

A scenic view of a river with a large water tower in the background and a bridge in the distance. The sky is blue with white clouds. The river is surrounded by green vegetation and trees.

# Protecting Our Water

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City of Spokane  
March 23, 2016



# Spokane's Water Department

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- Third largest water system in the state of Washington
- Provides water service to the residents in City limits
- 93.6% of water accounts are in the City
  - Rest in Spokane County, Airway Heights & Spokane Valley
- Delivers up to 180 million gallons of water per day
- 1,000 miles of water mains
- Owns Upriver Dam, providing power for water delivery



Aquifer:  
Plentiful, Clean Water  
Serves a Large Region  
Exchanges Water with the River



## Why Conserve?

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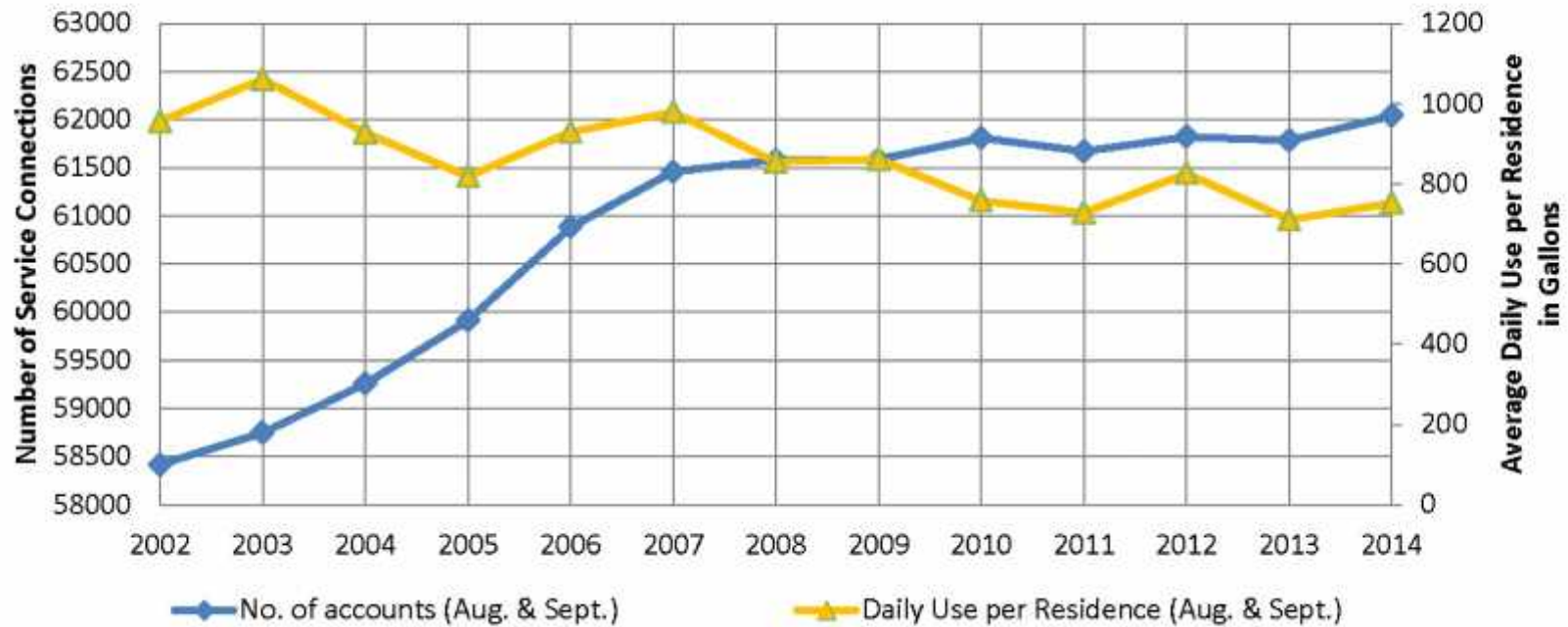
- Cheaper to conserve than to expand our water distribution system
- Less flow going to our wastewater treatment plant – Saves \$ and protects capacity
- Protect flows in the Spokane River – exchange between the Aquifer and the River
- Allow for growth
- It's the right thing to do



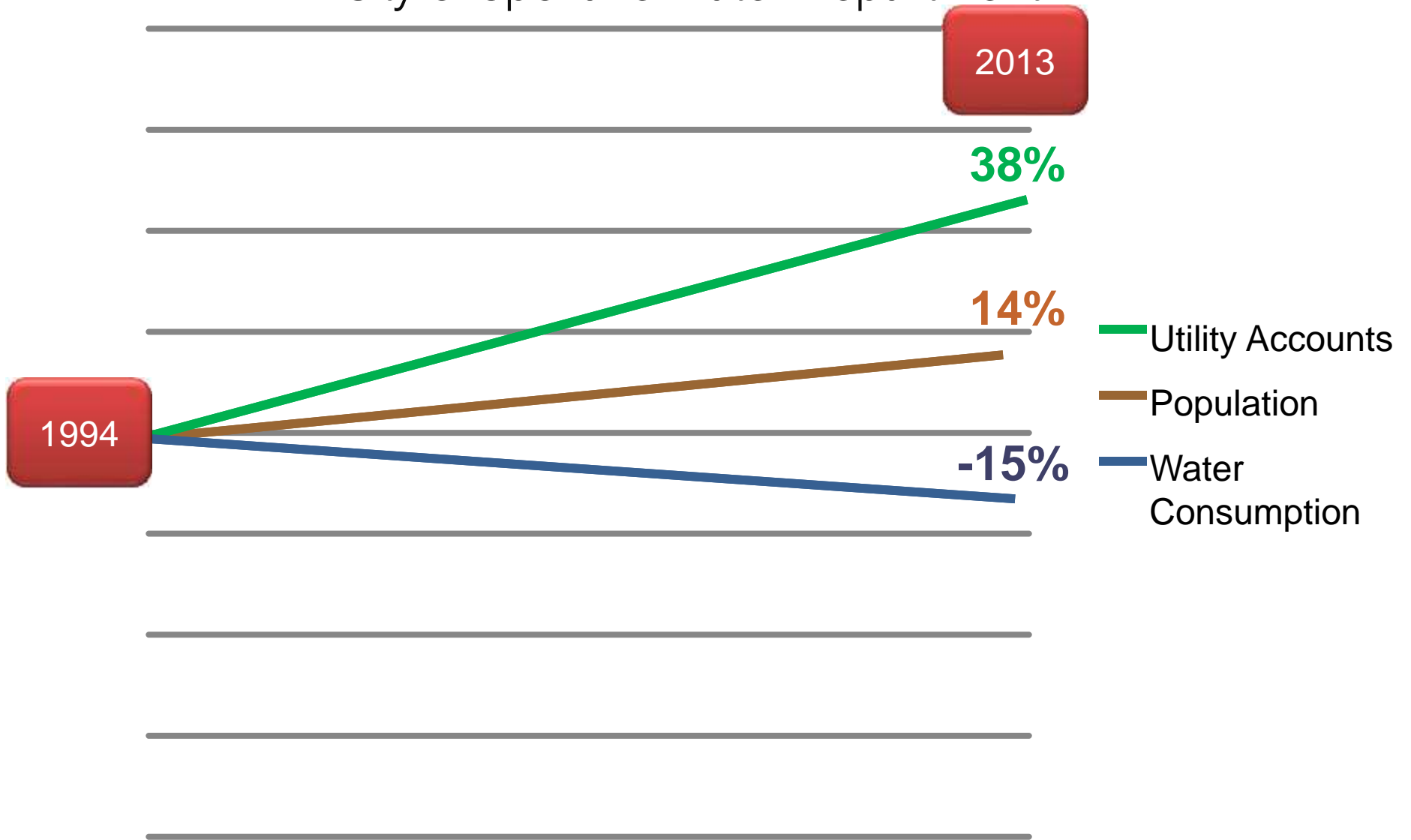


# Trends in Residential Water Use

Summer (Aug & Sept) 2002 to 2014  
Water Usage in Single Family Residences & Number of Accounts



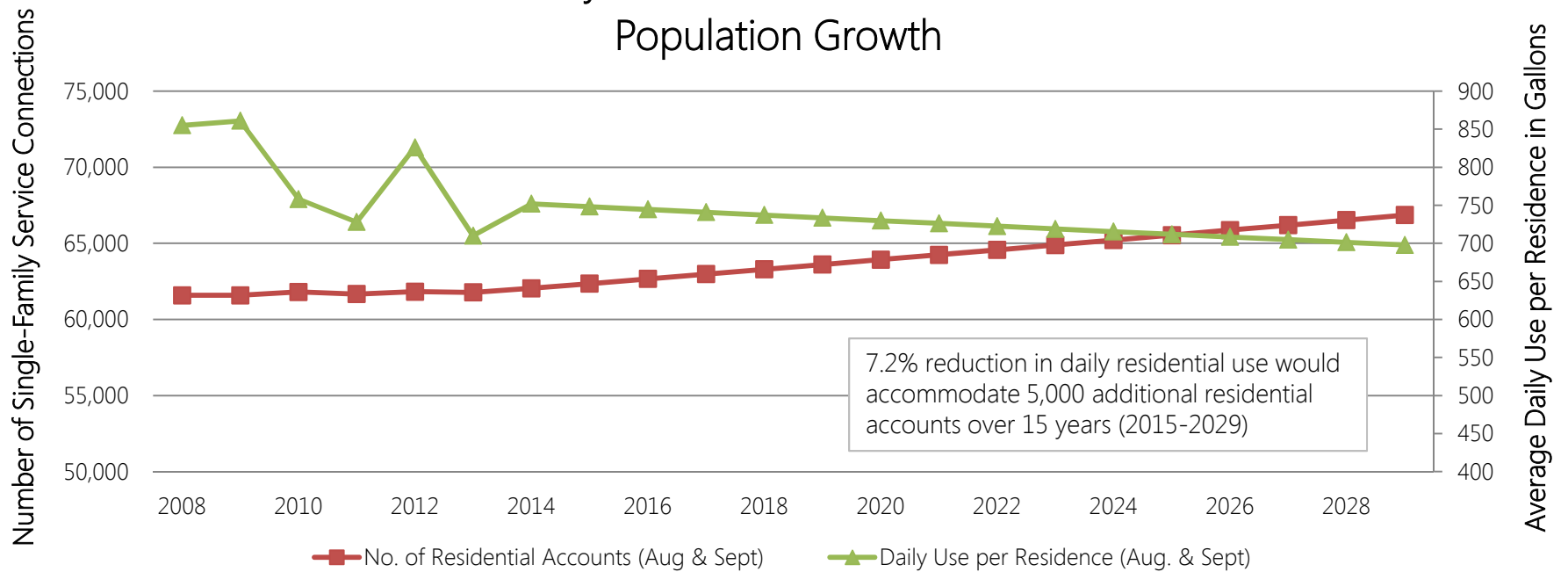
# Changes in Customer Accounts & Water Use City of Spokane Water Department





# Utilities Forecast

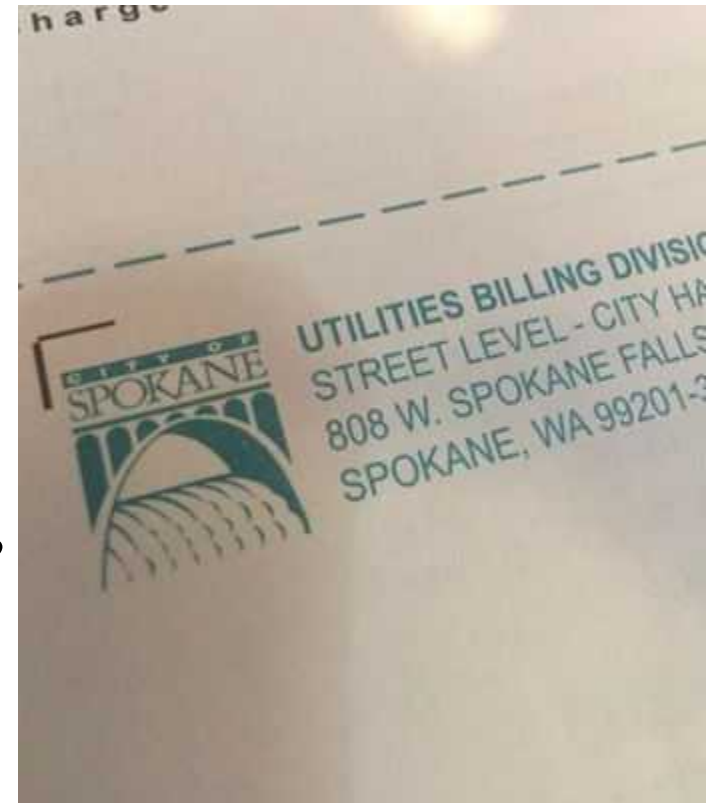
## Reduction in Daily Summer Water Use to Accommodate Population Growth



## How do we get there?

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- Financial Incentives for customers
- Public Education and Outreach
- Reduce Distribution System Loss
- Invest in Upgrading Inefficient City irrigation systems
- Examine water use at City facilities, including wastewater treatment facility







## Water Conservation Goals

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- Reduce **indoor residential use** by one half percent (0.5%) on average for residential connections annually.
- Reduce **outdoor residential use** by two percent (2%) on average for residential connections annually.
- Reduce metered **outdoor irrigation for commercial/industrial** use by two percent (2%) annually.
- Reduce **outdoor metered government use** by two percent (2%) for governmental connections annually.



# Financial Incentives

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## Tiered water consumption rate structure

Tier	Usage	Units	Inside City Rate*
1	First 4,500 gallons	1- 6 units	\$ 0.29
2	Next 3,000 gallons	7-10 units	\$ 0.62
3	Next 26,100 gallons	11-45 units	\$ 0.83
4	Over 33,600 gallons	Over 45 units	\$ 1.07

\*Cost per unit of water; unit equals 748 gallons

- Water usage charges are in addition to base rate
- Most progressive tiered structure in our region



# Financial Incentives

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## Wastewater Credit

\$5/mo credit for lowest 20% of indoor water users

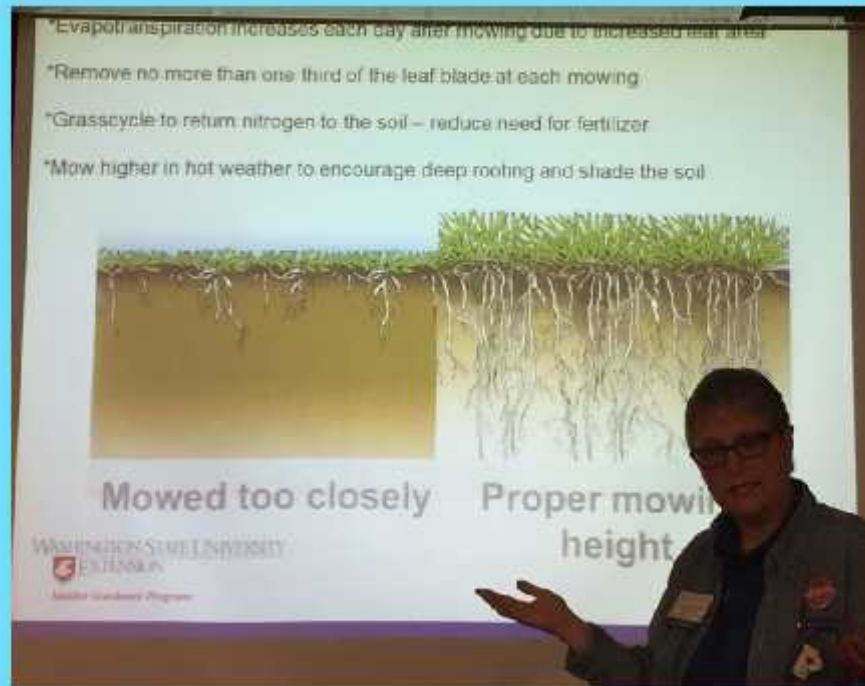
	2015	2016
Usage to qualify for credit*	11 units of water or less	11 units of water or less

\*Total usage over four winter months.

- First implemented in 2015
- Gives citizens some control over their monthly costs
- Recalculated every year



# Education & Outreach



An Educational Interactive that calculates personal and family water usage.



# Education & Outreach

## Soaker Hoses

Good for your **Garden**,  
your **Wallet**, and  
our **Environment**




**SLOW THE FLOW**  
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A program of the City of Spokane




## Driplines

Tips for Installing Drip  
Irrigation at Home



- \* Eliminate runoff on sidewalks and paved areas
- \* Prevent overspray onto windows, walls, and fences
- \* Solution for: narrow, curved, sloped, and steep areas

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# Irrigation Assessments

- Offering free sprinkler system reviews to customers



## Beat the Heat This Summer!

**FREE Sprinkler System Reviews For Customers of the City of Spokane Water Department**

### Using more water than you should?

Sprinkler systems can waste a tremendous amount of water if they're not working properly and it is often difficult for someone not trained in this field to detect the problems. That's why the City of Spokane offers customers a free irrigation assessment, which features a visit to your property from an Irrigation Specialist, a professional trained and committed to efficient water use management.

### What's involved in the review?

The Irrigation Specialist will assist customers in learning about their control clock system, current scheduling methods, and will provide a test run of the irrigation system to identify any maintenance issues. They can also address many other concerns that may exist in one's particular landscape. All important steps in meeting your property's watering needs, potentially saving you water and money.

A limited number of the 45 minute appointments are available. Sign Up Today!

[waterstewardship@spokanecity.org](mailto:waterstewardship@spokanecity.org)

509.742.8144



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a program of the City of Spokane [www.waterstewardship.org](http://www.waterstewardship.org)



## Distribution System Loss (DSL)

	2013	2014	2015	Average
DSL percent	17.9%	17.8%	13.4%	16.4%
DSL volume*	3,787,117	4,032,455	3,206,643	3,673,402

\*Gallons x 1,000

- Dedicated Leak Detection Program
- Pipe replacement
- Better define the problem through metering, data
  - More accurate metering at source wells, booster stations
  - Replace residential meters over time, recalibrate commercial meters
  - More accurate water use measure when flushing lines, testing mains, street cleaning, firefighting, completing construction uses

# Upgrade Inefficient City Irrigation Systems

- 2015 – Made investments in Franklin & Corbin parks
- 2016 – Will invest dollars from additional water sales in upgrades
- Considering Indian Canyon GC, other parks





## Look for Other Opportunities

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- City's Riverside Park Water Reclamation Facility is one of the largest water users in the community
- Looking at conducting a water audit to determine ways to reduce water use and optimize use of gray water





Thank you!

