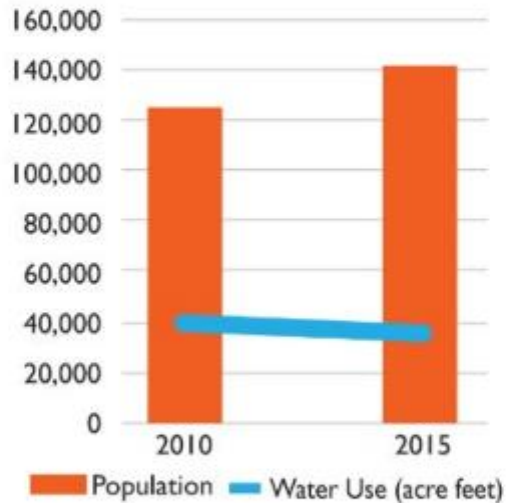
Consumptive Use Blocks for 3/4" Meters

| Water Use Per Month | Costs Per 1,000 Gallons Used |
|---------------------|------------------------------|
| 0-5,000 | Included in base charge |
| 5,000-10,000 | \$1.28 |
| 10,000-15,000 | \$1.40 |
| 15,000-20,000 | \$1.50 |
| 20,000-25,000 | \$1.61 |
| 25,000-30,000 | \$1.72 |
| 30,000-35,000 | \$1.83 |
| 35,000-40,000 | \$2.15 |
| 40,000-45,000 | \$2.70 |
| 45,000 and above | \$3.17 |

Information from: <https://www.sgcity.org/utilities/utilityrates> - Used with permission of WCWCD.

*Population and potable water use of WCWCD's municipal customers.

Population Up. Water Use Down.*



↑ 13% increase in population
↓ 9% decrease in water use

*Population and potable water use of WCWCD's municipal customers.

wcwcd.org

WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT



High fives, Washington County!

increased in population, but **decreased our**
ir use by more than **a billion gallons.**

Keep up the good work.
wcwcd.org

Cut water use by 1 billion gallons? Wow!

Information from: Washington County Water Conservancy District krathje@wcwcd.utah.gov via mail200.atl81.rsgsv.net, karry@wcwcd.gov via mail86.us4.mcsv.net – used with permission of WCWCD.