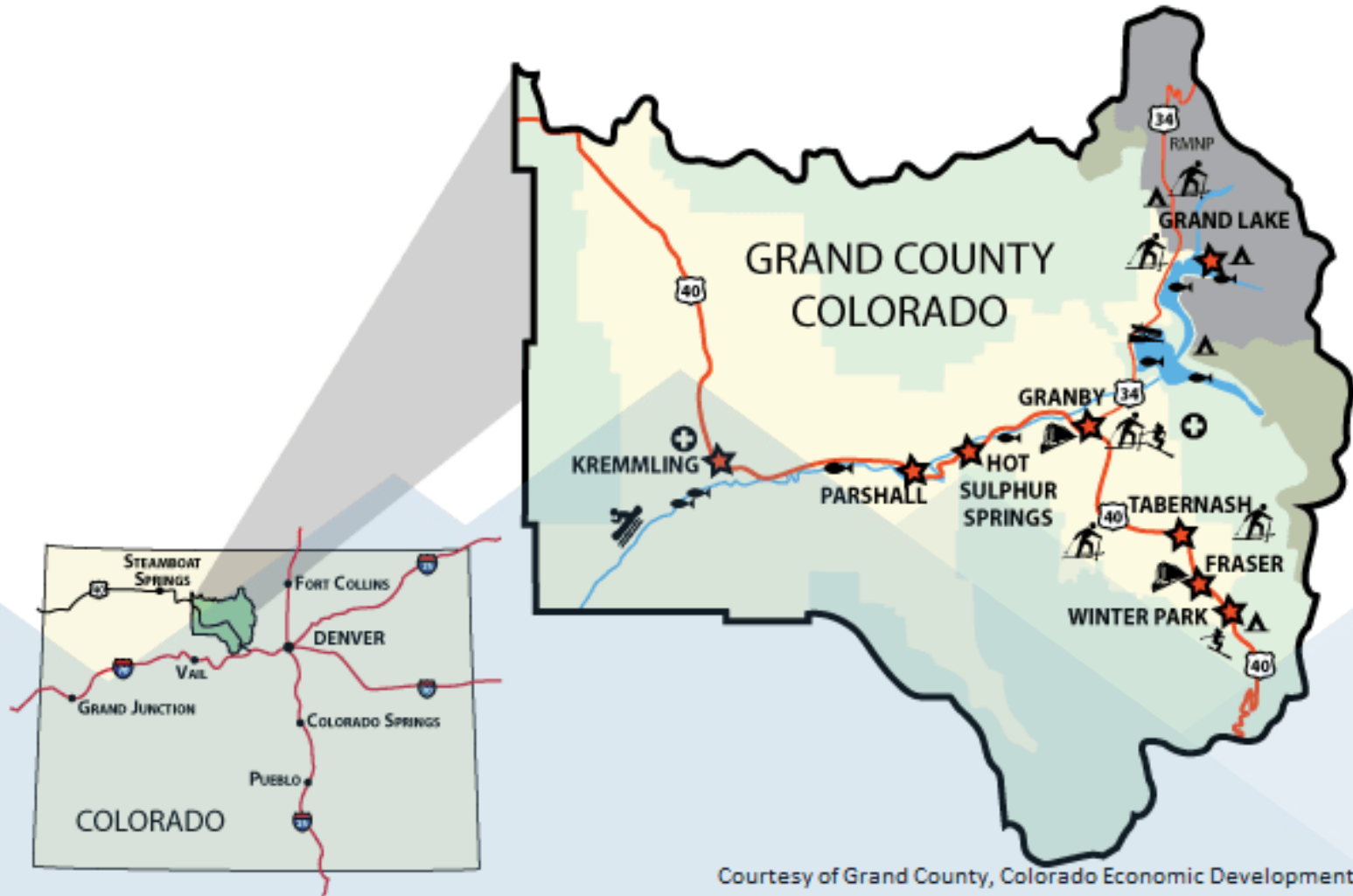




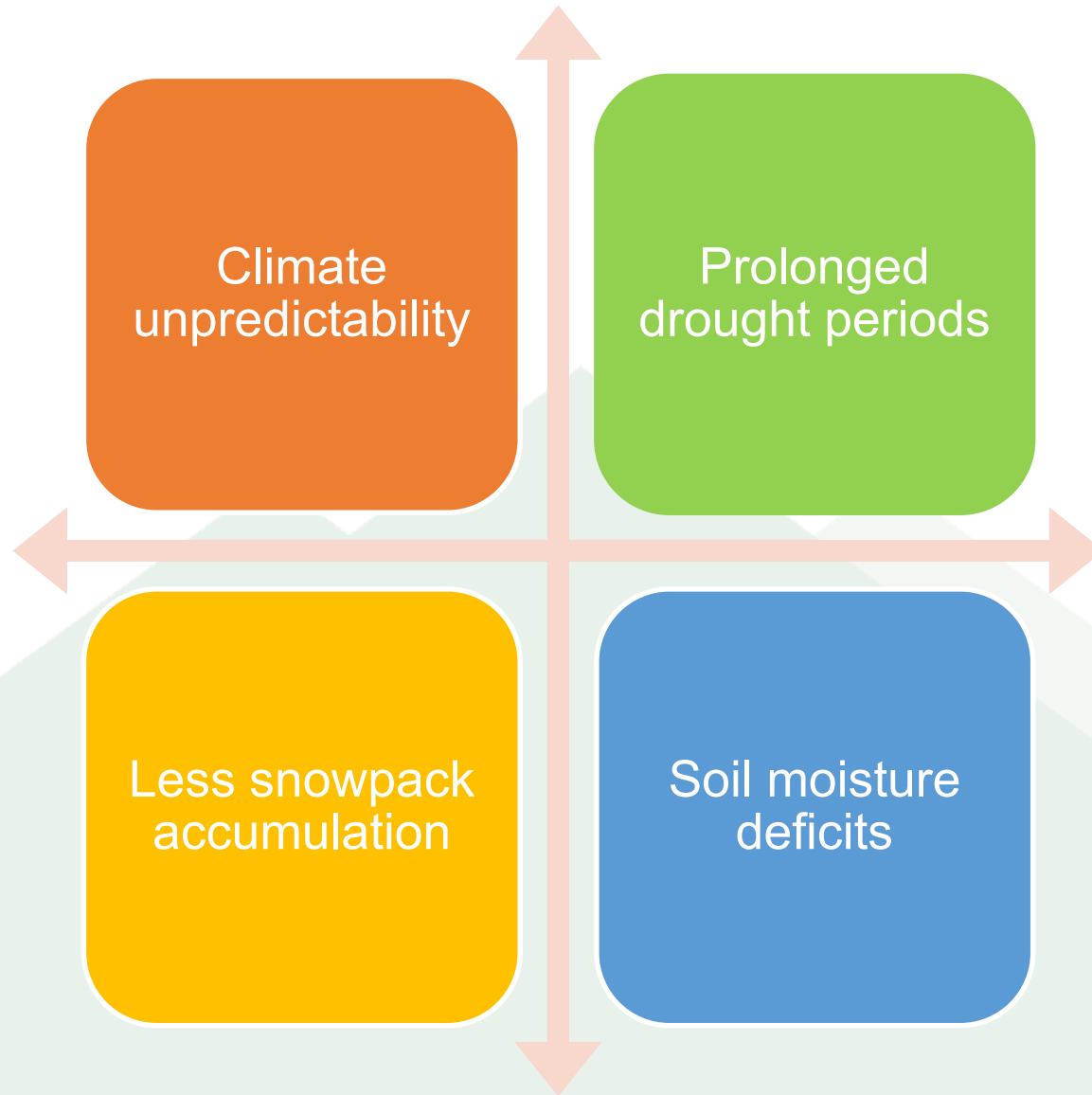
GRAND COUNTY  
**DROUGHT**  
**PREPAREDNESS**  
PROGRAM

QQ Meeting  
March 3, 2022

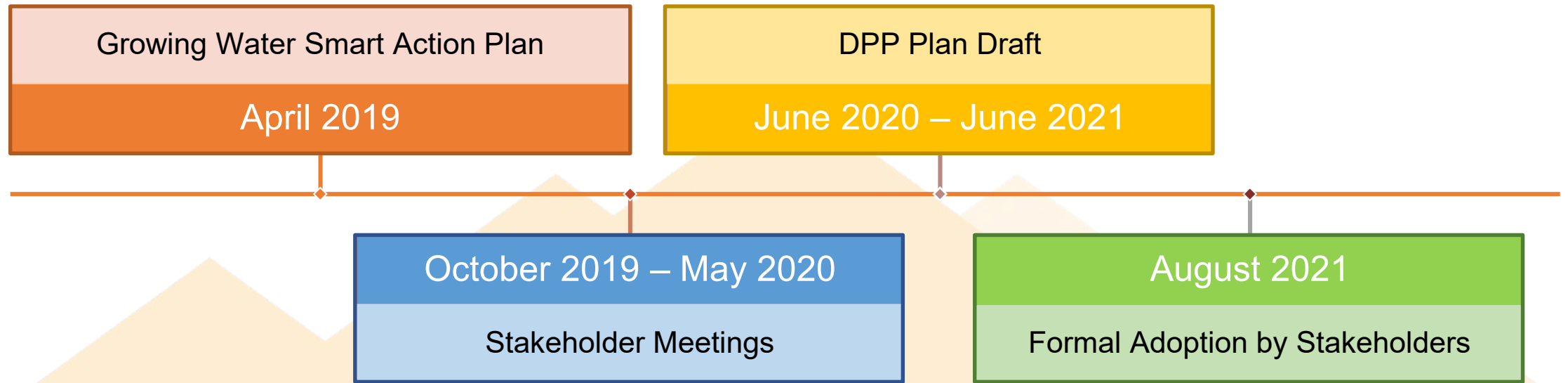


Courtesy of Grand County, Colorado Economic Development

# Why Plan for Drought?



# Grand County Drought Preparedness Plan and MOU Development



# MOU Partnerships – as of 3/1/22

- Grand County BOCC
- Town of HSS
- Town of Grand Lake
- Town of Granby
- Town of Winter Park
- Town of Fraser
- Fairways at Pole Creek HOA
- Trout Unlimited – Headwaters Chapter
- Winter Park Ranch W&S
- Fraser Valley Recreation District
- Headwaters Center
- Tabernash Meadows W&S
- Grand County W&S #1
- East Grand County Fire Protection District
- Winter Park W&S

# Other Stakeholders



# Purpose

---

1

Create a county-wide approach

2

Reduce hardships caused by water shortages

3

Mitigate the crisis through preparedness efforts

4

Preserve essential public services

5

Raise public awareness on water conservation



# Drought Preparedness Committee

- Consists of at least five members from Stakeholder Group
- Review indicators and triggers on a monthly basis
- Choose appropriate drought response (stage)





# Education and Outreach Committee

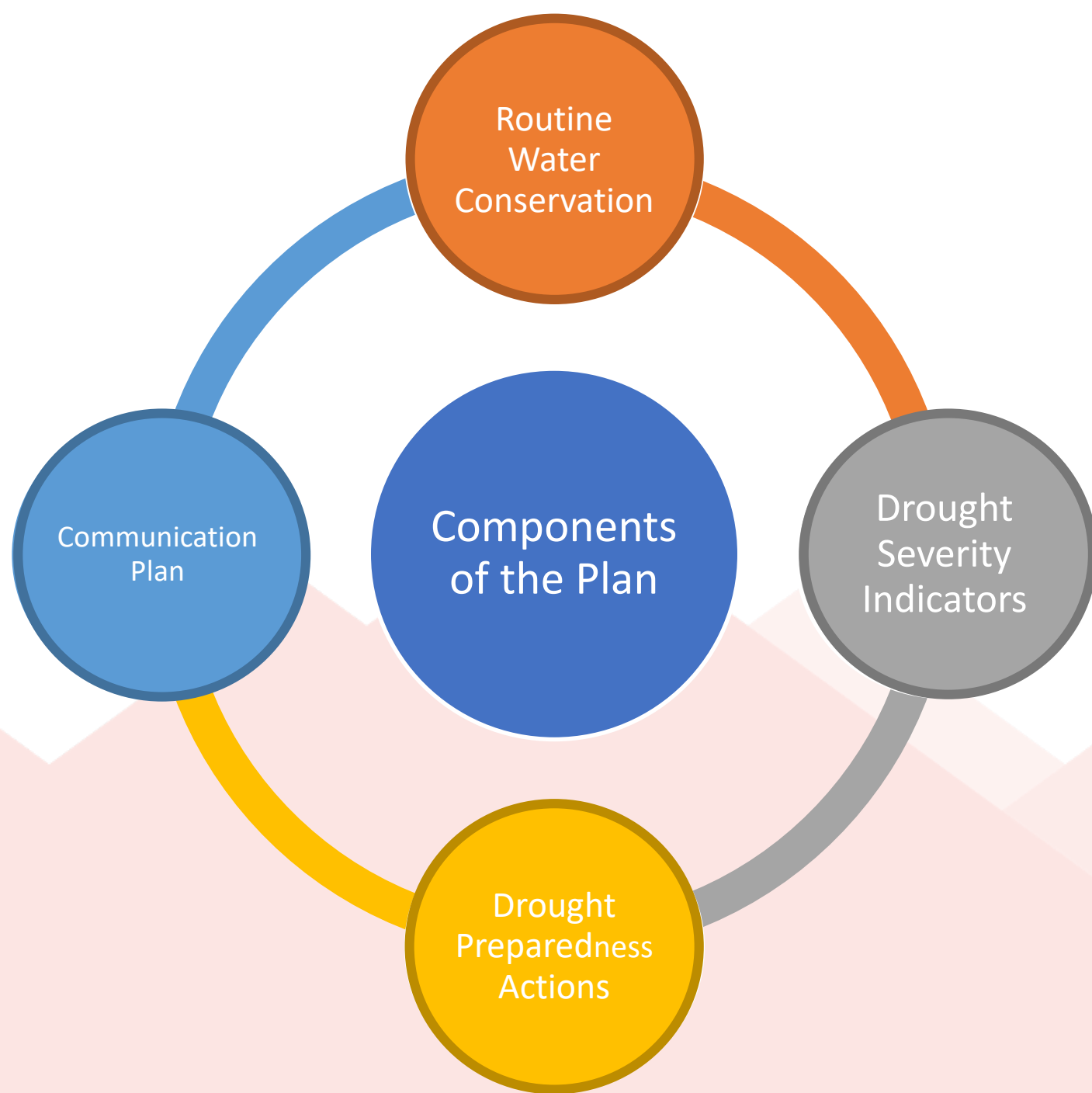
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Volunteers from Stakeholder Group

Objectives:

- Inform the community on drought stages
- Educate the community about their role and responsibilities
- Coordinate public information campaign efforts
- Increase knowledge about water supply and demand
- Promote water-saving and efficiency behaviors





# Drought Severity Indicators

---

U.S. Drought Monitor

SWE  
&  
Precipitation

SPEI

QuickDRI

3-Month  
Temperature  
and  
Precipitation  
Outlook



# Drought Response (Stage)

## Drought Watch

- Encourage residents to continue to use water efficiently
- Warn of and prepare for the possibility of watering restrictions

## Stage 1: Warning

- Outdoor watering no more than two days per week between the hours of 6:00pm and 10:00am
- Sports fields/parks will be encouraged to reduce water usage by 10%

## Stage 2: Severe

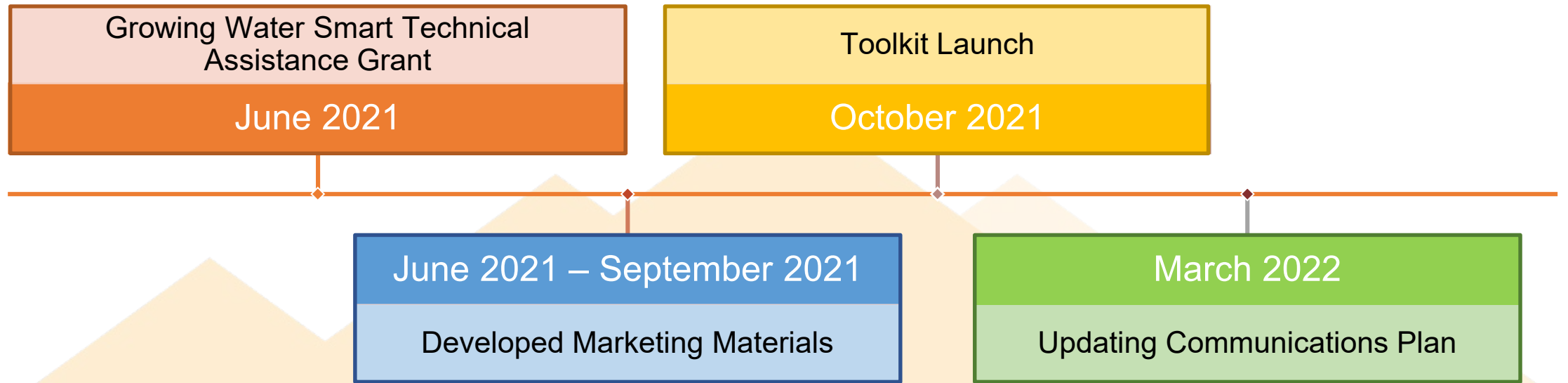
- Outdoor watering no more than one day per week between the hours of 6:00pm and 10:00am
- Sports fields/parks will be encouraged to reduce water usage by 20%
- Municipal water providers may choose to use drought pricing

## Stage 3: Exceptional

- Water rationing will be recommended
- No outdoor watering
- Sports fields/parks will be encouraged to reduce water usage by 40%
- Golf courses and agriculture will reduce water use as much as possible while still maintaining the viability of their business



# Drought Stage Declaration Toolkit



# Drought Stage Declaration Toolkit

## Drought Summaries

- For stakeholders to email their constituents

## Posters

- To print and post at stakeholders office buildings

## Social Media Posts

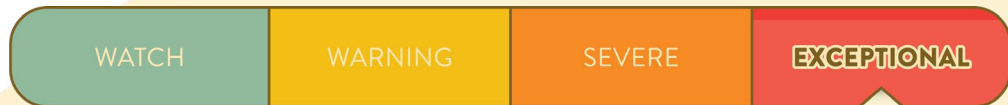
- To post to Facebook, Instagram, or Twitter

## Other Materials

- Promotional Video
- PowerPoint presentation about the program
- Digital and printed ad materials
- Logo and other brand elements

PROJECT  
RESOURCE  
STUDIO

# Logo & Brand Elements



GRAND COUNTY  
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PREPAREDNESS  
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**HELP OUT  
DURING DROUGHT**



GRAND COUNTY  
**DROUGHT**  
PREPAREDNESS  
PROGRAM

## Stage 1: Drought Warning

A Drought Warning has been declared by the Drought Preparedness Committee on XX/XX/XXX.

A Drought Warning has been declared by the Drought Preparedness Committee because indicators point to conditions that are worsening. Stage 1 recommends watering reductions and efforts on the part of all Grand County residents. This is the first stage during which the Drought Preparedness Committee will begin making recommendations to water providers and users.

### Indicators:

- The US Drought Monitor Index has Grand County in moderate drought (D1) conditions.
- Snow-water equivalent is between 70% - 89% of median on April 30<sup>th</sup> and precipitation accumulation for the water year is between 70% - 89% of average.
- Standardized Precipitation and Evapotranspiration Index is between -0.8 to -1.2.
- QuickDRI is yellow - intensifying drought conditions.
- Other West Slope counties or Front Range entities that divert water from Grand County are already in a stage 1 response.
- Grand County residents believe that a drought warning and its corresponding actions are appropriate.

Use Reduction Target: Sport fields, parks, golf courses, and agriculture will be encouraged through education and outreach to reduce water use.

Element	Stage 1: Warning
<b>Outdoor watering and irrigation</b>	
Lawn grass (residential, HOA, commercial, industrial, institutional)	No more than 2 days per week watering from 6:00 pm to 10:00 am. Follow best management practices for Watering a Home Landscape During Drought as recommended in Appendix C of Final Drought Preparedness Plan: <a href="https://www.co.grand.co.us/1341/Drought-Preparedness-Program">https://www.co.grand.co.us/1341/Drought-Preparedness-Program</a>
Agricultural water, golf courses, and vegetable gardens	Voluntary reductions.
Water wise landscapes, native/adaptive, Trees, shrubs, and perennials (private)	Handheld watering or drip irrigation no more than 2 days per week between 6:00 pm and 10:00 am.
New landscape establishment	Not recommended.
Municipal streetscape	Handheld watering or drip irrigation no more than 2 days/ week before 10:00 am.

# Email Fact Sheets

## Stage 2: Severe Drought

A Severe Drought has been declared by the Drought Preparedness Committee on XX/XX/XXX.

A Severe Drought has been declared by the Drought Preparedness Committee because indicators point to conditions that are further intensifying. This is a more severe level of drought and recommendations from the Drought Preparedness Committee will be more stringent.

### Indicators:

- The US Drought Monitor Index has Grand County in severe drought (D2) conditions.
- Snow-water equivalent is between 50% - 69% of median on April 30<sup>th</sup> and precipitation accumulation for the water year is between 50% - 69% of average.
- Standardized Precipitation and Evapotranspiration Index is between -1.3 to -1.5.
- QuickDRI is orange - even further intensification of drought conditions.
- Other West Slope counties or Front Range entities that divert water from Grand County are already in a stage 2 response.
- Grand County residents believe we are in a severe drought and its corresponding actions are appropriate.

Use Reduction Target: Sport fields, parks, golf courses, and agriculture will be encouraged to further reduce water use through education and outreach.

Drought Pricing: Municipal water providers may choose to use drought pricing as a tool to help reduce water use.

Element	Stage 2: Severe
<b>Outdoor watering and irrigation</b>	
Lawn grass (residential, HOA, commercial, industrial, institutional)	No more than 1 day per week watering from 6:00 pm to 10:00 am. Follow best management practices for Watering a Home Landscape During Drought as recommended in Appendix C of Final Drought Preparedness Plan: <a href="https://www.co.grand.co.us/1341/Drought-Preparedness-Program">https://www.co.grand.co.us/1341/Drought-Preparedness-Program</a>
Agricultural water, golf courses, and vegetable gardens	Voluntary reductions.
Water wise landscapes, native/adaptive, Trees, shrubs, and perennials (private)	Handheld watering or drip irrigation no more than 1 day per week between 6:00 pm and 10:00 am.
New landscape establishment	Discouraged June through August.

## Stage 3: Exceptional Drought

An Exceptional Drought has been declared by the Drought Preparedness Committee on XX/XX/XXX.

An Exceptional Drought has been declared by the Drought Preparedness Committee because indicators point to conditions that are extreme. Stage 3 indicates exceptionally dry conditions and will recommend water rationing. If conditions warrant, the Drought Preparedness Committee may not allow outdoor watering, and indoor water use may be restricted. Stage 3 drought recommendations could affect the quality of life in Grand County and will result in the long-term loss of landscapes.

### Indicators:

- The US Drought Monitor Index has Grand County in an extreme (D3) drought or exceptional (D4) drought conditions.
- Snow-water equivalent is less than 50% of median on April 30<sup>th</sup> and precipitation accumulation for the water year is less than 50% of average.
- Standardized Precipitation and Evapotranspiration Index is greater than -1.6.
- QuickDRI is red - indicating exceptionally dry and intense conditions.
- News media are sending messages that we are in exceptionally dry conditions.
- Elected officials are calling for water rationing.
- The situation suggests that severe impacts to water-dependent businesses are unavoidable.
- Other West Slope counties and Front Range entities diverting water from Grand County are already in Stage 3 restrictions.

Use Reduction Target: Municipal water users, sports fields, and parks will reduce water consumption by 40%. Golf courses and agriculture will reduce water use as much as possible while still maintaining the viability of their business.

Drought Pricing: Drought pricing is recommended for Stage 3 restrictions.

Element	Stage 3: Exceptional
<b>Outdoor watering and irrigation</b>	
Lawn grass (residential, HOA, commercial, industrial, institutional)	No lawn watering. Follow best management practices for Watering a Home Landscape During Drought as recommended in Appendix C of Final Drought Preparedness Plan: <a href="https://www.co.grand.co.us/1341/Drought-Preparedness-Program">https://www.co.grand.co.us/1341/Drought-Preparedness-Program</a>
Agricultural water, golf courses, and vegetable gardens	Voluntary reductions.
Water wise landscapes, native/adaptive, Trees, shrubs, and perennials (private)	Water no more than one day per month.



# HELP OUT DURING DROUGHT

GRAND COUNTY STAGES OF DROUGHT

**Drought Watch**  
Residents are encouraged to continue to use water efficiently | Warn of and prepare for the possibility of watering restrictions

**Stage 1: Drought Warning**  
Outdoor watering no more than two days per week from 6pm to 10am | Sports fields/parks will be encouraged to reduce water usage by 10%

**Stage 2: Severe Drought**  
Outdoor watering no more than one day per week between 6pm and 10am | New landscape establishment discouraged June through August  
Sports fields/parks are encouraged to reduce water usage by 20% | Municipal water providers may choose to use drought pricing

**Stage 3: Exceptional Drought**  
Indoor water rationing is recommended | Golf courses and agriculture will reduce water as much as possible while still maintaining the viability of their business  
No outdoor watering | Sports fields/parks will be encouraged to reduce water usage by 30%



DISCOVER MORE WAYS TO HELP  
[TINYURL.COM/GRANDCOUNTYDPP](http://TINYURL.COM/GRANDCOUNTYDPP)

# Posters

## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN  
**DROUGHT WATCH**

WATCH | WARNING | SEVERE | EXCEPTIONAL

### Advisories & Restrictions

Residents are encouraged to continue to use water efficiently (e.g., repair leaky faucets, take quick showers and recycle water)

Warn of and prepare for the possibility of watering restrictions

This voluntary program is a collaboration between: Grand County water providers, municipalities, agriculture, recreation, local nonprofits & business, fire districts & homeowners associations. Join our efforts to help out during drought.



DISCOVER MORE WAYS TO HELP  
[TINYURL.COM/GRANDCOUNTYDPP](http://TINYURL.COM/GRANDCOUNTYDPP)

## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN  
**STAGE 1: DROUGHT WARNING**

WATCH | WARNING | SEVERE | EXCEPTIONAL

### Advisories & Restrictions

Limit outdoor watering to no more than two days per week from 6pm to 10am

Sports fields/parks will be encouraged to reduce water usage by 10%

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## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN  
**STAGE 2: SEVERE DROUGHT**

WATCH | WARNING | SEVERE | EXCEPTIONAL

### Advisories & Restrictions

Limit outdoor watering to no more than one day per week from 6pm to 10am

Sports fields/parks will be encouraged to reduce water usage by 20%

New landscape establishment discouraged June through August

Municipal water providers may choose to use drought pricing

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# HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN  
**STAGE 3: EXCEPTIONAL DROUGHT**

WATCH | WARNING | SEVERE | EXCEPTIONAL

### Advisories & Restrictions

Indoor water rationing will be recommended

Residents are encouraged to restrict all outdoor watering

Sports fields/parks will be encouraged to reduce water usage by 30%

Golf courses and agriculture will reduce water use as much as possible while still maintaining the viability of their business

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# Social Media Posts

View Current Advisories & Restrictions

## HELP OUT DURING DROUGHT




GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

DISCOVER WHAT STAGE WE ARE CURRENTLY IN & LEARN MORE WAYS TO HELP. [TINYURL.COM/GRANDCOUNTYDPP](https://tinyurl.com/grandcountydpp)

## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN DROUGHT WATCH

WATCH WARNING SEVERE EXCEPTIONAL



GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

DISCOVER MORE WAYS TO HELP [TINYURL.COM/GRANDCOUNTYDPP](https://tinyurl.com/grandcountydpp)



## HELP OUT DURING DROUGHT

View Current Advisories & Restrictions



GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

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GRAND COUNTY IS CURRENTLY IN STAGE 2: SEVERE DROUGHT

WATCH WARNING SEVERE EXCEPTIONAL

### Advisories & Restrictions

Limit outdoor watering to no more than one day per week from 6pm to 10am	Sports fields/parks will be encourages to reduce water usage by 20%
New landscape establishment discouraged June through August	Municipal water providers may choose to use drought pricing

## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN STAGE 3: EXCEPTIONAL DROUGHT

WATCH WARNING SEVERE EXCEPTIONAL



GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

DISCOVER MORE WAYS TO HELP [TINYURL.COM/GRANDCOUNTYDPP](https://tinyurl.com/grandcountydpp)

GRAND COUNTY IS CURRENTLY IN STAGE 3: EXCEPTIONAL DROUGHT

WATCH WARNING SEVERE EXCEPTIONAL

### Advisories & Restrictions

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# Digital & Print Ads

## HELP OUT DURING DROUGHT

— GRAND COUNTY STAGES OF DROUGHT —

**DROUGHT WATCH**

- Residents are encouraged to continue to use water efficiently
- Warn of and prepare for the possibility of watering restrictions

**STAGE 1: DROUGHT WARNING**


- Outdoor watering no more than two days per week from 6pm to 10am
- Sports fields/parks will be encouraged to reduce water usage by 10%

**STAGE 2: SEVERE DROUGHT**

- Outdoor watering no more than one day per week between 6pm & 10am
- Sports fields/parks are encouraged to reduce water usage by 20%
- New landscape establishment discouraged June through August
- Municipal water providers may choose to use drought pricing

**STAGE 3: EXCEPTIONAL DROUGHT**

- Indoor water rationing is recommended
- Sports fields/parks will be encouraged to reduce water usage by 30%
- No outdoor watering
- Golf courses and agriculture will reduce water as much as possible while still maintaining the viability of their business

 GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

DISCOVER WHAT STAGE WE ARE CURRENTLY IN & LEARN MORE WAYS TO HELP.  
[TINYURL.COM/GRANDCOUNTYDPP](http://TINYURL.COM/GRANDCOUNTYDPP)

HELP OUT DURING DROUGHT

DISCOVER HOW YOU CAN HELP

GRAND COUNTY IS CURRENTLY IN STAGE 2: SEVERE DROUGHT

 GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

## HELP OUT DURING DROUGHT

GRAND COUNTY STAGES OF DROUGHT

**Drought Watch**

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**Stage 1: Drought Warning**


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**Stage 2: Severe Drought**

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- Sports fields/parks are encouraged to reduce water usage by 20%
- New landscape establishment discouraged June through August
- Municipal water providers may choose to use drought pricing

**Stage 3: Exceptional Drought**

- Indoor water rationing is recommended
- Sports fields/parks will be encouraged to reduce water usage by 30%
- Golf courses and agriculture will reduce water as much as possible while still maintaining the viability of their business

 DISCOVER MORE WAYS TO HELP  
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 GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

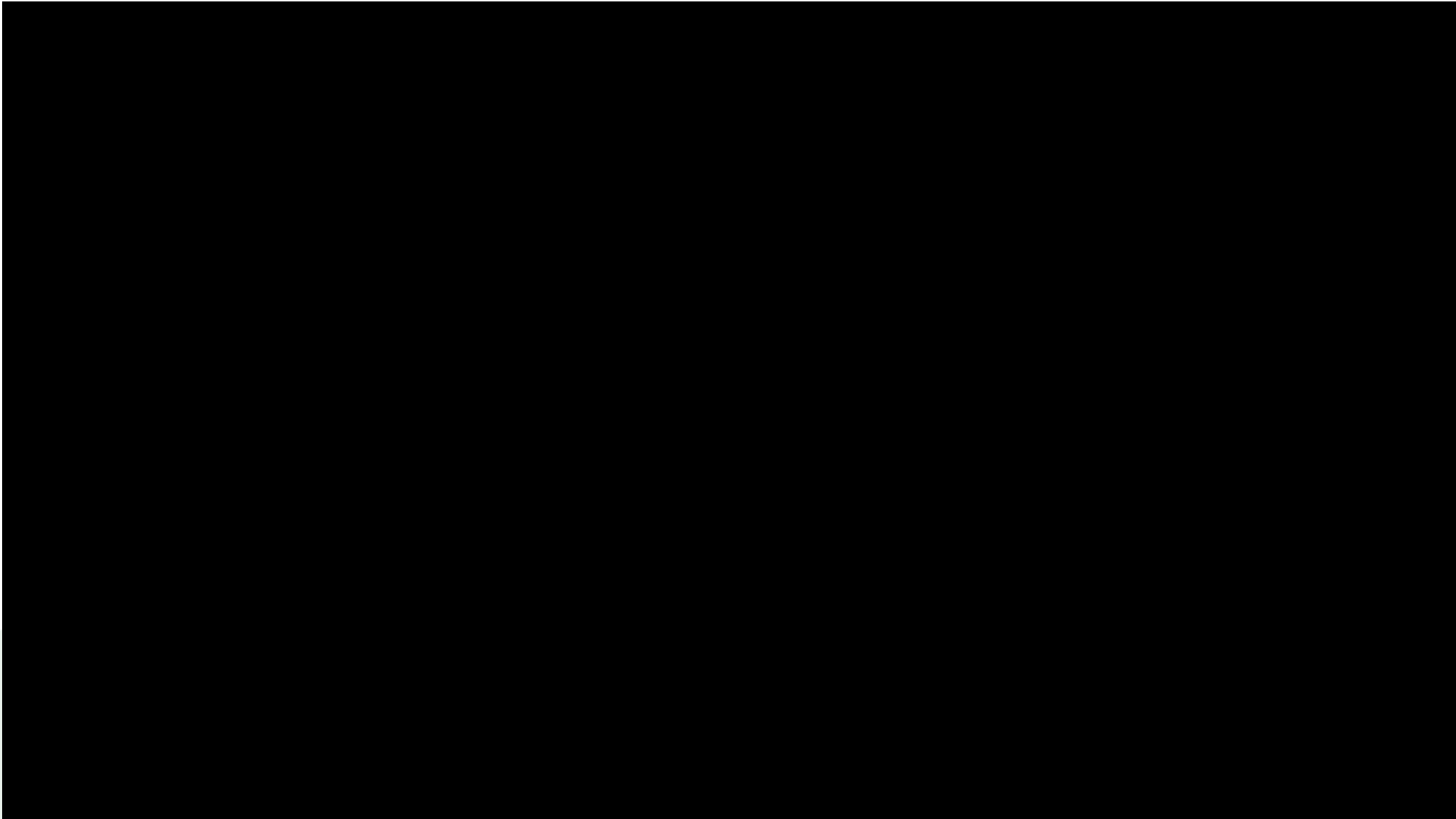
## HELP OUT DURING DROUGHT

GRAND COUNTY IS CURRENTLY IN STAGE 2: SEVERE DROUGHT

DISCOVER HOW YOU CAN HELP

 GRAND COUNTY DROUGHT PREPAREDNESS PROGRAM

# HELP OUT



# Questions and Discussion



GRAND COUNTY  
**DROUGHT**  
PREPAREDNESS  
PROGRAM