# City of Greeley Water Conservation Plan

"Dripping water hollows out stone, not through force but through persistence."

— Ovid

January 2015



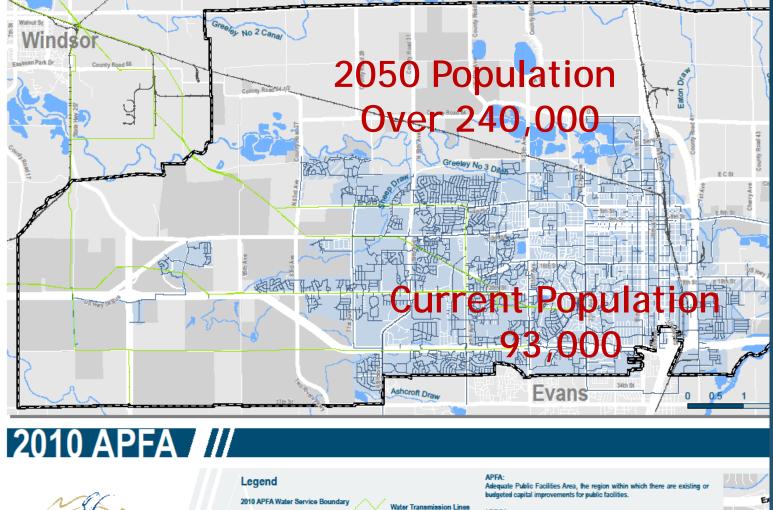


## Greeley's 2060 Comprehensive Plan

- The 2060 Plan was adopted in 2009
  - Reviewed key community indicators, trends, projections to assess growth and development
- Population and Growth Population will Increase -Water Demands will Double
- To Meet Citizen Water Needs Water Master Plan









Created: 6/29/2010 By: Planning, GIS

2010 APFA Water Service Boundary

Water Transmission Lines

Within City Limits

8" or Larger Water Lines

Out of City Limits

Service Boundary:

The greatest extent of existing 8" or larger water service lines

#### LREGA:

Long Range Expected Growth Area, the region within which the community is expected to grow over the next twenty to fifty years.

#### Service Note:

Updates to infrastructure are confinual and data representation will change over time. Representation is a general boundary and further review based on different developments is required. Contact the City of Greeley to request a formal review of service locations for a subject property.







#### Water Master Plan Four Point Plan

- Maintain what you have
  - Cement mortar lining of water lines
  - Fiberglass lining of sewer lines
- Secure supply stay ahead of demand
- Build storage for the lean times
  - Milton Seaman Project
- Conserve what you have
  - State approved water conservation plan





### Long-Term Conservation Plan

- State law requires water providers to develop a state-approved conservation plan
- Greeley's Plan documents our commitment
  - Began in 1907 with water restrictions
  - Fully metered 1996
  - Comprehensive program by 2006
- Plan commits to additional 10% water demand reduction by 2035





## Comprehensive Conservation Program

- Fully metered since 1996
- Leak detection: less than 5% system losses
- Continual watering restrictions since 1907
- Free irrigation & commercial audits, rain sensors
- Rebates for high-efficiency washers and toilets
- Required soil amendments; grants for xeric
- Water Insight Pilot
- Water Budget Program
- Continual Education





### **Conservation Program 2014**

- Water Budget Pilot Program City Wide
  - A water budget defines the amount of water each customer needs when used efficiently
- Focus on Landscape Work With Planning
  - Landscape and Species
- Converting Parks to Xeric Work With Parks
  - New Parks 15% 20% xeric
    - Existing parks convert 5% 10%



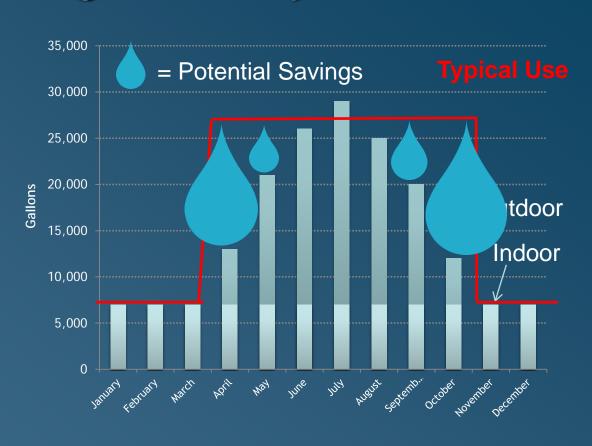
### What is a "water budget"?





### Water Budget - City Wide

 A water budget defines the amount of water each customer needs when used efficiently





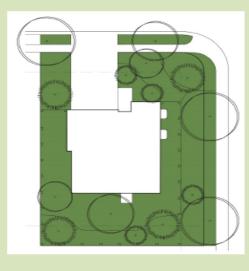
Indoor use is based on # people...

Outdoor use is based on lot size



# Landscape - Working with Planners

### Alternative Irrigation Demand Landscape Design Based on Water Budget



#### Water use at water budget

Full 4,781 s. f. 19 g/ s. f. 90,839 g/ yr.

Water Use Zones	
Description	Irrigation gallons/s.f.
High Water Use	17 to 19
Medium High Water Use	14 to17
Moderate Water Use	10 to 14
Low Water Use	5 to 10
Very Low Water Use	0 to 5

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## Updated Conservation Program Plan 2014

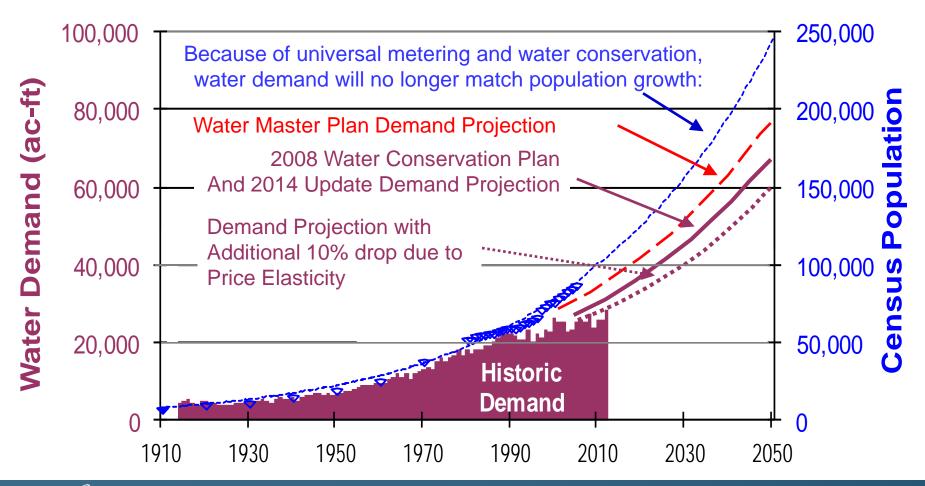
#### Water Sense Subdivision - Pilot

- Water Budget Pilot Program City Wide
- Focus on Landscape Work With Planning
- Converting Parks to Xeric Work With Parks





#### **Reductions in Estimated Water Demand**







### Questions?



