EAGLE RIVER WATER & SANITATION DISTRICT

UPPER EAGLE REGIONAL WATER AUTHORITY

April 25, 2025

Ashley Garrison
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203
Ashley.garrison@state.co.us

RE: Drought Response Plan Final Report and Pay Request No. 3
CWCB Contract Number POGG 2024-2530

Dear Ashley Garrison,

Attached is the Drought Response Plan project final report and accompanying pay request (No. 3). The Final report includes a project summary, project obstacles, and confirmation that all grant commitments were met. In addition, the final document and resolution from the Eagle River Water and Sanitation District (District) and Upper Eagle Regional Water Authority (Authority) adopting the plan are included in the packet. We decided to name the document "Water Shortage Response Plan" instead of Drought Response Plan because it will apply to all water shortage emergencies, including but not exclusive to droughts.

Project Summary

Droughts represent a significant natural hazard in Colorado, often leading to severe impacts and substantial costs. The Water Shortage Response Plan (WSRP) delineates the procedures for monitoring and identifying drought stages, establishing key trigger points within the Eagle River Water and Sanitation District (District) and Upper Eagle Regional Water Authority (Authority) system, and implementing critical measures to mitigate drought impacts and extend water supplies.

On June 25, 2024, a work session was convened with the District and Authority Boards to present the plan's key concepts and proposed implementation strategies. These concepts were subsequently shared with a stakeholder group, including local governments and major water users, and during the August 28 "Vail Lunch with Locals" meeting. The attached plan has incorporated feedback from the Boards, stakeholder groups, and the public. The primary objectives are to preserve the District & Authority's capacity to provide essential public water services, protect the environment from damage caused by human water diversions, and support the stability of the recreation-based economy.

Project obstacles

The project did not encounter significant obstacles. The public and the Boards provided positive feedback during the drafting of the document. The local community acknowledges that the water supply is a valuable and limited resource. Communicating a water shortage emergency to vacation homeowners may present a challenge, as these owners are less likely to be price sensitive and may not be aware of drought conditions or other events causing water shortages due to their non-year-round residence.

Grant matching commitments

The District completed the project as specified in the grant contract and has adhered to all technical and financial requirements.

The WSRP was adopted by the Authority and District Boards and is attached. The document includes an outline of the public and stakeholder engagement process.

Enclosed is Pay Request No. 3 for the costs associated with the Drought Response Plan Project. This Pay Request includes work from October 1, 2024, to April 10, 2025. The following is a summary of all current project charges:

Current Project Charges	$ 9,881.04
Previous Project Charges	$ 76,183.65
TOTAL PROJECT CHARGES TO DATE:	$ 86,064.69

CWCB Grant	$ 59,586.00
Less Previous Payments	$ 53,628.00
AMOUNT OF THIS REQUEST	**$ 5,958.00**

This is the 3rd and final pay request for the project. The Eagle River Water and Sanitation District and the Upper Eagle Regional Water Authority Boards adopted the plan on April 10, 2025, and the joint resolution is attached.

We have included the invoices related to the requested payment identified above. If you have any questions, please call me at (970) 471-1152 or JHildreth@erwsd.org.

Thank you for your attention to this matter.

Justin Hildreth, PE
Water Resources Engineer

Attachments: CWCB Progress Report
Joint Resolution 2025-02, Adopting the 2025 Water Shortage Response Plan
2025 Water Shortage Response Plan (FINAL)
Consultant Invoices

PROGRESS REPORT – October 1, 2024, to April 10, 2025
Eagle River Water and Sanitation District Drought Response Plan

PAY REQUEST NO. 3

Project Invoices for this period are summarized below:

LRE Water			Amount
Dated	10/11/2024	Invoice 27705	$ 9,661.04
Dated	11/08/2024	Invoice 28291	$ 220.00
		Current Project Charges	**$ 9,881.04**

Project Update: The Drought Response Plan is divided into eight subtasks. Below is a breakdown of each subtask along with its status:

Subtask 1: Identifying a planning process, developing plan objectives, and operating principles. This task was previously completed.

Subtask 2: Drought Vulnerability Assessment. This task was previously completed.

Subtask 3: Drought Monitoring. This task was previously completed.

Subtask 4: Drought Stages, Trigger Points, and Response Targets. This task was previously completed.

Subtask 5: Drought Mitigation and Response Strategies. This task was previously completed.

Subtask 6: Staged Drought Response Program. This task was previously completed..

Subtask 7: Drought Response and Operation Administrative Framework. This task was previously completed.

Subtask 8: Plan Approval and Adoption. This task is complete. The draft Water Shortage Response Plan, including the triggers, response program, usage restrictions, and potential water surcharges and fees, was adopted by the District and Authority Boards on April 10, 2025.

EAGLE RIVER WATER AND SANITATION DISTRICT
WATER SHORTAGE RESPONSE PLAN
Table summarizing CWCB comments and the Response

Essential CWCB Comments			
CWCB Comment Section	**CWCB Comment**	**How To Resolve**	**Resolved**
1.2 Drought Planning Committee	Drought Committee members including their job title and description of expertise. (essential)	Added detailed description of planning committee	Yes
1.2 Drought Planning Committee	Explanation of the Drought Committee selection process. (beneficial)	Added detailed description of planning committee	Yes
1.2 Drought Planning Committee	Summary of the Drought Committee planning meetings held during the drought management plan development process. (beneficial)	Added detailed description of planning committee	Yes
1.7 Goals, Objectives and Operating Principles	List of water use priorities (i.e., a) essential water needs, b) social or economic impacts, and c) nonessential uses such as outdoor irrigation). (essential)	Added section on ideal water goals and values	Yes
1.7 Goals, Objectives and Operating Principles	Discussion of how the operating principles were incorporated into the plan development and how these principles will be considered during implementation (i.e., "The operating principles are reflective of the community's values and will be reviewed prior to implementing mandatory water use reductions.") (beneficial)	Added section on ideal water goals and values	Yes
2.1 Historical Drought Impact Assessment	Mitigation measures historically implemented to minimize drought impacts. Mitigation measures taken prior to a drought to avoid or reduce impacts during a drought. Demandand supply-side historical mitigation measures may be identified using Worksheets B and C, respectively. (essential)	Noted that minimal actions were taken previously	Yes
2.1 Historical Drought Impact Assessment	Lessons learned from previous drought(s) and recommendations for how implementation of drought mitigation/response measures should be altered to better respond to future drought. (beneficial)	Added descriptions of historic droughts and lessons learned	Yes
2.2 Identifying and Assessing Future Vulnerabilities	Summary of provider's water supplies and ability to reliability meet projected water demands during drought. This may include an overview of water supply reliability planning efforts such as the acquisition of new supplies to meet growing demands, raw water master planning studies, key terminology used to define water supply reliability (e.g. firm yield), etc. (essential)	Added section on various water supply planning efforts	Yes
2.2 Identifying and Assessing Future Vulnerabilities	Description of how water supply reliability planning is related to the availability of supplies and vulnerability during drought. (beneficial)	Added more detailed discussion on water supply planning efforts	Yes
3.0 Drought Monitoring	Entities/staff responsible for drought monitoring. (essential)	List of staff roles included	Yes
3.0 Drought Monitoring	Protocol for recording and archiving monitoring data. (beneficial)	Described that data should be stored	Yes
4.1 Drought Stages, Trigger Points, and Response Targets	Advantages and disadvantages of declaring a drought early versus delaying declaration of a drought stage until later in the season. Address the balance between prematurely declaring a drought and waiting too long to respond. (beneficial)	Added discussion	Yes
5.1 Drought Mitigation Measures and Action Plan	Entities/staff responsible for administrating the mitigation action. (essential)	Added section on WSRC roles, as well as integration into ICS during an emergency	Yes
5.2 Supply-Side Response Strategies	List of the selected supply-side response strategies. Supply-side strategies listed in Worksheet B may be used as an initial reference source for generating strategy ideas. Specific details related to each strategy should be included. For example, if the "lower reservoir intake strategy" is selected, information should also be provided on the specific reservoir(s) in which the intake will be lowered. (essential)	Added section on supply side strategies, specifically Aurora and Columbine	Yes
7.2 Implementation of the Staged Drought Response Program	Entities/staff responsible for administering the staged drought response program. (essential) Worksheet I provides a template for noting staff and corresponding roles and responsibilities.	Added section on WSRC roles, as well as integration into ICS during an emergency	Yes
7.2 Implementation of the Staged Drought Response Program	Staff responsible for administering the drought public campaign. (essential)	Communications staff described and roles added to WSRC section	Yes
7.6 Monitoring of Drought Response	Refer to Section 3 where drought monitoring protocol is provided. Describe any changes that may occur with this protocol during a drought. For instance, does the frequency of monitoring increase? (essential)	Added section on demand data monitoring, and increased monitoring frequency from 1 month to 1 week during declared drought	Yes
7.6 Monitoring of Drought Response	Describe any additional drought indicators that you may collect as assess during drought. For instance, does demand monitoring increase during drought to assess water savings being achieved? (essential)	Added section on demand data monitoring, and increased monitoring frequency from 1 month to 1 week during declared drought	Yes
7.6 Monitoring of Drought Response	Staff/entities responsible for the data collection, evaluation, and recommendations on Plan improvements. (essential)	Added section on WSRC and staff roles, as well as integration into ICS during an emergency. How detailed do we want these roles and annual activities to be?	Yes
8.2 Plan Adoption or Promulgation	Official agreement(s) needed with other entities for drought-related coordination purposes. (essential)	Discussion added, no formal agreements are required	Yes
8.3 Periodic Review and Update	Frequency of when the Plan will be updated. Recommend every five years. (essential)	This is included in the Future Plan Update section	Yes
8.3 Periodic Review and Update	Anticipated date of the next update. (essential)	This is included in the Future Plan Update section	Yes
8.3 Periodic Review and Update	Staff responsible for taking the lead in initiating the Plan update and collecting appropriate data. (essential)	This is included in the Future Plan Update section	Yes

EAGLE RIVER WATER AND SANITATION DISTRICT
WATER SHORTAGE RESPONSE PLAN
Table summarizing CWCB comments and the Response

Figure and Table Accessibility Review

Section	Figure ID	Review Action	Resolved
Figures	Figure 1. 2018 Drought Year Hydrograph and Critical Period	Reviewed and updated for accessibility	Yes
Figures	Figure 2. District and Authority Supply and Service Areas	Reviewed and updated for accessibility	Yes
Figures	Figure 3. Historical Annual Total Streamflows, Eagle River at Gypsum (09070000)	Reviewed and updated for accessibility	Yes
Figures	Figure 4. Ranked Annual Total Streamflows, Eagle River at Gypsum (09070000)	Reviewed and updated for accessibility	Yes
Figures	Figure 5. Climate Change Streamflow Context, Eagle River at Gypsum (09070000)	Reviewed and updated for accessibility	Yes
Figures	Figure 6. Average Daily Water Demands Across the District and Authority	Reviewed and updated for accessibility	Yes
Figures	Figure 7. Average Daily Consumptive Use of Water Across the District and Authority	Reviewed and updated for accessibility	Yes
Figures	Figure 8. Hydrograph of Recent Drought Years, Showing Key Monitoring Thresholds	Reviewed and updated for accessibility	Yes
Figures	Figure 9. 2018 Drought Year Hydrograph and Critical Period	Reviewed and updated for accessibility	Yes
Figures	Figure 10. Critical period length for water years 2001 through 2023.	Reviewed and updated for accessibility	Yes
Figures	Figure 11. Eagle County SPI, 2000 through 2024	Reviewed and updated for accessibility	Yes
Figures	Figure 12. District Critical Period Length Compared to SPI	Reviewed and updated for accessibility	Yes
Figures	Figure 13. Map of District SNOTEL sites	Reviewed and updated for accessibility	Yes
Figures	Figure 14. April 1st SWE and 3-Station Average for Eagle River SNOTEL Stations	Reviewed and updated for accessibility	Yes
Figures	Figure 15. District and Authority Critical Period Length Compared to April 1st Snow Water Equivalent	Reviewed and updated for accessibility	Yes
Figures	Figure 16. Peak Annual Streamflow, Eagle River at Avon, Showing Recent Droughts	Reviewed and updated for accessibility	Yes
Figures	Figure 17. Critical Period Length Compared to Peak Streamflow at the Avon Gage (USGS 09067020)	Reviewed and updated for accessibility	Yes
Figures	Figure 18. Critical Period Length Compared to the Exceedance of 100 cfs Flow at Avon	Reviewed and updated for accessibility	Yes
Figures	Figure 19. Drought Stages Action Diagram	Reviewed and updated for accessibility	Yes
Figures	Figure 20. D/A-Wide Outdoor Watering Schedule, Showing Weekly Restrictions	Reviewed and updated for accessibility	Yes
Figures	Figure 21. District and Authority Water Demand in 2021, Highlighting Non-Compliance with Outdoor Water Use Policy	Reviewed and updated for accessibility	Yes
Figures	Figure 22. Example Timeline of Monitoring and Response Actions	Reviewed and updated for accessibility	Yes
Tables	Table 1. Eagle River Basin Water Shortage Risk Indicators	Reviewed and updated for accessibility	Yes
Tables	Table 2. Eagle River Basin Drought Indicators	Reviewed and updated for accessibility	Yes
Tables	Table 3. Critical Thresholds for Water Shortage Indicators	Reviewed and updated for accessibility	Yes
Tables	Table 4. Other Drought Plans Reviewed	Reviewed and updated for accessibility	Yes
Tables	Table 5. Drought Response Actions from Other Plans, Showing Occurrence by Drought Stage	Reviewed and updated for accessibility	Yes
Tables	Table 6. List of District Water Shortage Response Actions	Reviewed, removed "?"s, checked for accessibility	Yes