So how dry is it?









2020 was Colorado's 2nd driest and 7th warmest

2021 below average snowpack

Soil moisture levels were exceptionally dry since October 2020, so soil took a lot of the runoff this year

What we're seeing here is the combination of below normal snowpack and extremely dry soils



U.S Drought Monitor

 D0 - Abnormally Dry Hay production decreases; rangeland is dry Irrigation begins sooner 	100.00% of Grand County (D0-D4)	
 D1 - Moderate Drought Rangeland growth is stunted; very little hay is available Dryland crops suffer Wildfires increase 	100.00% of Grand County (D1-D4)	
 D2 - Severe Drought Farmers reduce planting; producers sell cattle Fire season is extended Snowpack is low; surface water levels are low; river flow is reduced 	69.07% of Grand County (D2-D4)	Routt
D3 - Extreme Drought		



 Pasture conditions worsen 	45.96%
 Large fires develop 	of Grand
 Reservoirs are extremely low; mandatory water restrictions are implemented; water temperature increases 	County (D3-D4)

D4 - Exceptional Drought

- Dust storms and topsoil removal are widespread
- Agricultural and recreational economic losses are large

19.43% of Grand County (D4)

Source(s): U.S. Drought Monitor, UC Merced



Updated weekly - 06/08/21

Trigger

Stage	Indicator #1	Timing	Trigger	
Drought Watch	U.S. Drought Monitor	To be evaluated at each	D0 abnormally dry	
Stage 1 - Warning	Index – Grand County map	Drought Preparedness Committee meeting	D1 moderate drought	
Stage 2 - Severe			D2 severe drought	
Stage 3 - Exceptional			D3 extreme drought or D4 exceptional drought	

Historical Conditions for Grand County

2000 - Present (Weekly) 1895 - Present (Monthly) 0 - 2017 (Yearly)

The U.S. Drought Monitor (USDM) is a national map released every Thursday, showing parts of the U.S. that are in drought. The USDM relies on drought experts to synthesize the best available data and work with local observers to interpret the information. The USDM also incorporates ground truthing and information about how drought is affecting people, via a network of more than 450 observers across the country, including state climatologists, National Weather Service staff, Extension agents, and hydrologists. Learn more.



Explore Historical Maps

Stage 2 Severe Drought

June 10th the Drought Preparedness Committee declared Grand County in Stage 2 Drought



DPP Stages of Drought

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 from 6:00pm to 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 from 6:00pm to 10:00am
- 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

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 Preparedness Program Elements

This is a summary of recommendations that would be provided to water providers and users. Depending on local conditions, additional recommendations may be provided. Progressive drought stages (from Drought Watch through Stage 3) are meant to replace the previous drought stage. Each progressive drought stage includes targeted and increased education and outreach.

Element	Routine	Drought Watch	Stage 1 Warning	Stage 2 Severe	Stage 3 Exceptional		
Outdoor watering and irrigation							
Lawn grass (residential, HOA, commercial, industrial, institutional)	Water no more than 3 days a week. To reduce evaporative loss, avoid outside lawn irrigation between the hours of 10:00 am and 6:00 pm. Do not cause water to pool in gutters/streets. Adjust sprinklers to avoid spraying on concrete or asphalt. Repair leaking sprinkler systems immediately. Avoid cutting lawn grass shorter than 3". Do not water when raining or during high winds. Install smart irrigation systems and/or sensors that measure rain and/or soil moisture.	Warn of and prepare for the possibility of mandatory watering restrictions. Voluntary two days per week lawn grass watering from 6:00 pm to 10:00 am.	No more than two days per week watering from 6:00 pm to 10:00 am.	No more than one day per week watering from 6:00 pm to 10:00 am.	No lawn watering.		

Element	Routine	Drought Watch	Stage 1 Warning	Stage 2 Severe	Stage 3 Exceptional		
Outdoor watering and irrigation							
Agricultural water ⁷ and golf courses	Use only what you need. Repair faulty irrigation systems.	Increased education and outreach re: efficiency and funding sources.	Voluntary reductions.	Voluntary reductions.	Voluntary reductions.		
Water wise landscapes, native/adaptive, Trees, shrubs, and perennials (private)	Increased education to transition landscape plants to xeriscape & native/ adaptive plants.	Handheld watering or drip irrigation only.	Handheld watering or drip irrigation no more than 2 days per week between 6:00 pm and 10:00 am.	Handheld watering or drip irrigation no more than 1 day per week between 6:00 pm and 10:00 am.	Water no more than one day per month.		
New landscape establishment	Encourage xeriscape and native/adaptive plants with drip irrigation systems.	Warn of potential for watering restriction under drought stages.	Not recommended.	Discouraged June through August.	Not allowed.		
Municipal streetscape	Water efficiently. Repair faulty irrigation systems.	Handheld watering or drip irrigation only.	Handheld watering or drip irrigation no more than 2 days/ week before 10:00 am.	Handheld watering or drip irrigation no more than 1 day/week before 10:00 am.	No watering.		
Flowers and vegetables (private) and community gardens	Water efficiently.	Water efficiently no more than three days per week using handheld and drip irrigation only between 4:00 pm and 10:00 am.	Water efficiently no more than two days per week using handheld and drip irrigation only between 4:00 pm and 10:00 am.	Water efficiently no more than one day per week using handheld and drip irrigation only between 4:00 pm and 10:00 am.	No watering.		
Sport fields and parks	Water efficiently. Repair faulty irrigation systems.	Use only what you need.	Irrigated per mandatory scheduling or water budget restrictions to achieve a 10% reduction.	Irrigated per mandatory scheduling or water budget restrictions to achieve a 20% reduction.	Irrigated per mandatory scheduling or water budget restrictions to achieve a 30% reduction.		

⁷ Agricultural Impact Task Force: <u>https://engagecwcb.org/agricultural-task-force?tool=story_telling_tool#tool_tab</u>

Element	Routine	Drought Watch	Stage 1 Warning	Stage 2 Severe	Stage 3 Exceptional		
Water Features							
Swimming pools, hot tubs & other water features	No waste of water. Repair faulty irrigation systems.	Outreach and education to discourage frequent filling.	Discourage frequent refilling.	Single-family residential pools or hot tubs shall not be filled or refilled. Operation of other pools and hot tubs will be permitted.	Operation of pools and hot tubs will not be permitted. No filling of pools or hot tubs.		
Washing / Even	ts						
Cars - washing at home and charity events	With bucket or handheld hose with a nozzle that shuts off when not in use.	With bucket or handheld hose with a nozzle that shuts off when not in use. If possible, ensure water runs off into landscape features.	With bucket or handheld hose with a nozzle that shuts off when not in use. If possible, ensure water runs off into landscape features.	Not permitted. Must use commercial car wash.	Not permitted. Must use commercial car wash.		
Fleet vehicle washing	No waste of water.	No waste of water.	Once every two weeks.	Once per month.	Not allowed.		
Street cleaning	Use only what you need.	Increased education and outreach with municipalities.	Reduce water used for street sweeping.	Use water gained from flushing of hydrants.	Street sweeping for extreme health and safety issues only.		
Driveway and sidewalk washing	Discourage under all circumstances: use dry clean methods.	Discourage under all circumstances: use dry clean methods.	Use dry clean methods and high efficiency equipment.	Washing and spraying on impervious surfaces is prohibited.	Washing and spraying on impervious surfaces is prohibited.		

Element	Routine	Drought Watch	Stage 1 Warning	Stage 2 Severe	Stage 3 Exceptional		
Commercial-Institutional Processes							
Restaurants	Water served only on request.	Water served only on request.	Water served only on request.	Water served only on request.	Water served only on request.		
Lodging	No restrictions.	No restrictions. Education and outreach to customers.	Change linens and towels only on request.	Change linens and towels only on request.	Change linens and towels only on request.		
Mag chloride application / grading	Apply in springtime.	Grade only after rain events.	Grade only after rain events.	Grade only after rain events.	Grade only after rain events.		
Bulk water / Construction water	No waste of water.	No waste of water.	No waste of water.	No waste of water.	No waste of water.		
Hydrants	Utilize restrictive gated devices.	Minimize water main flushing.	Utilize restrictive gated devices. Minimize water main flushing.	Hydrant flushing is prohibited unless necessary for public health and safety reasons. Use of all water for fire training and use of water from hydrants is not permitted unless necessary for public safety.	Hydrant flushing is prohibited unless necessary for public health and safety reasons. Use of all water for fire training and use of water from hydrants is not permitted unless necessary for public safety.		