

# **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**

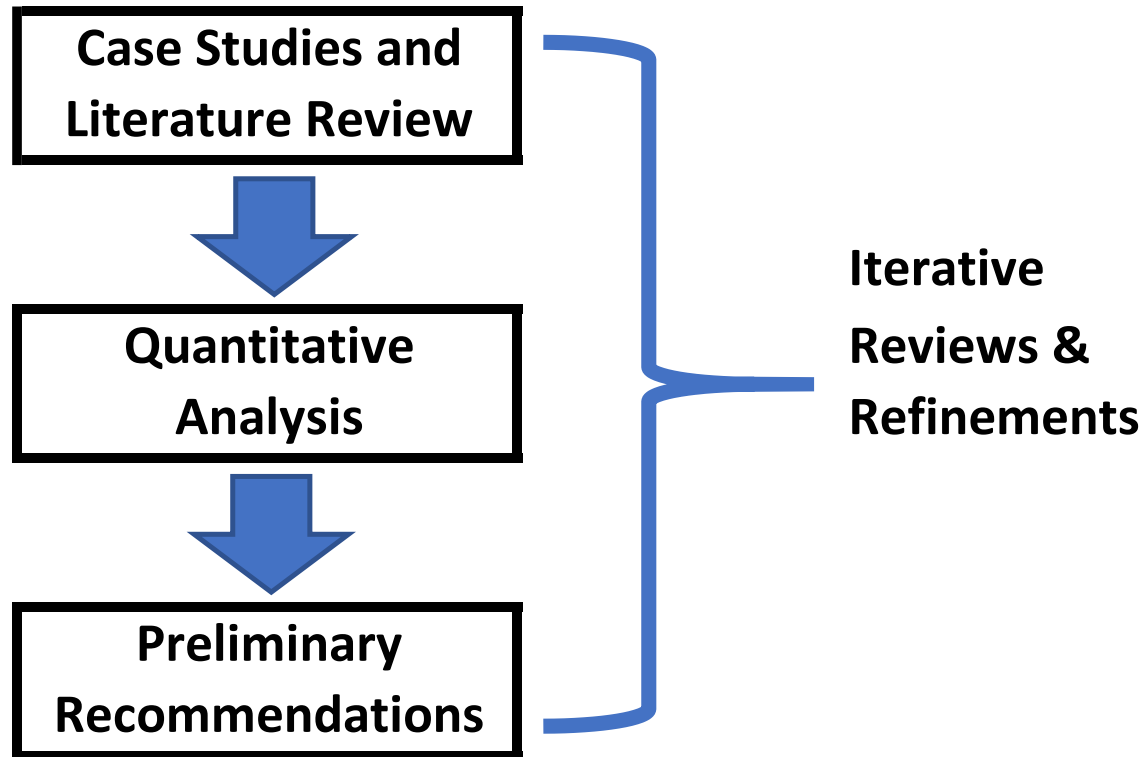
**Minimize impacts to landscapes**



**Minimize financial impacts to customers and the water utility**



# Process for Developing a New Drought Plan



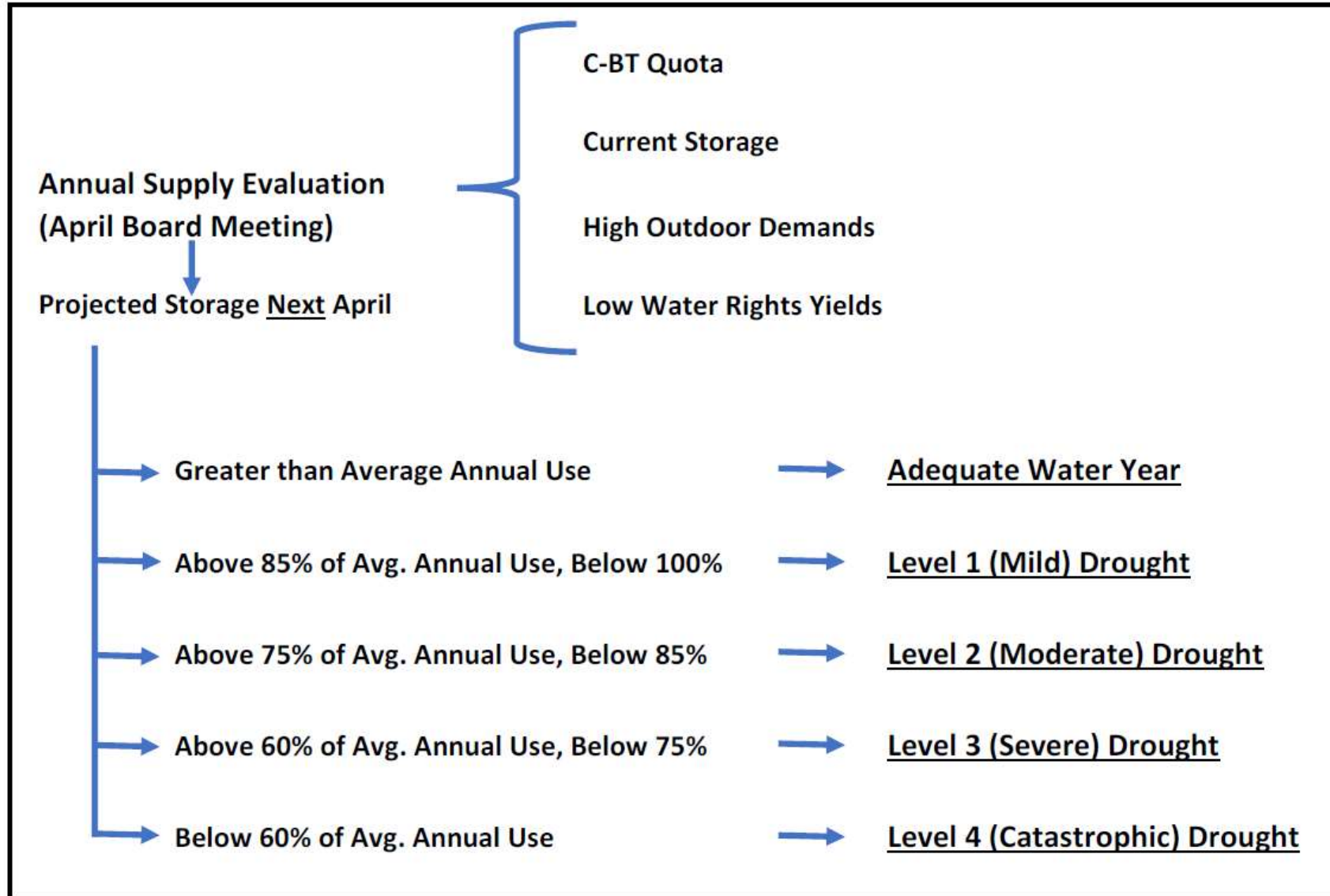
## **Previous Drought Measures**

- **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, multi-family, 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**

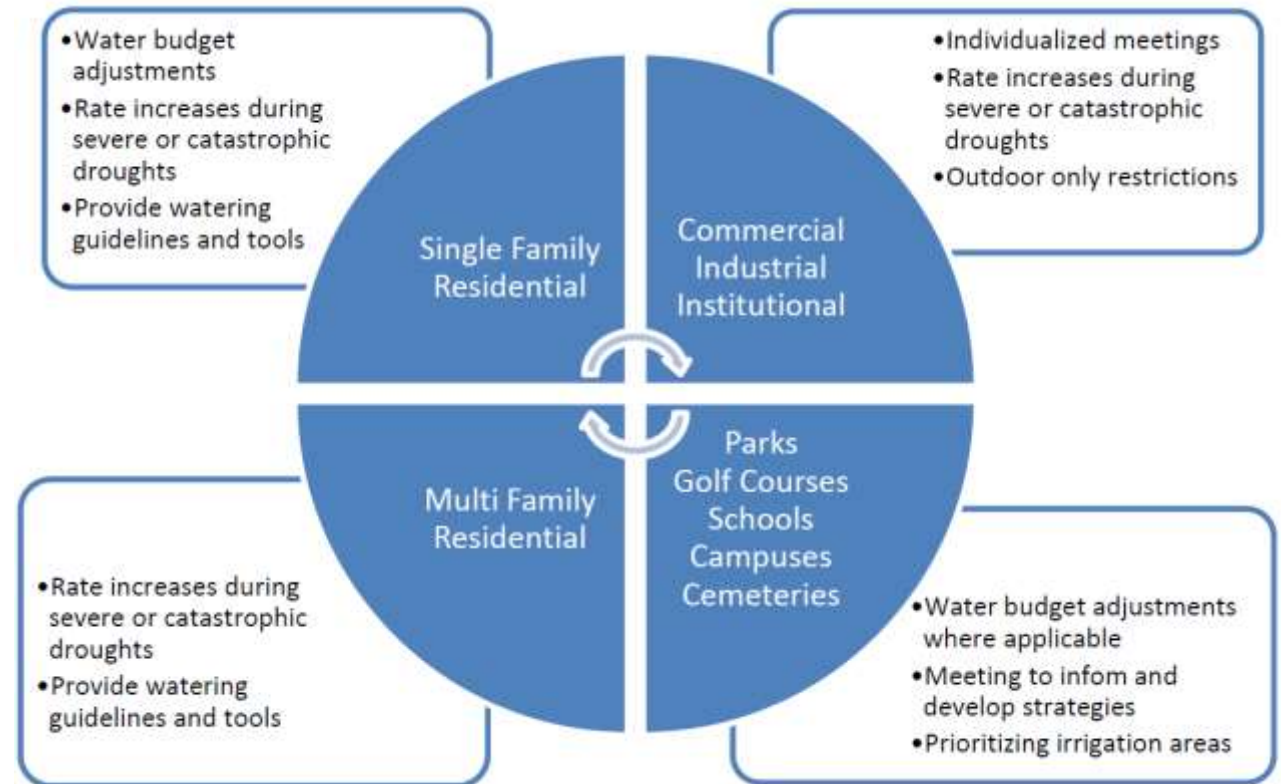


**Need flexibility in the drought plan to  
adapt to changing circumstances**



# Customer 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**
  - **Level 3 = 25% increase**
  - **Level 4 = 35% increase**
- **Helps reduce financial vulnerability during droughts**



# Drought Reserve Fund

- **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 emergencies**



# Code Changes

## **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**

# Summary

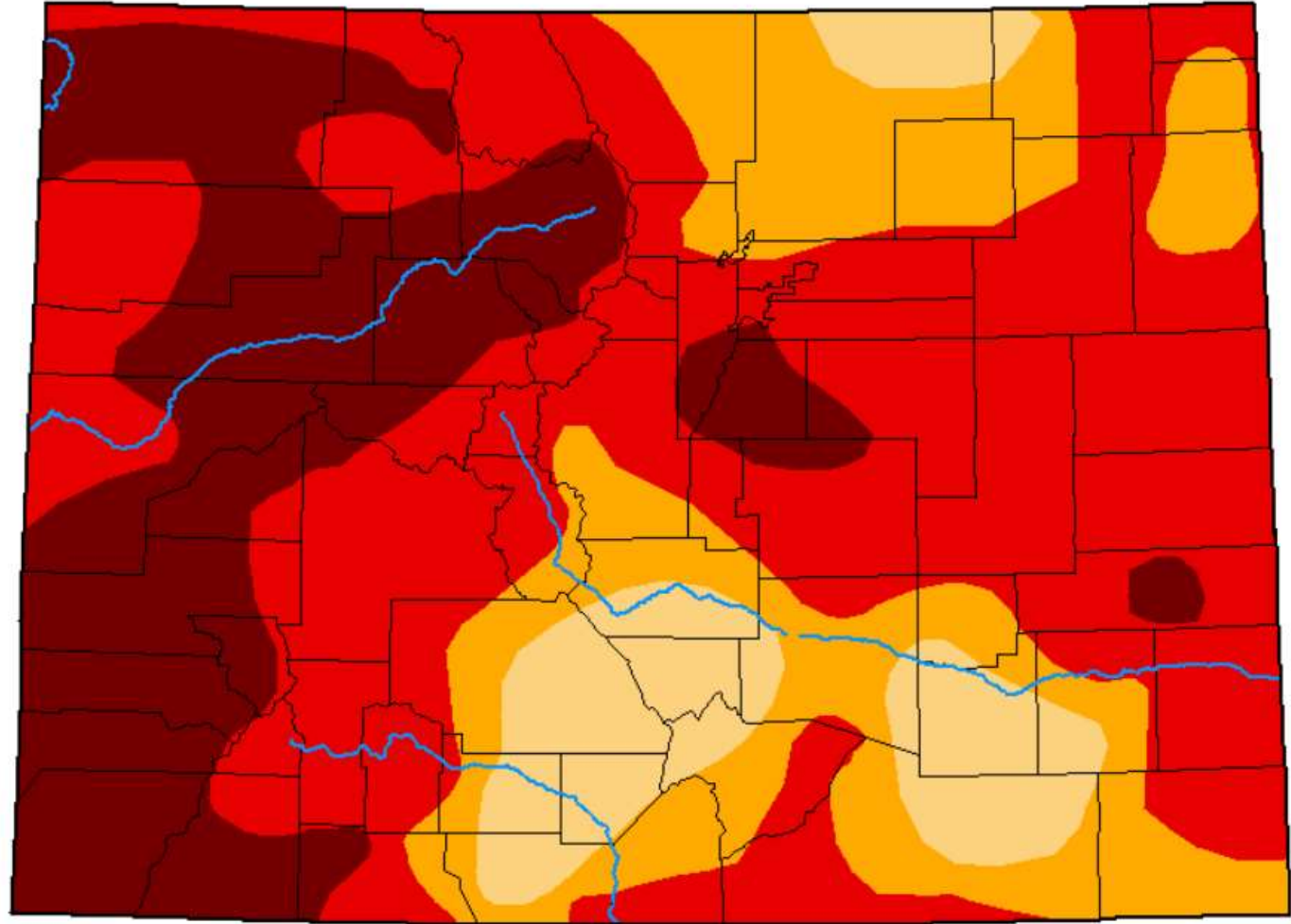
- **This plan meets the goals of:**
  - **Reducing water use and building savings during drought**
  - **Equity among customers**
  - **Minimal financial impacts**
  - **Flexibility to adapt**



# Recommendation

- **Timing is critical as we face increasing drought conditions**
- **Water and Sewer Board approved the drought plan at their January 20, 2021 meeting; and**

**Water & Sewer Board and staff recommends Council approval of necessary code changes**



# Questions?

