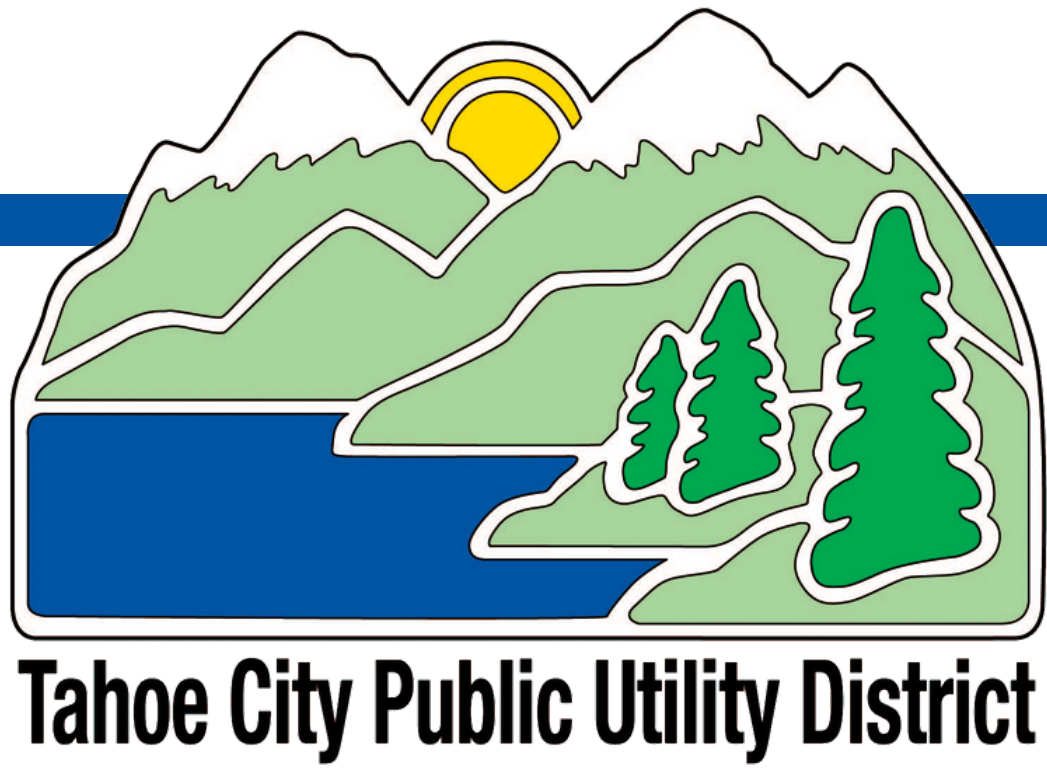


# Tahoe Cedars and Madden Creek Water Service Areas Infrastructure Improvement Charge



## IMPROVED FIRE HYDRANT COVERAGE

### Water Systems Combined

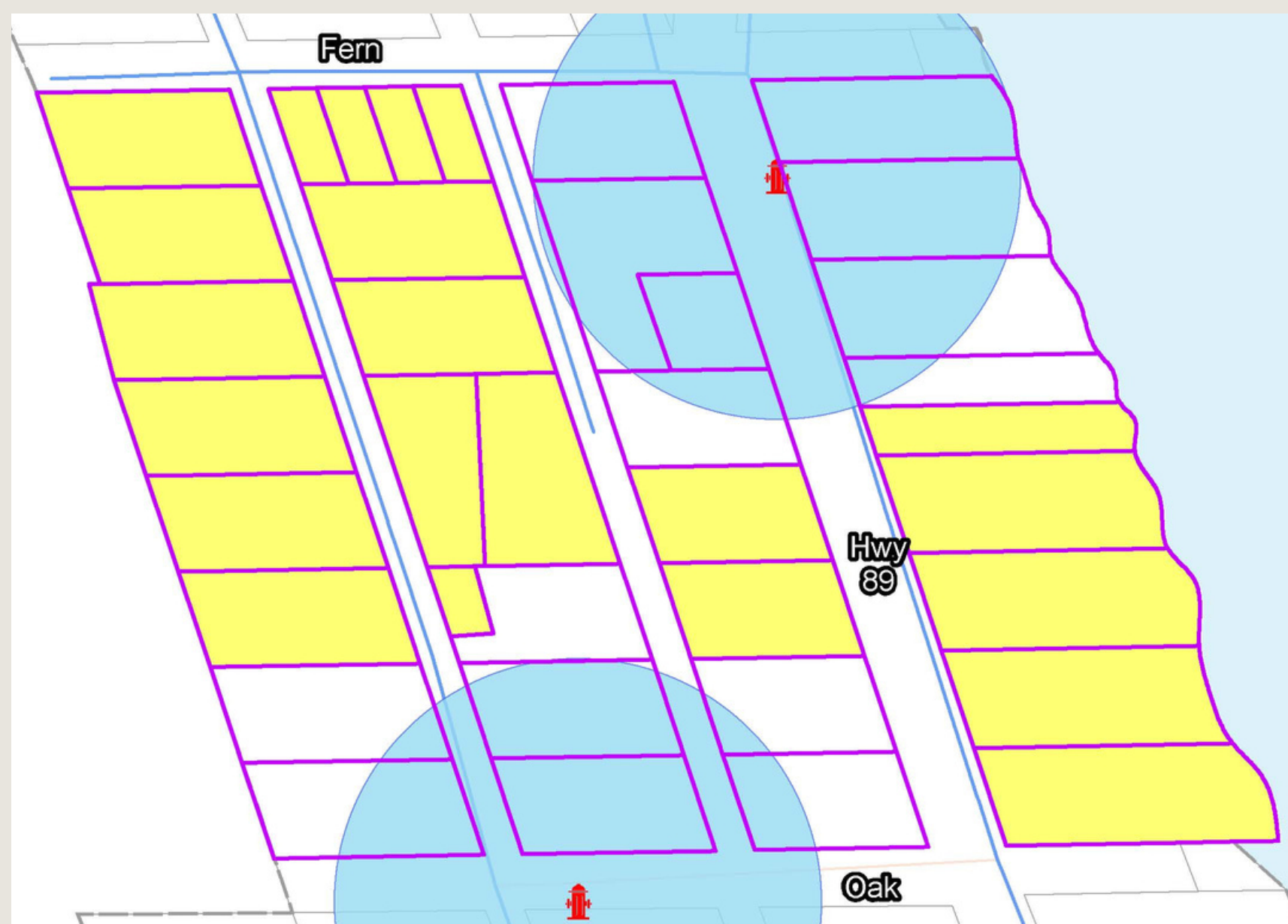
**Existing**

97

**Planned**

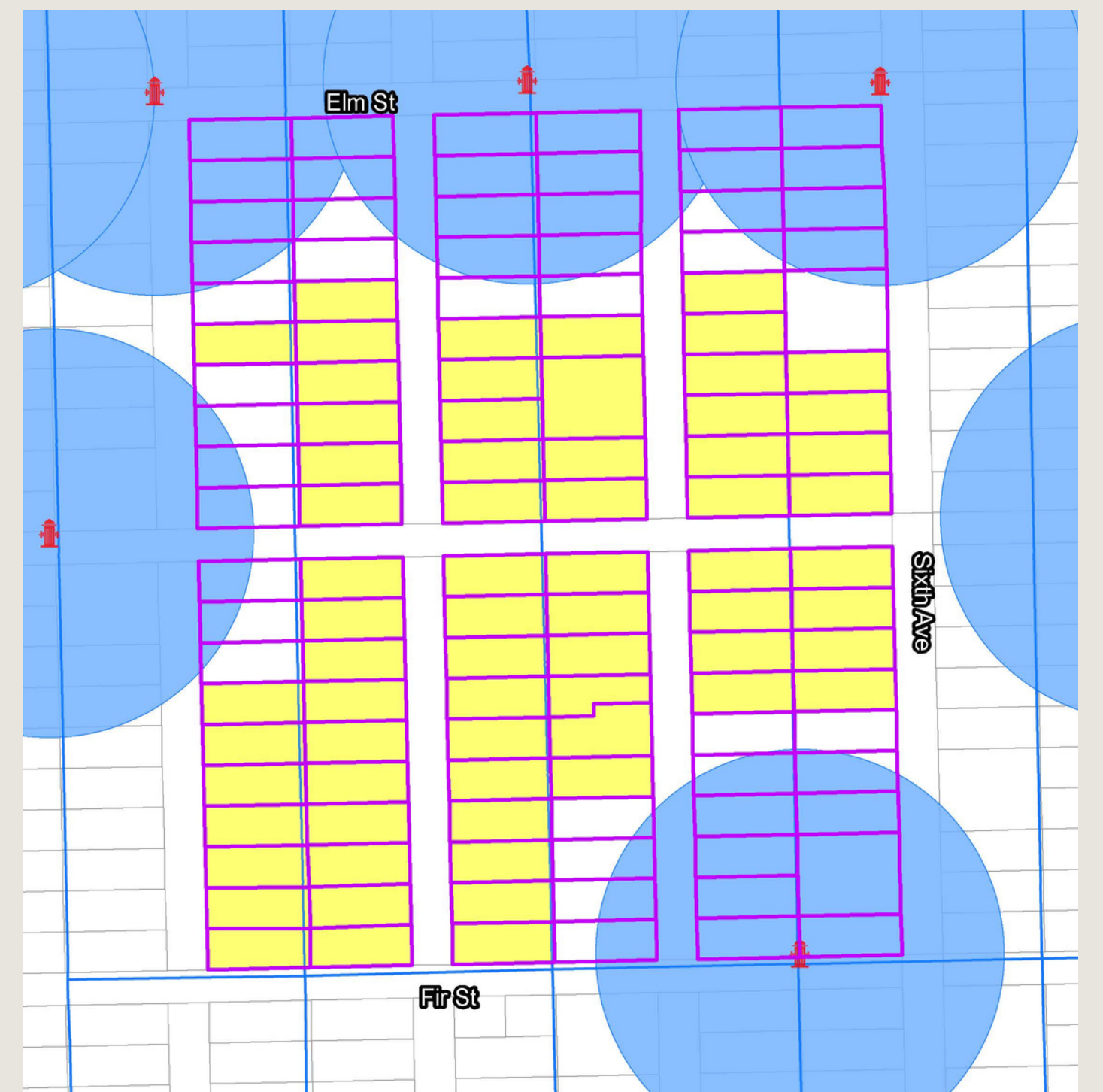
Adding 145 for  
a total of 242

Madden Creek Area Example



37 Project Parcels  
22 Parcels outside of hydrant coverage = 59%

Tahoe Cedars Area Example



117 Project Parcels  
67 Parcels outside of hydrant coverage = 57%

### Water systems combined:

626 parcels out of 1,742 are not covered by existing fire hydrants (within 500' buffer).

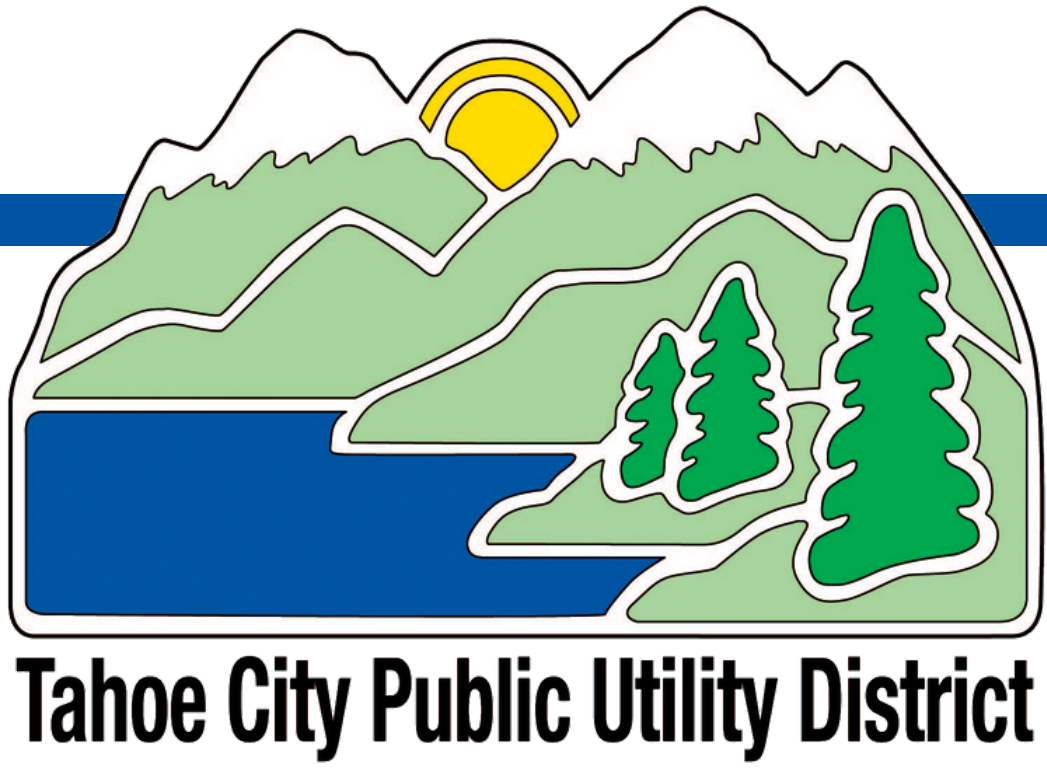


Modern fire protection standards for residential and commercial areas is every 400 to 600 ft.

[www.tcpud.org](http://www.tcpud.org)

*Building a healthy mountain community through our passion for public service.*

# Tahoe Cedars and Madden Creek Water Service Areas Infrastructure Improvement Charge



## UPSIZED WATER MAINS

### Water Systems Combined

#### Existing

Diameter	Length
1"	3,740 linear feet (.7 miles)
1.5" to 2"	16,990 linear feet (3.2 miles)
4"	34,850 linear feet (6.6 miles)
6"	35,710 linear feet (6.7 miles)
8"	0
12"	1,990 linear feet (.3 miles)

#### Planned

Diameter	Length
8"	95,090 linear feet (18 miles)
12"	5,942 linear feet (1.1 miles)



**Existing 4"**  
500 gallons per minute

**Improved 8"**  
1,500 gallons per minute

Properly sized water mains ensure adequate flows for firefighting and improved protection for a community.



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# Water Infrastructure for Fire Suppression

## Caldor Fire (2021)

Improvements to hydrant spacing and water mains were key to protecting life and property in South Lake Tahoe when the 2021 Caldor Fire crested the ridge above Christmas Valley. **A complete network of fire hydrants appropriately spaced throughout the community and connected to large water mains were capable of delivering sufficient volumes of water.**



Working together to create fire-resilient communities in the Lake Tahoe Basin.

The **Tahoe Water for Fire Suppression Partnership** is a bi-state collaboration of Lake Tahoe Basin water agencies formed in response to the 2007 Anzora Fire.

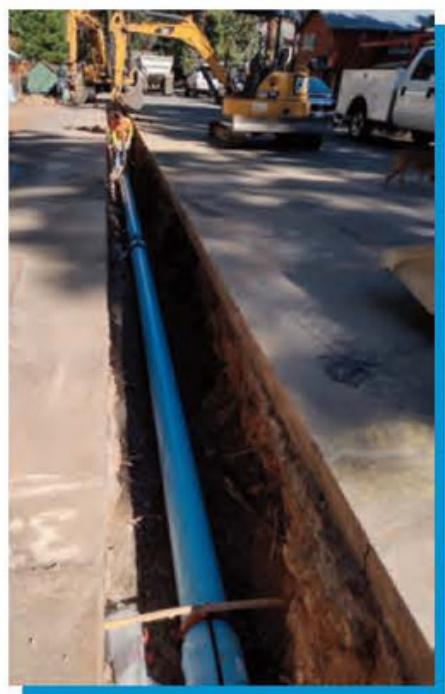
The Partnership's mission is to accelerate the installation of a resilient water infrastructure to address fire suppression needs.

Robust water infrastructure serves a vital purpose to protect the environment, economy, and people against catastrophic wildfire.



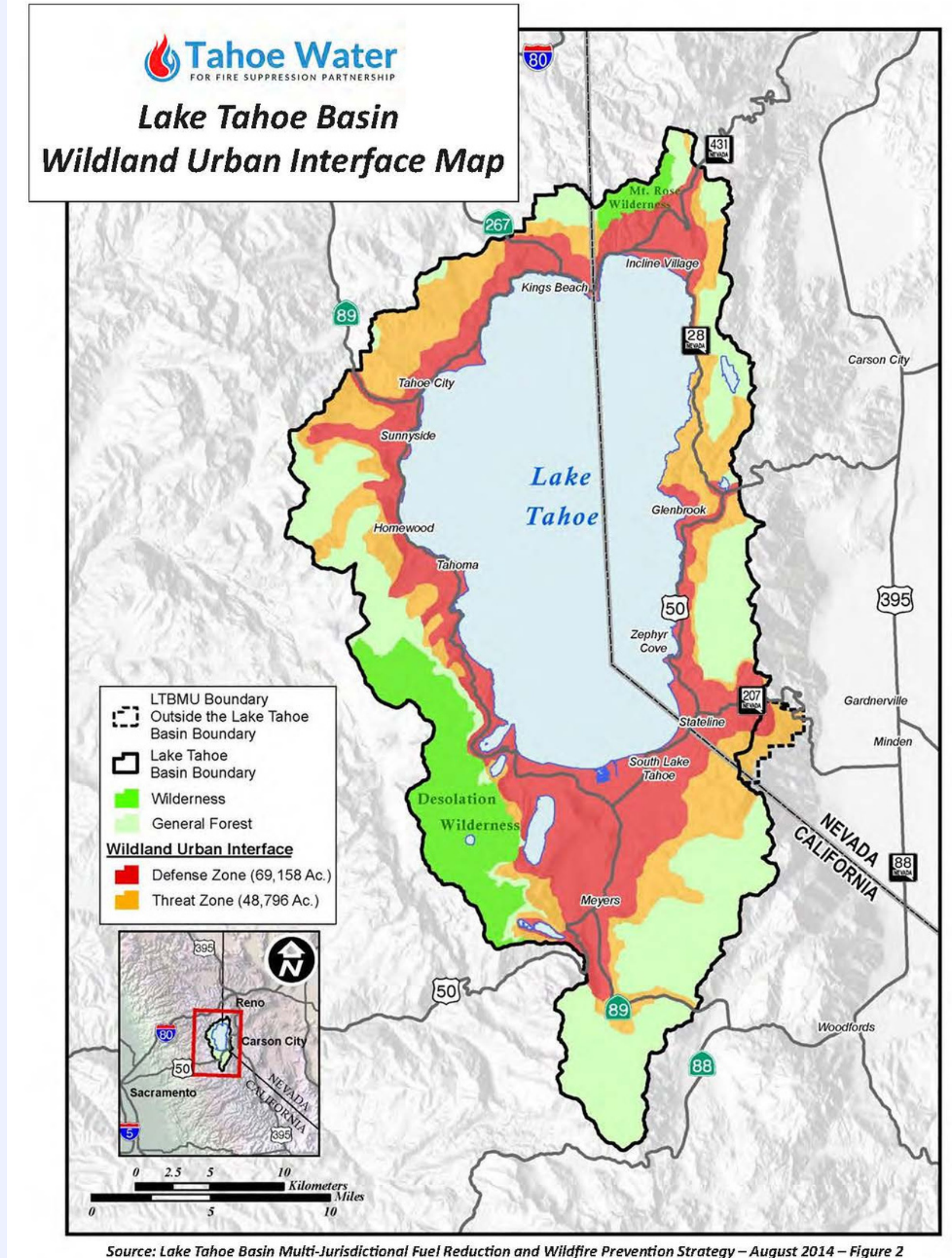
### Water Infrastructure to Defend Our Communities

The **Partnership installs Water Infrastructure for Firefighting** that upgrades the region's antiquated water infrastructure, originally built only to support summer cabins. These improvements provide critical water to defend our communities against catastrophic wildfires.



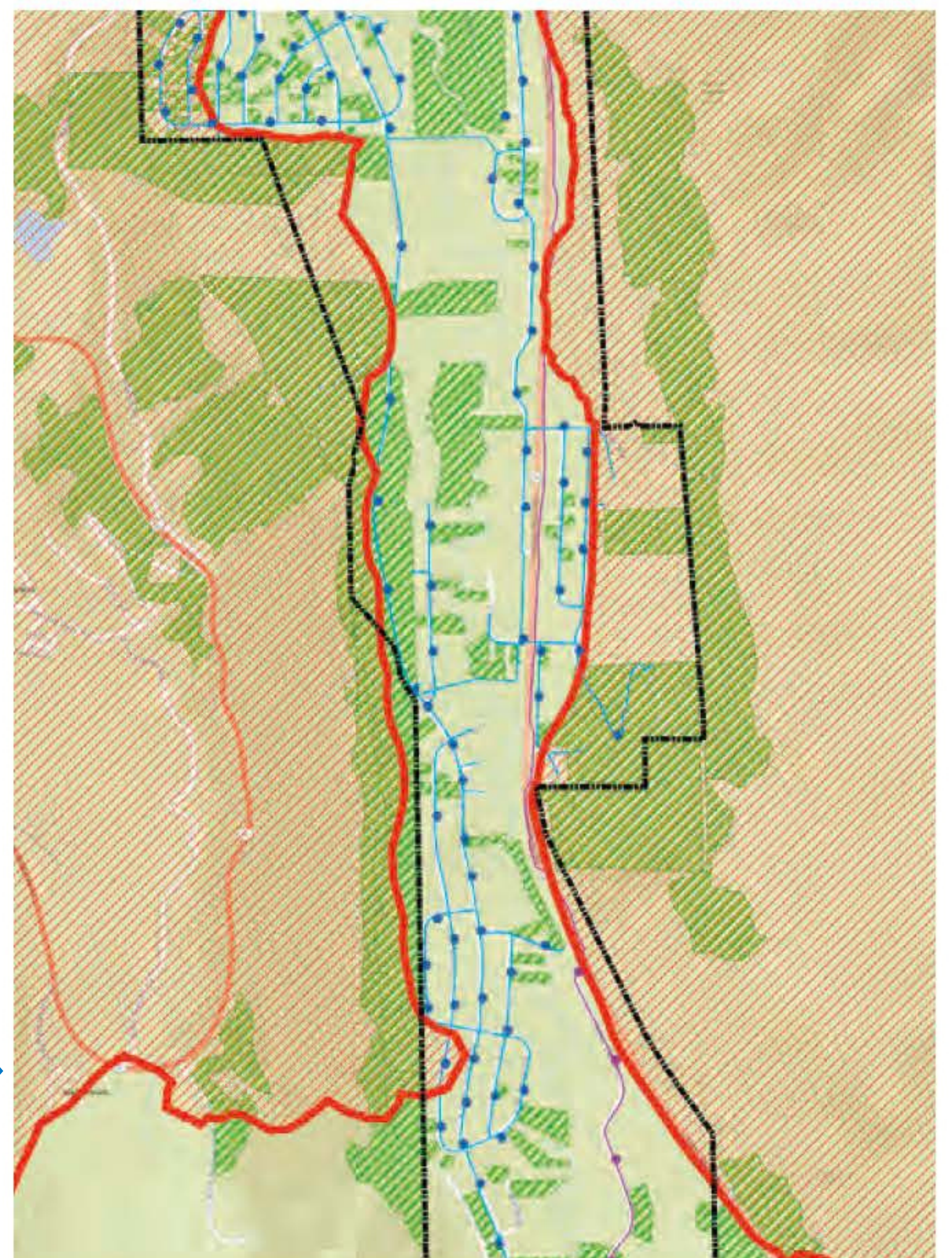
- Improving fire hydrant coverage
- Replacing old, undersized waterlines
- Increasing water storage capacity
- Increasing water distribution capacity
- Creating interconnections between public and private water systems
- Collaborating to address the patchwork of small, geographically isolated, and undersized water systems in the Lake Tahoe Basin.

TAHOE WATER FOR FIRE SUPPRESSION PARTNERSHIP



Most of the communities in the Tahoe City Public Utility District's service area are surrounded by the Wildland Urban Interface and in high fire zone.

### Caldor Fire (2021) - Christmas Valley Map

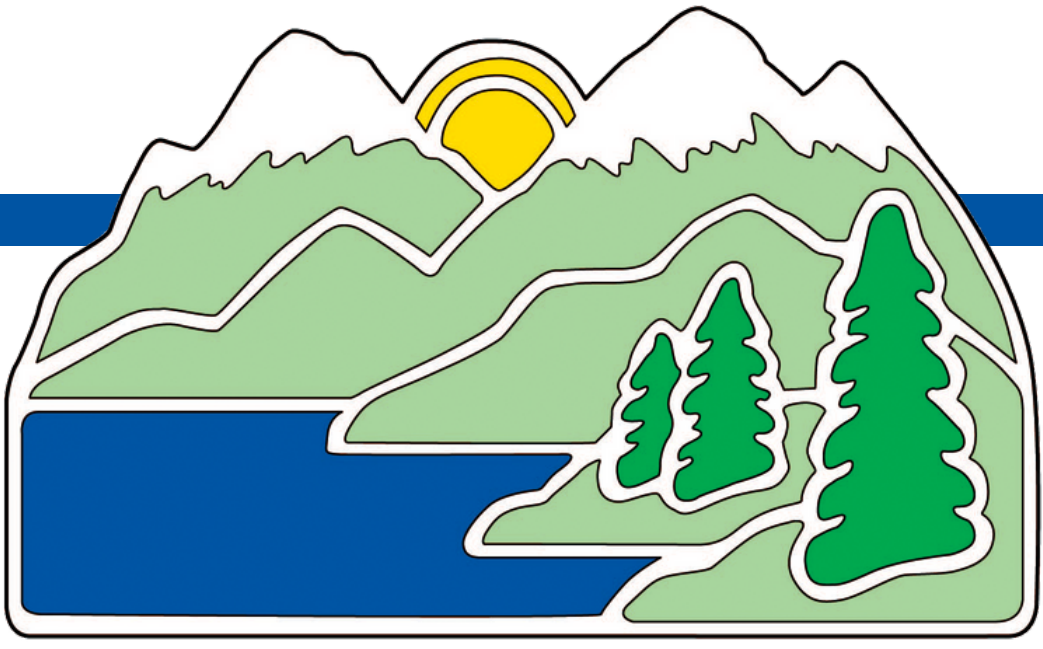


Coupled with forest fuel reduction projects that reduced the intensity of the incoming wildfire, firefighters were able to enter the community and extinguish spot fires that posed a significant threat and most certainly would have destroyed homes. However, not a single home was lost in Christmas Valley.

TFFT (Tahoe Fire and Fuels Team) Treatments: Forest fuel reduction projects



# Tahoe Cedars and Madden Creek Water Service Areas Infrastructure Improvement Charge

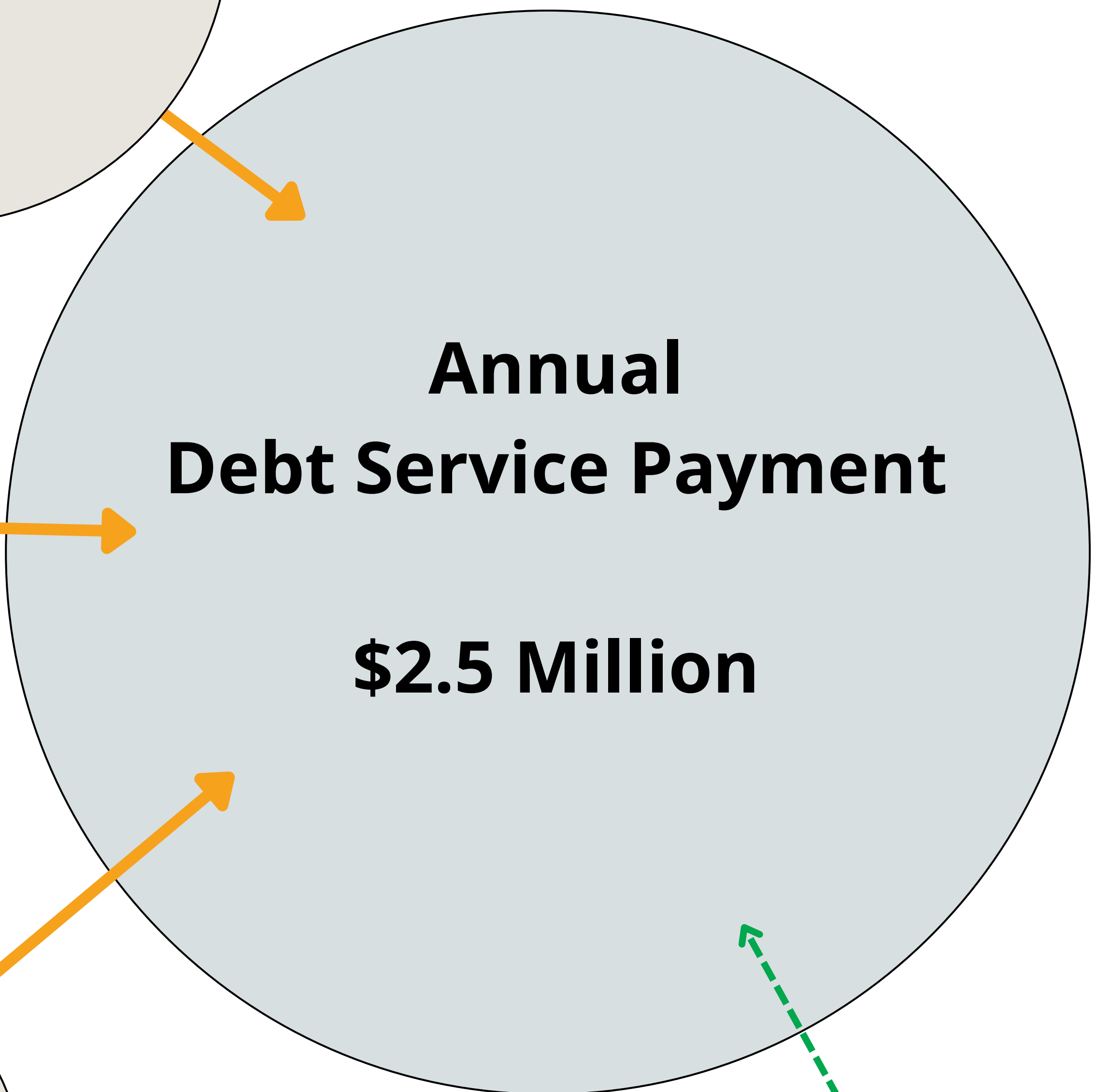
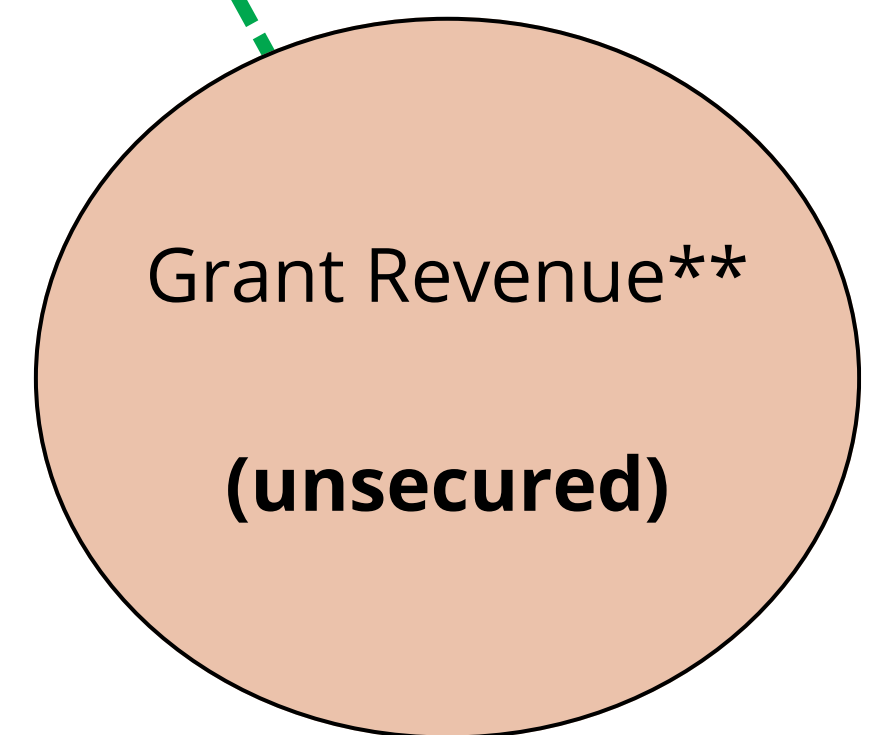
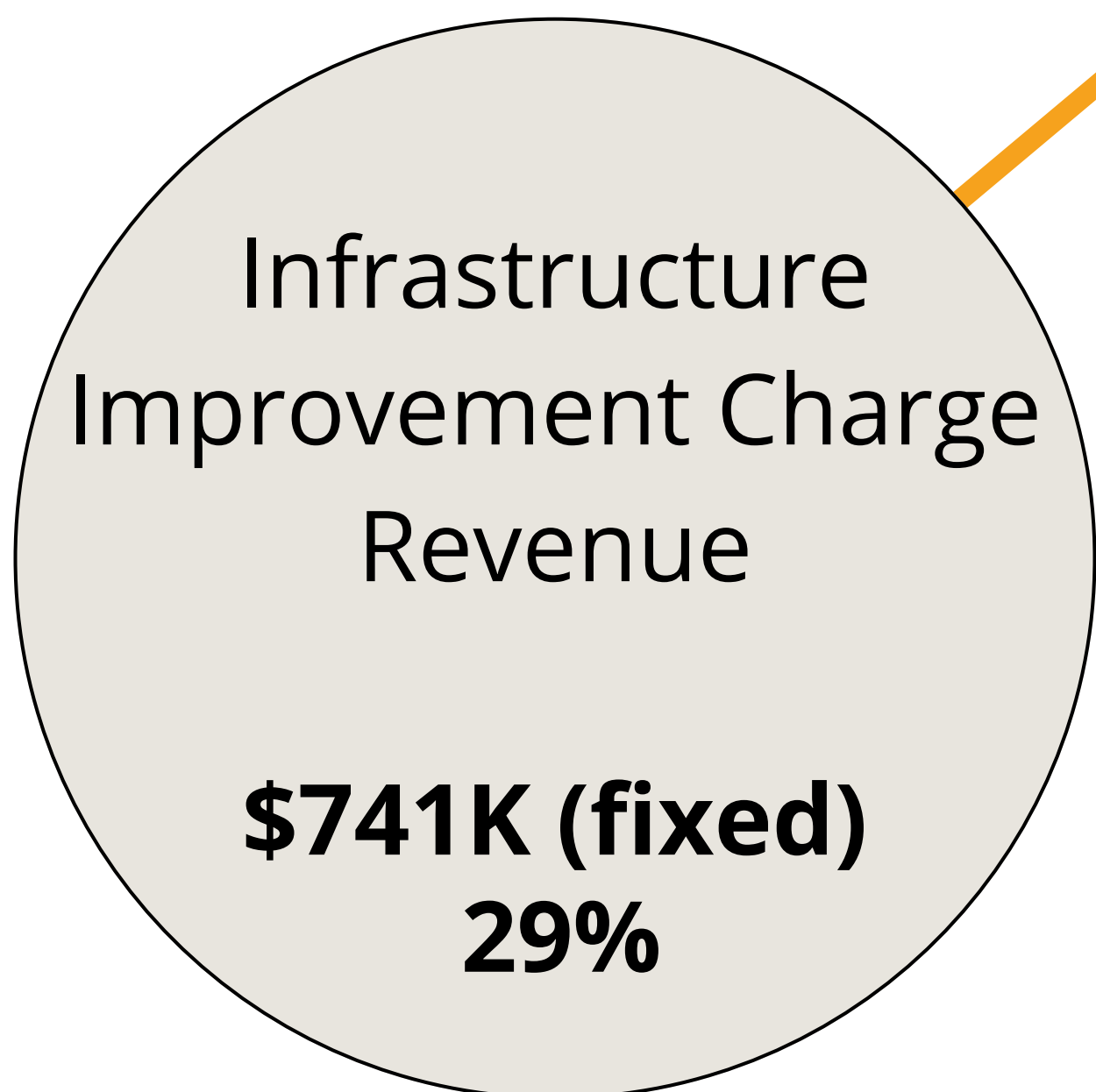
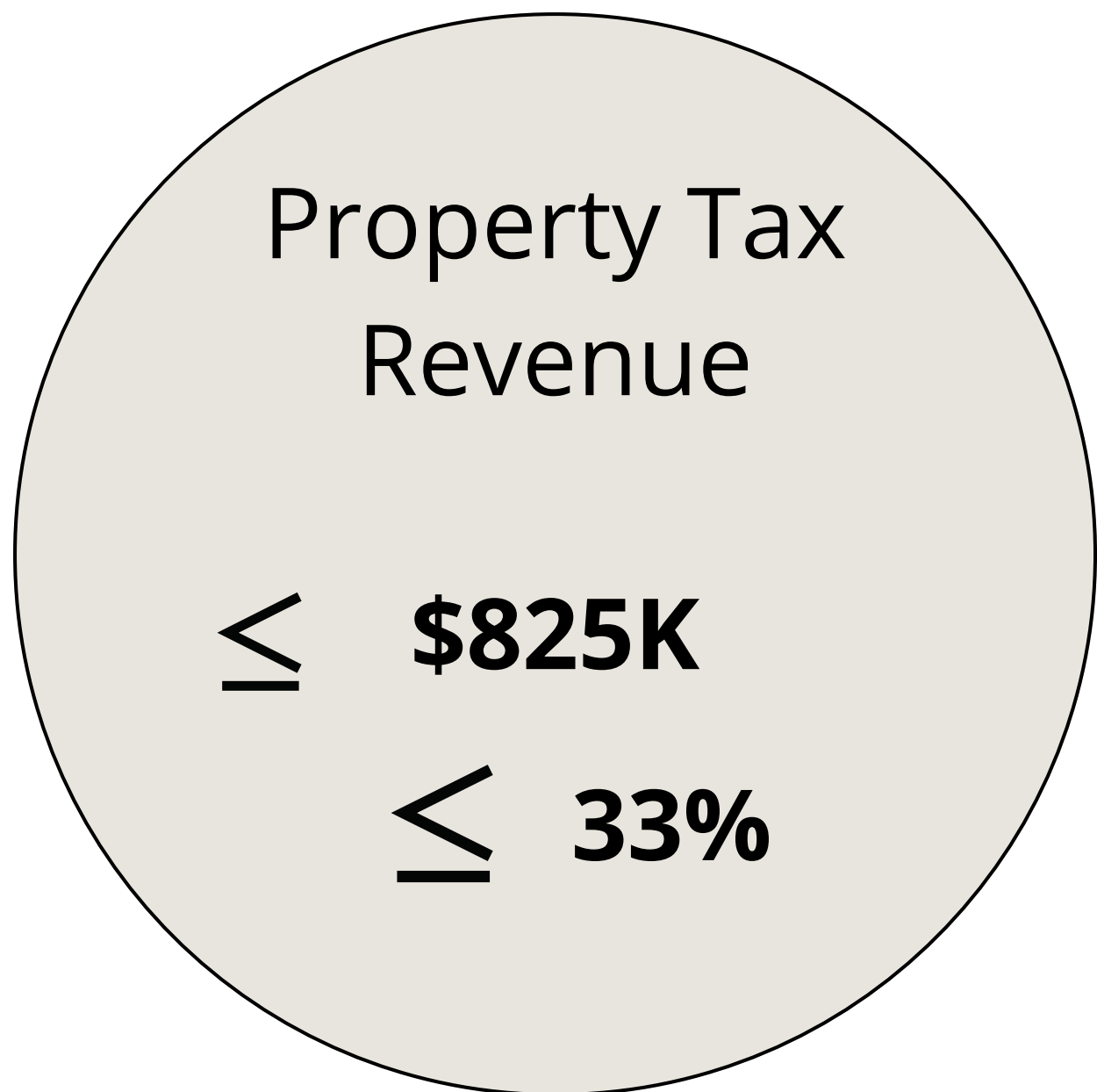
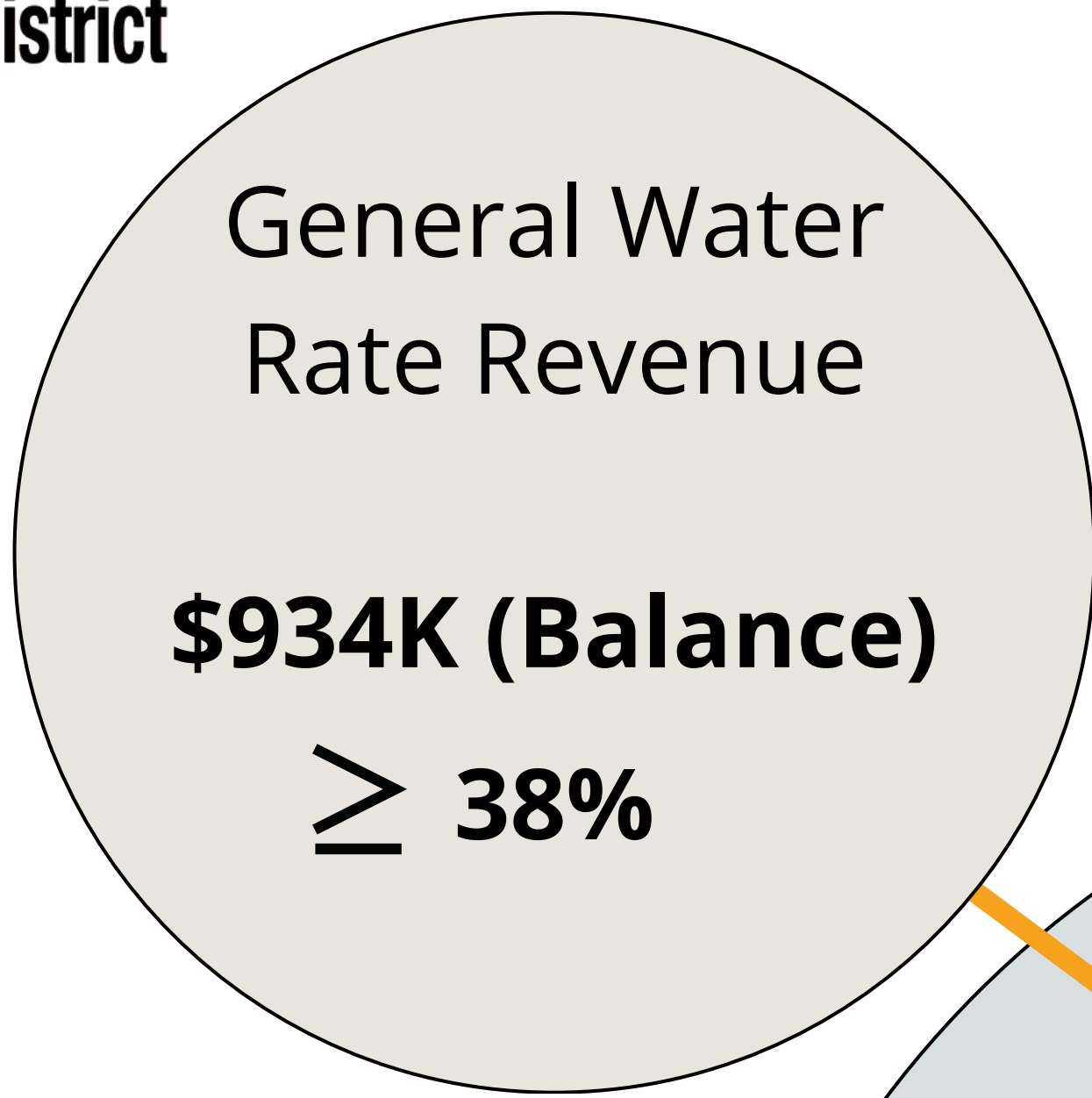


Tahoe City Public Utility District

## REVENUE SOURCES

Tahoe Cedars/Madden Creek Water System Reconstruction Projects  
**Total Estimated Cost: \$75 Million**  
(Future Value with Financing\*)

- Secured TCPUD Revenue
- Unsecured TCPUD Revenue



Infrastructure Improvement Charge

**Per Customer Monthly Charge: \$43.58**  
**Per Customer Annual Charge: \$522.91**

Number of Customers: 1,417  
Annual Revenue to Pay Debt Service: \$741K

\*Financing Terms Assumptions:  
State Water Board DWSRF loan  
2.1% for 30 years fixed

\*\*Allocated as directed by the Board