# Drought Emergency Plan City Council February 16, 2021



# Recommended Drought Plan Update

 Update to the Drought plan is the result of 24 months of analysis, including a literature review and economic analysis

• Case studies and analysis of the tools that are working in for utilities using water budget billing

- Over the last 16 years, our approach and best practices have changed
  - *City deployed a Water Budget billing structure*
  - Developed wise water use and conservation programs
  - Customer usage has decreased per household, while supplies have increased.
- On January 20<sup>th</sup>, The Water & Sewer Board formally approved and recommended to City Council the Drought Emergency Response Plan (2021) and the related code changes

## Goals of the Drought Plan Update

- Targeting response actions to the severity of drought conditions
- Reducing water use and building savings during drought
- Maintaining Equity among customers and use types
- Managing the financial impacts
- Identifying communication tools
- Maintaining flexibility to adapt



### **Important considerations**

Equity among Greeley's customers

#### Minimize impacts to landscapes



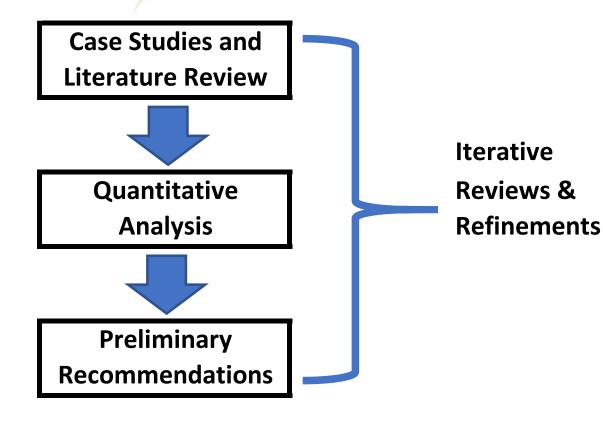


Minimize financial impacts to

customers and the water utility



### Process for Developing a New Drought Plan







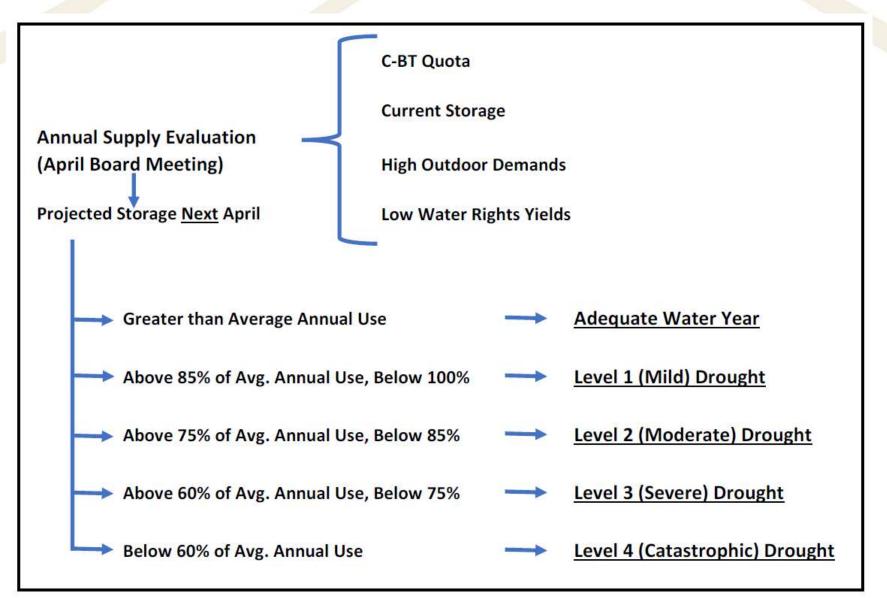
#### **Previous Drought Measures**

- Day of the week limitations
- Outdoor water use restrictions including ordinance changes
- Voluntary indoor suggested restrictions
- Working with large landscapes on use individually

#### Proposed Drought Measures

- Using water budgets for single family residential (SFR)
- Ability to use increased rates for all customer classes
- Change in ordinance to reflect new outdoor restrictions
- Implement a drought reserve fund

#### **Drought Response Trigger and Declaration Process**



#### **Drought Response Trigger and Declaration Process**

- Current Target Storage is 21,300 AF
  - Will be re-evaluated regularly, based upon customer growth and demands
- Reductions and restrictions are for *outdoor irrigation only*
- Using Water Budget as one of many tools for Single-family residential customers
  - Savings assumes single family customers are using 100% of their water budgets
- Recommending a 2 year recovery period
- Equitable: same % reductions for single family residential, multifamily, commercial and industrial

# **Drought Response Strategies**

Droughts are uncertain

- Hard to project how long they will last or how severe they will be.
- Also, difficult to predict how customers will respond and thus, how much water will be saved by different drought measures.

Important to have a variety

of tools for customers to use

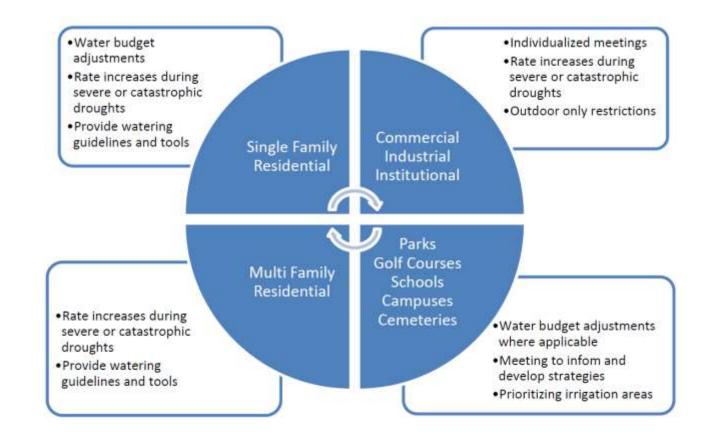


Need flexibility in the drought plan to adapt to changing circumstances



# **Engagement Strategy**

- Strategies aimed at equitable reductions
- Different tools available
- See comprehensive list of drought response tools in the 2021 Emergency Drought Response Plan (Enclosed)



# **Drought Response Strategies**

Variety of tools that can reduce demand up to 70%

- Level 1 & 2 utilizing messaging and voluntary response strategies to reduce demand
- Rate Increases send a price signal for more severe drought
  - o Level 3 = 25% increase
  - o Level 4 = 35% increase
- Helps reduce financial vulnerability during droughts





- Annual revenues are projected to be reduced by \$1.6 to \$3.0 million per year (4 to 8 % of normal revenue) during drought response
- Greeley plans to implement and gradually accrue a drought reserve fund for future use in mitigating reductions in revenues due to decreased water sales during drought emerge





**Implementation of the Drought Emergency Response Plan Requires:** 

- Adoption of Code changes in Sections 14.08.090 and 14.08.160
  - > Prescribes the means by which City residents may use water resources to irrigate their property and make other uses of City water during periods of adequate water supply and drought

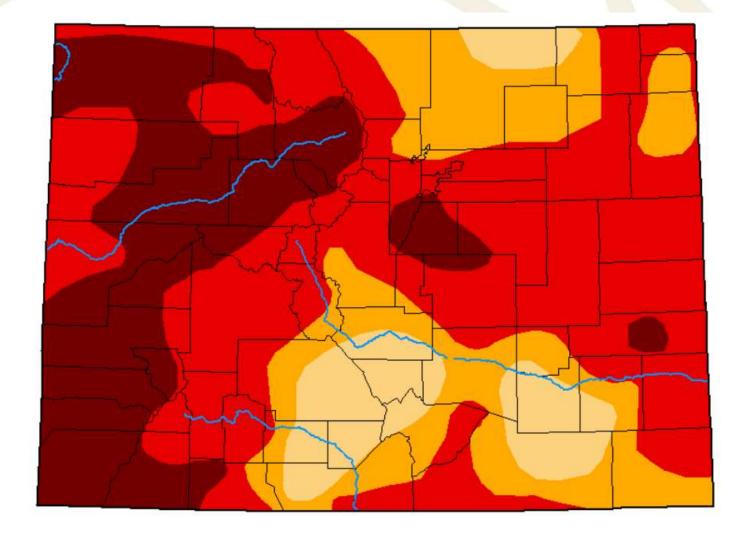


- This plan meets the goals of:
  - Reducing water use and building savings during drought
  - $_{\circ}$  Equity among customers
  - $_{\circ}\,$  Minimal financial impacts
  - $_{\circ}\,$  Flexibility to adapt



## Recommendation

- Timing is critical as we face increasing drought conditions
- Water and Sewer Board adopted plan at their January 20, 2021 meeting
- Board and staff recommends
  Council approval of necessary
  code changes



### **Questions?**

