



**Cherry Creek Basin Water Quality Authority  
Board of Directors Meeting Agenda  
Thursday, October 20, 2022, 9:00 a.m.**

**In-Person: SEMSWA  
7437 S. Fairplay St.  
Centennial, CO 80112**

**Virtual: Zoom<sup>1</sup>  
<https://zoom.us/j/3039689098> Passcode: CCBWQA  
Phone (669)900-6833 Mtg ID 3039689098# Passcode: #542117**

**CCBWQA Board of Directors Meeting Documents can be found online at the link below.**  
<https://drive.google.com/drive/folders/1ctix7RwAcABNmt1PKGS8FHTs5G0g-6s?usp=sharing>

1. Call to Order and Pledge of Allegiance
2. Oath of Office - Abe Laydon
3. Consent Agenda (5 minutes)  
*(Items on the consent agenda can be approved with a single motion or, items can be requested to be moved from the consent agenda and moved to the "discussion or direction and/or action" section.)*
  - a. Approval of the September 15, 2022 Minutes (enclosed)
  - b. Acceptance of the Schedule of Cash Position dated October, 2022 (enclosed)
  - c. Approval of the Unpaid Claims as of October, 2022 (enclosed)
  - d. IGA Amendment for Cherry Creek upstream of Scott Road (enclosed)
  - e. IGA Amendment for Happy Canyon Creek near I-25 (enclosed)
  - f. IGA Amendment for Cherry Creek at Arapahoe Road (enclosed)
  - g. First Amendment to 2022 Wright Water Engineers Technical Manager Agreement (enclosed)
  - h. Approval of Wright Water Engineers 2023 Technical Manager Services Agreement (enclosed)
  - i. Approval of RG and Associates 2023 Agreement (enclosed)
4. Direction and/or Action (5 minutes)
  - a. 2023 Sampling and Analysis Plan Update (Stewart, enclosed)
5. Discussion (45 minutes)
  - a. Lake Nutrients Criteria RMH (DiToro/Clary, enclosed)
  - b. CCBWQA 2023 Draft Budget (Ruzzo/Clary, enclosed)
    - i. Draft Capital Improvement Program (enclosed for information only)
6. Presentations (15 minutes for presentation; 15 minutes for discussion)
  - a. Board Involvement (Woodling)
7. Board Member Items
8. Updates (10 minutes)
  - a. Technical Manager (Clary)
  - b. Cherry Creek Stewardship Partners Update and [Events](#) (Davenhill)
  - c. TAC (James)
  - d. Contract Staff (see enclosed memos)
    - i. PAPM (Borchardt)
      - a. LUR Monthly Summary
      - b. CIP, Maintenance, and Operations Status Report
    - ii. Water Quality (Stewart)
      - a. [WQ Update](#) and Memo
    - iii. Regulatory (DiToro)
  - e. Legal
  - f. Other

---

<sup>1</sup> If you are unable to participate on the CCBWQA's Zoom platform, please email [val.endyk@ccbwwqa.org](mailto:val.endyk@ccbwwqa.org)

9. Executive Session pursuant to Section 24-6-402(4) C.R.S., if necessary.
10. Adjournment

[CCBWQA Workplan](#)





**Cherry Creek Basin Water Quality Authority  
Minutes of the Board of Directors Meeting  
Thursday, September 15, 2022, 9:00 a.m.**

**Board Members Present**

Abe Laydon, Douglas County (zoom)  
Bill Ruzzo, Governor's Appointee  
Christopher Lewis, Vice Chairman, Governor's Appointee  
John Woodling, Governor's Appointee  
Margaret Medellin, Governor's Appointee (zoom)  
Mike Anderson, City of Lone Tree  
Stephanie Piko, City of Centennial  
Steve Sundberg, City of Aurora (zoom)  
Tom Downing, Governor's Appointee  
Tom Stahl, City of Greenwood Village (zoom)

**TAC Members Present**

Alex Mestdagh, Town of Parker (zoom)  
Ashley Byerley, SEMSWA (zoom)  
David Van Dellen, Town of Castle Rock (zoom)  
Jason Trujillo, Board Appointee, Cherry Creek State Park (zoom)  
Joe Marencik, City of Castle Pines (zoom)  
Jon Erickson, TAC Vice Chairman, Board Appointee, Colorado Parks and Wildlife (zoom)  
Rick Goncalves, Board Appointee (zoom)  
Ryan Adrian, Douglas County (zoom)  
Sherry Scaggiari, City of Aurora (zoom)

**Others Present**

Erin Stewart, LRE Water  
Jane Clary, Wright Water Engineers, CCBWQA Technical Manager  
Jessica DiToro, LRE Water  
Joni Nuttle, CDPHE (zoom)  
Richard Borchardt, R2R Engineers (zoom)  
Tim Flynn, Collins Cole Flynn Winn & Ulmer, PLLC  
Val Endyk, CCBWQA

**1. Call to Order and Pledge of Allegiance**

Director Lewis called the meeting to order at 9:04 am and led in the pledge of allegiance.

**2. Consent Agenda**

- a. **Approval of the August 18, 2022 Minutes**
- b. **Acceptance of the Schedule of Cash Position dated September, 2022**
- c. **Approval of the Unpaid Claims as of September, 2022**
- d. **IGA Amendment for Cherry Creek at Dransfeldt**

Director Anderson moved to approve the consent agenda. Seconded by Director Downing. The motion carried.

### **3. Direction and/or Action**

#### **a. IGA for Piney Creek Reaches 1 and 2**

Rich Borchardt provided a summary of the Piney Creek reaches 1 and 2 project. The CCBWQA is providing \$38K and partnering with SEMSWA providing \$114K. Project will provide bed and bank protection to immobilize an estimated 49 lbs of Phosphorus annually.

Discussion included:

- Other projects have been completed on Piney Creek upstream of this project.
- The sequencing of projects is important. With stream reclamation the general approach is to start upstream and work downstream, so that any imbalance in sediment transport can be resolved during the progression of the sequencing of the projects.
- Floodplain preservation options when doing stream reclamation projects to lessen impact of upstream development and its encroachment into the stream. The Bow Tie preservation, on the south side of the project, helps with the reclamation effort and provides a buffer between the stream and development.

Director Piko moved to authorize CCBWQA to execute the IGA and an expenditure of \$38,000. Seconded by Director Medellin. The motion carried.

#### **b. Approval of Sunset Point Site Application**

Rick Goncalvez provided a summary of the application 3.5 miles east of Castle Rock. Lift station will flow to the Plum Creek Reclamation facility with 400 gpm duplex. Application and design includes sufficient emergency equipment and response plans in place with the exception of direct piping in case of pump failure. The application meets criteria but some of the information was provided on the wrong forms so the applicant was notified to provide corrected information. TAC provided a recommendation to accept the application based on the corrected forms being submitted and emergency bypass pipes being included in the design and construction.

Discussion included:

- When new forms are submitted, the additional review will verify that the new forms are filled out correctly.
- Location in relation to the 100 year floodplain. Opportunity for additional protective measures to ensure the development is not impacting the floodplain.
- 208 Plan relationship to the CCBWQA Watershed Plan and effects.
- CCBWQA is the designated 208 Management Agency, but not the 208 Planning Agency. Since DRCOG disbanded, the 208 watershed plan has become out of date, which makes determining compliance difficult.

Director Ruzzo moved to approve the Site Location Application for the Sunset Point Lift Station on the condition that emergency bypass piping be included in the design and construction of the project, that the information be submitted on the correct forms, and that the certified "Receiving Entity" forms be submitted and approved, and directing the Authority's Technical Manager to sign the application form as "Recommend Approval", fill in the dialogue box on the form with the stated conditions. Seconded by Director Anderson. The motion carried.

Director Ruzzo moved that the CCBWQA inform the WQCD that the current 208 Management Plan is out of date. Seconded by Director Piko. The motion carried.

### **c. Approval of Direct TV Site Application**

Rick Goncalvez provided a summary of the Direct TV site application which includes a decrease in design capacity from 3,500 gpd (which was under CDPHE jurisdiction) to max daily flows less than the 2,000 gpd, which puts Direct TV in the jurisdiction of Tri-County Health. Douglas County took over services from Tri-County Health in full as of September 1, 2022 and will take over oversight of this property.

Director Piko moved to approve the Site Location Application for the Direct TV OWTS for decreasing the design capacity of an existing WWTP to 2000 GPD or less and directing the authority's Technical Manager to sign the application form and submit to CDPHE. Seconded by Director Anderson. The motion carried.

### **d. Broader Scope CR72 RMH**

Jessica DiToro provided an update on the Broad Scope CR72 Informational Hearing which will be held in April 2023. If at this Informational Hearing, the WQCC determines that a RMH is necessary, one will be scheduled (likely) for late 2023. Staff has included this topic for discussion at every TAC and Board meeting since April 2022, and has also requested that TAC members coordinate with their respective Board members to identify any potential changes to CR72.

The only two items that remained up for consideration after multiple discussions were: 1) Differential flow monitoring (DFM) of lift stations in the Basin; and 2) Parker WSD's construction dewatering proposal to remove the 0.05mg/L TP limit on short-term dewatering activities. Regarding item #2, CPW identified concerns based on the impacts of groundwater on the loading to Cherry Creek Reservoir. Additional analysis of dewatering permit monitoring data (including flow rates) is needed before any conclusions can be made and will be further investigated by CPW and CDPHE.

It is staff's opinion that concerns over DFM are likely not worth spending CCBWQA resources on at this time in a regulatory setting, while the PWSD proposal should not be carried forward by CCBWQA. If PWSD does propose this change to CR72, CCBWQA will have to determine if it supports, opposes, or wishes to stay neutral on the issue at the formal CR72 RMH.

Discussion included:

- Regulation 22 stakeholder workgroup is ongoing and could be an area to address DFM. Rick Golcalvez is involved, and we could be a proponent in that process based on Board direction.
- Prior conversations between staff and WQCD indicated that the WQCD did not support CR72 as the regulatory location for restrictions/specifications on DFM.
- WQCD has indicated that it will not be a proponent for the CR72 RMH and wishes the CCBWQA to be the proponent if changes are needed. However, if CCBWQA is not the proponent, other entities such as PWSD still can be proponents.
- John Woodling would like more Board guidance to staff related to involvement with regulatory processes and proceedings.
- Any future letter to the WQCC for the Informational Hearing will be approved by the Board prior to being sent.

Without precluding further discussion with the WQCD, Director Woodling moved that, at this time, CCBWQA not propose changes to CR 72, but that CCBWQA seek party status if a RMH is scheduled. Seconded by Director Piko. The motion carried.

## **4. Discussion**

### **a. Lake Nutrients Criteria RMH**

Jessica DiToro provided an update on the Lakes Nutrient Criteria RMH. The group "the Water Parties" requested a 90-day delay in regards to concerns over impacts to water rights that could occur if these standards were adopted. In addition "the Joint Parties" submitted a request for a 1-year delay due related to data and methodology used to generate the proposed standards. The WQCC issued an order stating that the hearing will

be delayed until April 10, 2023. Technical review by Hydros, Saunders, and McCutcheons were included as affidavits.

A conference for all parties to the RMH was held on September 14th regarding the schedule and process for the delayed RMH. The WQCD will also be submitting an amendment to their proponent's prehearing statement (PPHS) on October 5th. This means CCBWQA staff will not be able to thoroughly review the WQCD's PPHS until after the next TAC meeting, which is scheduled for October 6th. The WQCC also set December 21st as the deadline for the responsive prehearing statement (RPHSs). Parties that have already submitted RPHS, like CCBWQA, will have the opportunity to submit an amended RPHS or supplemental information to their RPHS at that time. Staff will review the WQCD's supplemented PPHS in October and will bring recommendations regarding potential changes (or no changes) to the RPHS to the TAC and Board at the November TAC and Board meetings.

#### **b. Lake Nutrients Criteria Budget Estimate**

Agenda item 4b should be changed from "Lake Nutrients Criteria Budget Estimate" to "Site Specific Standards Budget Estimate".

The recent changes to the Lakes Nutrients Criteria RMH may have impacts to the efforts but an estimate has been received from Christine Hawley of Hydros which would include methodology review, data analysis, model use if needed. The cost estimate is approximately \$84K and would include a multi-stage review process to determine next steps based on results, with go/no-go checkpoints throughout the entire process.

Davis Graham and Stubbs provided an estimated range of \$30-60K depending on involvement required (documentation and writing provided by Hydros and CCBWQA staff). Staff support from Jane Clary and Jessica DiToro would be \$10-20K each, again depending on involvement required, but this amount will be included in their respective scopes for 2023.

Discussion included:

- Many unknown factors will impact the cost and involvement required. If the WQCD altered their methodology over the next 3-6 months resulting in different criteria, there is a possibility that site specific standards may not be needed (although unlikely).
- John Woodling expressed concern over the cost of development of a site-specific standard and the associated involvement in the regulatory rulemaking process.
- Other discussion noted that although there is cost with site-specific standards, there is also a cost of compliance with TMDLs and a desire to make sure that future requirements are tied to meaningful/scientifically sound targets for the reservoir.

#### **5. Board Member Items**

Director Woodling requested time on the October agenda for a presentation related to how the board should be directing Staff to proceed, particularly on regulatory issues.

#### **6. Updates**

##### **a. Technical Manager**

##### **i. Watershed Plan Update**

Jane Clary provided an update that she, Jessica, and Erin presented the 2021 CCBWQA Annual Report on Activities to the WQCC on Monday Sept 12th which went well. Positive feedback was received from the WQCC and WQCD following the presentation. Good questions from the WQCC indicated that they were engaged in the presentation. WQCC members provided positive comments on the electronic format of the annual report.

Jane also stated that several TAC and Board members have expressed interest in updating the CCBWQA Watershed Plan and have some concerns about the outdated plan. The 2023 budget and scope will include a

review of the watershed plan to identify needed updates, missing information and an approach to update the plan (the update itself could occur in 2024).

Discussion included:

- Process should include stakeholder engagement, priority project identification, etc.
- Goals of the watershed plan are to provide a long-term vision resource for Board and local governments, a roadmap for actions/projects, consolidated procedures for review activities (e.g., site applications) and other information.

**b. Cherry Creek Stewardship Partners Update and [Events](#)**

Annual Watershed Conference to be held on September 23rd.

**c. TAC**

Topics at 9/1 TAC rolled into all of today's Board meeting agenda items, the only exception was Rich did an update on the wetland harvesting and showed robust regrowth.

**d. Contract Staff**

**i. PAPM (Borchardt)**

**a. LUR Monthly Summary**

29 land use referrals. In packet.

**b. CIP, Maintenance, and Operations Status Report**

Wetland Harvesting - Working on 2022 harvesting right now. Will occur in the next week or so. Hoping for similar results and efficacy.

RDS activities - Compressor warning before Labor Day and compressor shut-off over holiday weekend. Maintenance crew cleaned out the filters for the compressor and it is back up and running. Another warning has popped up since. Maintenance crew will come out to work on it. Will operate through the end of month.

**ii. Water Quality (Stewart)**

**a. [WQ Update](#)**

Erin Stewart provided an update of the WQ from the data portal, which includes data through July.

**iii. Regulatory (DiToro)**

**a. Colorado Water Quality Rulemaking Hearing Information**

[Memo](#) included in the packet is an overview of the Rulemaking Process and those RMH activities that may be of interest to the CCBWQA.

**e. Legal**

**i. Cherry Creek Project Authority Due Diligence Application Stipulation**

Tim Flynn provided an update which he had received from Evan Ela with Cockrel Ela Gregher Glesne and Ruhland, special water rights counsel for CCBWQA with respect to CCBWQA's Statement of Opposition filed in a due diligence application case on Cherry Creek filed by the Cherry Creek Project Water Authority. Mr. Flynn reported that Evan Ela has determined that it is appropriate for CCBWQA to enter into a Stipulation with the Project Authority whereby CCBWQA will withdraw its Statement of Opposition but be allowed to review and comment on any proposed decree. This will enable CCBWQA to ensure that the proposed decree does not have adverse harmful effects on CCBWQA's Bow Tie Water Rights.

Director Ruzzo moved to authorize entering into the Stipulation and the withdrawal of the CCBWQA Statement of Opposition. Director Piko Seconded. The motion carried.

**f. Other**

Director Piko informed the board that the property owner of the section on Cherry Creek to the north of the drainage had requested SEMSWA review for floodplain rezoning due to the potential for sale. She noted that



the request for other entities to partner with MHFD to purchase the property to preserve the floodplain has started.

Rich Borchartd stated that we have easements south of Arapahoe Rd, but north of Arapahoe Road it is mostly private property. Rich noted that there is a line item under preservation for \$50K a year and can be adjusted through the budget process. The purchase of property and/or easement north of Arapahoe Road would help facilitate future stream reclamation projects planned on Cherry Creek in the area.

Director Piko stated that coordination of municipalities, easement holders, etc., would be helpful based on various needs (water quality, floodplain preservation, land use concerns, homeless encampments, etc.)

**7. Executive Session pursuant to Section 24-6-402(4), (b), and (e). C.R.S., for purposes of discussing matters subject to negotiation and advice from legal counsel with respect to such matters if necessary.**

No executive session was held.

**8. Adjournment**

There being no further business to come before the Board, Director Lewis moved to adjourn the meeting at 11:04 a.m.

[CCBWQA Workplan](#)

**Cherry Creek Basin Water Quality Authority**  
**Schedule of Cash Position**  
September 30, 2022  
as of October 13, 2022

	<u>General Fund</u>	<u>Pollution Abatement Fund</u>	<u>Enterprise Fund</u>	<u>Total</u>
<b><u>1st Bank - Checking Account</u></b>				
Balance as of 09/30/22	\$ 32,986.35	\$ 32,444.20	\$ 5,223.26	\$ 70,653.81
<i>Anticipated Activities</i>				
Monthly Transfer for AP	85,000.00	880,000.00	110,000.00	1,075,000.00
Bill.com Open Invoices	(83,970.29)	(884,395.75)	(102,844.13)	(1,071,210.17)
<i>Anticipated balance</i>	<u>\$ 34,016.06</u>	<u>\$ 28,048.45</u>	<u>\$ 12,379.13</u>	<u>\$ 74,443.64</u>
<b><u>ColoTrust General - (8001)</u></b>				
Balance as of 09/30/22	\$ 1,028,987.00	\$ 3,427,779.64	\$ 1,586,814.00	\$ 6,043,580.63
Subsequent activities:				
10/07/22 Month to Date Fees Received	-	-	49,568.88	49,568.88
<i>Anticipated Monthly Transfer for AP</i>	(85,000.00)	(880,000.00)	(110,000.00)	(1,075,000.00)
<i>Anticipated balance</i>	<u>\$ 943,987.00</u>	<u>\$ 2,547,779.64</u>	<u>\$ 1,526,382.88</u>	<u>\$ 5,018,149.51</u>
<b><u>ColoTrust Pollution Abatement - (8002)</u></b>				
Balance as of 09/30/22	\$ -	\$ 53,884.31	\$ -	\$ 53,884.31
<i>Anticipated balance</i>	<u>\$ -</u>	<u>\$ 53,884.31</u>	<u>\$ -</u>	<u>\$ 53,884.31</u>
<b><u>CSAFE - Savings Account</u></b>				
Balance as of 09/30/22	\$ 859,161.30	\$ 42,246.04	\$ 344,398.20	\$ 1,245,805.54
<i>Anticipated balance</i>	<u>\$ 859,161.30</u>	<u>\$ 42,246.04</u>	<u>\$ 344,398.20</u>	<u>\$ 1,245,805.54</u>
<b><i>Total funds available as of date above</i></b>	<u><u>\$ 1,837,164.36</u></u>	<u><u>\$ 2,671,958.44</u></u>	<u><u>\$ 1,883,160.21</u></u>	<u><u>\$ 6,392,283.00</u></u>

**Effective monthly yield (as of 09/30/2022)**

1st Bank - 0.050%\* if Balance >\$20,000  
ColoTrust Plus - 2.6205%  
CSAFE - 2.62%

**Cherry Creek Basin Water Quality Authority  
Unpaid Claims as of 10/13/2022**

Date	Vendor	Invoice #	Account Description	Amount
6/30/2022	Hydros Consulting Inc.	523-001	117440 - Management/administration	806.00
7/31/2022	RG and Associates LLC	152476	107445 - TAC coordination	1,088.00
8/1/2022	Davis Graham & Stubbs LLP	838166	107050 - Regulatory Support	5,358.00
8/31/2022	RG and Associates LLC	152522	107454 - 107445 Split GF Accounts	2,544.00
8/31/2022	Collins Cole Flynn Winn & Ulmer, PLLC	2223	107460 - Legal services	9,461.00
8/31/2022	Pinpoint Systems Inc.	9652	107481 - Office expense	1,623.75
8/31/2022	Hydros Consulting Inc.	523-002	117440 - Management/administration	18,376.30
8/31/2022	Wright Water Engineers, Inc.	64588	117440 - Management/administration	18,191.25
8/31/2022	RESPEC	INV-0822-1558	117728 - Reservoir Shoreline Stabilization - East Shade Shelter	8,038.75
8/31/2022	Muller Engineering Company	35101	407720 - Reservoir to 12-Mile Park Study	4,309.75
8/31/2022	Muller Engineering Company	35138	407733.01 - CCBWQA Planning	10,286.50
8/31/2022	Wright Water Engineers, Inc.	64589	407736 - Special Studies/Projects: BMP Effectiveness	1,328.25
9/23/2022	53 Corporation, LLC	Pay App 2022-3	117722 - PRF Restoration	57,346.75
9/24/2022	Muller Engineering Company	35296	407720 - Reservoir to 12-Mile Park Study	2,824.00
9/24/2022	Muller Engineering Company	35297	407720 - Reservoir to 12-Mile Park Study	2,454.50
9/24/2022	Muller Engineering Company	35300	407733.01 - CCBWQA Planning	2,490.75
9/25/2022	LRE Water	20930	107400 - 107999 Split GF Accounts	43,386.19
9/25/2022	Valerie Endyk	9	107454 - 107520 Split GF Accounts	5,812.50
9/25/2022	LRE Water	20930	407890 - Res Sediment Sampling and Analysis	250.00
9/26/2022	Urban Drainage and Flood Control District	INV02860	117882 - Stream reclamation - CC Scott Road	275,000.00
9/26/2022	Urban Drainage and Flood Control District	INV02852	117887 - Happy Canyon: The I25 Upstream	250,000.00
9/27/2022	B & RW Construction Co., Inc.	2022	117723 - PRF Routine	3,855.00
9/30/2022	CliftonLarsonAllen LLP	3438045	107000 - Accounting	3,334.92
9/30/2022	Collins Cole Flynn Winn & Ulmer, PLLC	2553	107460 - Legal services	8,512.00
9/30/2022	*Verizon	9917427727	107480 - Miscellaneous	51.43
9/30/2022	Pinpoint Systems Inc.	9675	107481 - Office expense	502.50
9/30/2022	Hydros Consulting Inc.	523-003	117440 - Management/administration	810.60
9/30/2022	R2R Engineers, Inc.	2022-11	117440 - Management/administration	26,202.79
9/30/2022	*Xcel Energy	798601759	117701 - Utilities - Reservoir Destratification	8,779.31
9/30/2022	Cockrel Ela Glesne Greher & Ruhland, P.C.	6045.001SEPT22	407735 - Special Studies/Projects - Bow Tie	880.00
10/6/2022	Urban Drainage and Flood Control District	INV02863	407738 - Special Studies/Projects -	78,020.38
10/8/2022	B & RW Construction Co., Inc.	02-100822	117723 - PRF Routine	8,860.00
10/10/2022	RG and Associates LLC	152588	107454 - 107445 Split GF Accounts	2,296.00
10/11/2022	Town of Castle Rock	1344	117877 - Stream Reclamation - McMurdo Gultch	170,129.00
10/12/2022	Southeast Metro Stormwater Authority	Piney 1-2	117872 - 117872	38,000.00
<b>Total Claims</b>				<b><u>1,071,210.17</u></b>
General Fund				83,970.29
Pollution Abatement Fund				884,395.75
Enterprise Fund				102,844.13
<b>Total Claims by Funding Source</b>				<b><u>1,071,210.17</u></b>



## ACTION ITEM MEMORANDUM

**To:** CCBWQA Board of Directors  
**From:** Richard Borchardt, Pollution Abatement Project Manager  
**Date:** October 20, 2022  
**Subject:** Cherry Creek Stream upstream of Scott Road – IGA Amendment

**Request:** The Board authorize the execution of the Amendment to Intergovernmental Agreement (IGA Amendment) for the Stream Improvements on Cherry Creek Upstream of Scott Road which includes funding of \$100,000 (\$0 CCBWQA, \$100,000 Douglas County, and \$0 MHFD).

**Project:** The Project is on Cherry Creek near Scott Avenue (Project, see Figure on Right) in Douglas County (County) and is a partner project with the County, CCBWQA, and Mile High Flood District (MHFD) which is the project lead. Muller Engineering is the design consultant. The proposed stream improvements benefit the water quality in Cherry Creek and the Cherry Creek Reservoir by reducing bed and bank erosion and immobilizing Phosphorus in the adjacent soils. It is estimated that this 0.81 mile long-project will immobilize 73 pounds of phosphorus annually.



**Funding:** The current funding level for the project of \$4,165,00 (see Table 1) includes previous contributions of \$900,000 from CCBWQA. The attached IGA Amendment, which has been reviewed by CCBWQA’s attorney, includes additional funding of \$100,000 (\$0 CCBWQA, \$100,000 Douglas County, and \$0 MHFD). The total current Project costs are estimated at \$4,265,000 from the IGA Amendment.

	2022			
Funding Source	Project Sponsor %	Previously Contributed	Additional Contribution	Maximum Contribution
MHFD	33.4%	\$1,425,000	\$0	\$1,425,000
CCBWQA	21.1%	\$900,000	\$0	\$900,000
Douglas County	45.5%	\$1,840,000	\$100,000	\$1,940,000
<b>Total</b>	<b>100.0%</b>	<b>\$4,165,000</b>	<b>\$100,000</b>	<b>\$4,265,000</b>

**Table 1**

**TAC Review:** TAC recommended that the Board authorize this IGA Amendment with no expenditure from CCBWQA.

**Budget:** No funding is required from CCBWQA for this IGA Amendment.

**Motion:** I move that the Board authorize CCBWQA to execute the IGA Amendment with no expenditure from CCBWQA.



**Photo of Cherry Creek near middle of Project**

FOURTH AMENDMENT TO  
AGREEMENT REGARDING  
DESIGN AND CONSTRUCTION  
OF DRAINAGE AND FLOOD CONTROL IMPROVEMENTS FOR  
CHERRY CREEK UPSTREAM OF SCOTT ROAD  
DOUGLAS COUNTY

Agreement No. 20-01.12D  
Project No. 107751

THIS FOURTH AMENDMENT TO AGREEMENT (hereinafter called "FOURTH AMENDMENT"), by and among URBAN DRAINAGE AND FLOOD CONTROL DISTRICT D/B/A MILE HIGH FLOOD DISTRICT (hereinafter called "DISTRICT"), CHERRY CREEK BASIN WATER QUALITY AUTHORITY (hereinafter called "CCBWQA"), and DOUGLAS COUNTY (hereinafter called "COUNTY") and collectively sometimes referred to as the "PARTIES", and singularly as a "PARTY";

**WITNESSETH:**

**WHEREAS**, the PARTIES entered into an "Agreement Regarding Design and Construction of Drainage and Flood Control Improvements for Cherry Creek Upstream of Scott Road, Douglas County" (Agreement No. 20-01.12) dated October 21, 2020 as amended by a First Amendment (Agreement No. 20-01.12A) dated August 16, 2021 as amended by a Second Amendment (Agreement No. 20-01.12B) dated October 29, 2021 and a Third Amendment (Agreement No. 20-01.12C) dated August 12, 2022 (hereinafter collectively referred to as the "AGREEMENT"); and

**WHEREAS**, the PARTIES reaffirm their intent to construct drainage and flood control improvements that have water quality benefits for Cherry Creek upstream of Scott Road (hereinafter called "PROJECT"); and

**WHEREAS**, PARTIES desire to increase the level of funding by \$100,000; and

**WHEREAS**, the Board of Directors of CCBWQA, the County Commissioners of COUNTY, and the Board of Directors of DISTRICT have authorized, by appropriation or resolution, all of PROJECT costs of the respective PARTIES.

**NOW, THEREFORE**, in consideration of the mutual promises contained herein, the PARTIES hereto agree as follows:

1. Paragraph 4. PROJECT COSTS AND ALLOCATION OF COSTS Subparagraphs B, C, and D are hereby deleted from the AGREEMENT in their entirety and replaced as follows:
  4. PROJECT COSTS AND ALLOCATION OF COSTS
    - B. It is understood that PROJECT costs as defined above are not to exceed \$4,265,000



without amendment to this AGREEMENT.

PROJECT costs for the various elements of the effort are estimated as follows:

<u>ITEM</u>	<u>AS AMENDED</u>	<u>PREVIOUSLY AMENDED</u>
1. Final Design	\$ 650,000	\$ 650,000
2. Construction *	\$ 3,615,000	\$ 3,515,000
3. Contingency	\$ -0-	\$ -0-
Grand Total	\$ 4,265,000	\$ 4,165,000

\*It is anticipated that additional funds for construction shall be added to this AGREEMENT at a future date.

This breakdown of costs is for estimating purposes only. Costs may vary between the various elements of the effort without amendment to this AGREEMENT provided the total expenditures do not exceed the maximum contribution by all PARTIES plus accrued interest.

C. Based on total PROJECT costs, the maximum percent and dollar contribution by each party shall be:

	<u>Percentage Share</u>	<u>Previously Contributed</u>	<u>Additional Contribution</u>	<u>Maximum Contribution</u>
DISTRICT	33.4%	\$ 1,425,000	\$-0-	\$ 1,425,000
CCBWQA	21.1%	\$ 900,000	\$-0-	\$ 900,000
COUNTY	45.5%	\$1,840,000	\$100,000	\$1,940,000
TOTAL	100.00%	\$4,165,000	\$100,000	\$4,265,000

D. It is understood and agreed that notwithstanding any other provision contained herein to the contrary, any additional contribution of a PARTY hereunder, whether direct or contingent, shall under no circumstances exceed the PARTY'S Maximum Contribution indicated above without the prior express written consent of the PARTY.

2. Paragraph 5. MANAGEMENT OF FINANCES is deleted in its entirety from the AGREEMENT and replaced as follows:

5. MANAGEMENT OF FINANCES

As set forth in DISTRICT policy (Resolution No. 11, Series of 1973, Resolution No. 49, Series of 1977, and Resolution No. 37, Series of 2009), the funding of a local body's share may come from its own revenue sources or from funds received from state, federal or other sources of funding without limitation and without prior Board approval.

Payment of each PARTY's full share (CCBWQA - \$900,000; COUNTY - \$1,940,000; DISTRICT - \$1,425,000) shall be made to DISTRICT subsequent to execution of this AGREEMENT and within thirty (30) days of request for payment by DISTRICT. The

payments by PARTIES shall be held by DISTRICT in a special fund to pay for increments of PROJECT as authorized by PARTIES, and as defined herein. DISTRICT shall provide a periodic accounting of PROJECT funds as well as a periodic notification to CCBWQA and COUNTY of any unpaid obligations. Any interest earned by the monies contributed by PARTIES shall be accrued to the special fund established by DISTRICT for PROJECT and such interest shall be used only for PROJECT upon approval by the contracting officers (Paragraph 13).

It is understood and agreed that a portion of each PARTY'S above referenced share has previously been paid to DISTRICT as set forth in Paragraph 4. C. in the column labeled "Previously Contributed".

Within one (1) year of completion of PROJECT if there are monies including interest earned remaining which are not committed, obligated, or disbursed, each PARTY shall receive a share of such monies, which shares shall be computed as were the original shares; or at CCBWQA and COUNTY request, CCBWQA's and COUNTY's share of remaining monies shall be transferred to another special fund held by DISTRICT.

3. All other terms and conditions of this AGREEMENT shall remain in full force and effect.

**WHEREFORE**, PARTIES hereto have caused this FOURTH AMENDMENT to be executed by properly authorized signatories as of the date and year written below.

URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT D/B/A  
MILE HIGH FLOOD DISTRICT

By \_\_\_\_\_

Name: Laura A. Kroeger

Title: Executive Director

Date \_\_\_\_\_

\_\_\_\_\_  
Checked By



BOARD OF COUNTY COMMISSIONERS  
OF THE COUNTY OF DOUGLAS

By: \_\_\_\_\_  
Chair

Date \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Kristin Randlett, Deputy Clerk to the Board

APPROVED AS TO CONTENT:

\_\_\_\_\_  
Douglas J. DeBord, County Manager

APPROVED AS TO LEGAL FORM:

\_\_\_\_\_  
Chris Pratt, Assistant County Attorney

APPROVED AS TO FISCAL CONTENT:

\_\_\_\_\_  
Andrew Copland, Director of Finance

CHERRY CREEK BASIN  
WATER QUALITY AUTHORITY

\_\_\_\_\_  
CCBWQA Checked by

By \_\_\_\_\_

Name Joshua Rivero

Title CCBWQA Chairman

Date \_\_\_\_\_

\_\_\_\_\_  
Attest: John McCarty, CCBWQA Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
Timothy J. Flynn, General Counsel for CCBWQA



## ACTION ITEM MEMORANDUM

**To:** CCBWQA Board of Directors  
**From:** Richard Borchardt, Pollution Abatement Project Manager  
**Date:** October 20, 2022  
**Subject:** Happy Canyon Creek Stream Reclamation near I25 – IGA Amendment

**Request:** The Board authorize the execution of the Amendment to the Intergovernmental Agreement (IGA Amendment) for the Stream Improvements on Happy Canyon Creek near Interstate 25 which includes funding of \$200,000 (\$0 CCBWQA, \$200,000 Douglas County, and \$0 MHFD).

**Project:** The Project is on Happy Canyon Creek upstream of Interstate 25 (I25) to upstream of confluence with the Oak Hill Tributary in Douglas County and the City of Lone Tree. Happy Canyon Creek is a tributary to Cherry Creek. The Project sponsors are the City of Lone Tree (CITY), CCBWQA, Douglas County (COUNTY), and the Mile High Flood District (MHFD) which is the project lead. Muller Engineering is the design consultant. The proposed stream improvements benefit the water quality in Happy Canyon Creek and the Cherry Creek Reservoir by reducing bed and bank erosion and immobilizing Phosphorus in the adjacent soils. It is estimated that this 0.57 mile long-project will immobilize 51 pounds of phosphorus annually.



**Funding:** The current funding level for the project of \$5,241,427 (see Table 1) includes previous contributions of \$500,000 from CCBWQA. The attached IGA Amendment, which has been reviewed by CCBWQA’s attorney, includes additional funding of \$200,000 (\$0 CCBWQA, \$200,000 Douglas County, and \$0 MHFD). The total current Project costs are estimated at \$5,441,427 from the IGA Amendment. Construction is anticipated to start by the End of Year.

	2022			
Funding Source	Project Sponsor %	Previously Contributed	Additional Contribution	Maximum Contribution
MHFD	38.3%	\$2,087,799	\$0	\$2,087,799
Douglas County	49.7%	\$2,503,628	\$200,000	\$2,703,628
CCBWQA	9.2%	\$500,000	\$0	\$500,000
CITY	2.8%	\$150,000	\$0	\$150,000
<b>Total</b>	<b>100.0%</b>	<b>\$5,241,427</b>	<b>\$200,000</b>	<b>\$5,441,427</b>

**Table 1**



**TAC Review:** TAC recommended that the Board authorize this IGA Amendment with no expenditure from CCBWQA.

**Budget:** No funding is required from CCBWQA for this IGA Amendment.

**Motion:** I move that the Board authorize CCBWQA to execute the IGA Amendment with no expenditure from CCBWQA.



**Photo of Happy Canyon Creek downstream of Oak Hill Tributary**



**Photo of Happy Canyon Creek near middle of Project Reach**

AMENDMENT TO  
AGREEMENT REGARDING  
FINAL DESIGN, RIGHT-OF-WAY ACQUISITION AND CONSTRUCTION  
OF DRAINAGE AND FLOOD CONTROL IMPROVEMENTS FOR  
HAPPY CANYON CREEK NEAR INTERSTATE 25  
DOUGLAS COUNTY

Agreement No. 13-06.01H  
Project No. 100464

THIS AMENDMENT TO AGREEMENT (hereinafter called "AMENDMENT"), by and between URBAN DRAINAGE AND FLOOD CONTROL DISTRICT D/B/A MILE HIGH FLOOD DISTRICT (hereinafter called "DISTRICT"), DOUGLAS COUNTY (hereinafter called "COUNTY"), CHERRY CREEK BASIN WATER QUALITY AUTHORITY (hereinafter called "CCBWQA"), and CITY OF LONE TREE (hereinafter called "CITY"), collectively known as "PARTIES";

WITNESSETH:

WHEREAS, DISTRICT and COUNTY have entered into "Agreement Regarding Final Design, Right-of-Way Acquisition and Construction of Drainage and Flood Control Improvements for Happy Canyon Creek near Interstate 25 Douglas County" (Agreement No. 13-06.01) dated August 19, 2013, as amended; and

WHEREAS, DISTRICT and COUNTY have agreed to add CCBWQA as a funding partner; and  
WHEREAS, CCBWQA was not a Party to the Original Agreement 13-06.01, and was added as a Party by Amendment F; and

WHEREAS, DISTRICT, COUNTY, and CCBWQA have agreed to add CITY as a funding partner; and

WHEREAS, CITY was not a Party to the Original Agreement 13-06.01, and was added as a Party by Amendment G; and

WHEREAS, PARTIES now desire to construct drainage, flood control and water quality improvements for Happy Canyon Creek near I-25; and

WHEREAS, PARTIES desire to increase the level of funding by \$200,000 ; and

WHEREAS, PROJECT includes capital improvement and maintenance repair elements; and

WHEREAS, DISTRICT has heretofore adopted a Special Revenue Fund Budget for calendar year 2022 subsequent to public hearing (Resolution No. 76, Series of 2021) which includes funds for PROJECT; and

WHEREAS, DISTRICT's Board of Directors reviewed and authorized expenditures for the 2022 Work Program (Resolution No. 78, Series of 2021); and

WHEREAS, DISTRICT has adopted at a public hearing a Five-Year Capital Improvement Program (Resolution No. 79, Series of 2021) for drainage and flood control facilities in which PROJECT was included in the 2022 calendar year; and

WHEREAS, the Board of Commissioners of COUNTY, the Board of Directors of DISTRICT, the Board of Directors of CCBWQA, and City Council of CITY have each authorized, by appropriate resolution their respective costs, as hereinafter setforth, for the PROJECT.

NOW, THEREFORE, in consideration of the mutual promises contained herein, PARTIES hereto agree as follows:

1. Paragraph 4. PROJECT COSTS AND ALLOCATION OF COSTS is deleted and replaced as follows:

4. PROJECT COSTS AND ALLOCATION OF COSTS

A. PARTIES agree that for the purposes of this Agreement PROJECT costs shall consist of and be limited to the following:

1. Final design services;
2. Delineation, description and acquisition of required rights-of-way/ easements;
3. Construction of improvements;
4. Contingencies mutually agreeable to PARTIES.

B. It is understood that PROJECT costs as defined above are not to exceed \$5,441,427 without amendment to this Agreement.

PROJECT costs for the various elements of the effort are estimated as follows:

<u>ITEM</u>	<u>AS AMENDED</u>	<u>PREVIOUSLY AMENDED</u>
1. Final Design	\$550,000	\$550,000
2. Right-of-way	\$100,000	\$100,000
3. Construction*	\$4,618,427*	\$4,518,427
4. Contingency	\$173,000	\$73,000
Grand Total	\$5,441,427*	\$5,241,427

\* It is anticipated that additional funding for construction will be brought in through future amendments.

This breakdown of costs is for estimating purposes only. Costs may vary between the various elements of the effort without amendment to this Agreement provided the total expenditures do not exceed the maximum contribution by all PARTIES plus accrued interest.

C. At the request of COUNTY, the following COUNTY and DISTRICT funds may be transferred to PROJECT from a separate special fund held by DISTRICT:

Transfer from: T&A #5616

Account No. 50-05-76111-005616

Amount: \$345,598 (\$172,799 County, \$172,799 District)

D. At the request of COUNTY, the following COUNTY funds may be transferred to PROJECT from a separate special fund held by DISTRICT:

Transfer from: T&A # 4501

Account No. 50-05-75111-004501  
 Amount: \$400,000

E. Based on total PROJECT costs, the maximum percent and dollar contribution by each Party shall be:

CAPITAL IMPROVEMENT FUNDING					
	<u>Percentage Share</u>	<u>Previously Contributed</u>	<u>Additional Contribution</u>	<u>Special Funds Transfer</u>	<u>Maximum Contribution</u>
DISTRICT	36.92%	\$1,790,000	\$0	\$172,799	\$1,962,799
COUNTY	50.85%	\$1,930,829	\$200,000	\$572,799 **	\$2,703,628 *
CCBWQA	9.41%	\$500,000	\$0	-0-	\$500,000
CITY	2.82%	\$150,000	\$0	-0-	\$150,000
TOTAL	100.00%	\$4,370,829	\$200,000	\$745,598	\$5,316,427

\*COUNTY is designing and constructing the reach of Happy Canyon which goes under I-25 as a part of Phase1. As such, \$980,829 will be held by COUNTY.

\*\* The reported Special Funds Transfer includes the project #4501 additional contribution.

MAINTENANCE FUNDING				
	<u>Percentage Share</u>	<u>Previously Contributed</u>	<u>Additional Contribution</u>	<u>Maximum Contribution</u>
DISTRICT	100%	\$0	\$125,000	\$125,000
TOTAL	100%	\$0	\$125,000	\$125,000

TOTAL FUNDING			
	<u>Capital</u>	<u>Maintenance</u>	<u>Total Maximum Contribution</u>
DISTRICT	\$1,962,799	\$125,000	\$2,087,799
COUNTY	\$2,703,628 *	\$0	\$2,703,628
CCBWQA	\$500,000	\$0	\$500,000
CITY	\$150,000	\$0	\$150,000
TOTAL	\$5,316,427	\$125,000	\$5,441,427

F. It is understood and agreed that notwithstanding any other provision contained herein to the contrary, any additional contribution obligation of a Party hereunder, whether direct or contingent, shall under no circumstances exceed the Maximum Contribution



indicated above without prior express written consent of CCBWQA, COUNTY, or CITY.

2. Paragraph 5. MANAGEMENT OF FINANCES is deleted and replaced as follows:

5. MANAGEMENT OF FINANCES

As set forth in DISTRICT policy (Resolution No. 11, Series of 1973, Resolution No. 49, Series of 1977, and Resolution No. 37, Series of 2009), the funding of a local body's one-half share may come from its own revenue sources or from funds received from state, federal or other sources of funding without limitation and without prior Board approval.

Payment of each party's full share (COUNTY - \$2,703,628 with the remaining share portion of \$980,829 held by the County pursuant to paragraph 4 above; DISTRICT - \$2,087,799; CCBWQA - \$500,000; CITY - \$150,000) shall be made to DISTRICT subsequent to execution of this Agreement and within 30 days of request for payment by DISTRICT. The payments by PARTIES shall be held by DISTRICT in a special fund to pay for increments of PROJECT as authorized by PARTIES, and as defined herein. DISTRICT shall provide a periodic accounting of PROJECT funds as well as a periodic notification to COUNTY, CCBWQA, and CITY of any unpaid obligations. Any interest earned by the monies contributed by PARTIES shall be accrued to the special fund established by DISTRICT for PROJECT and such interest shall be used only for PROJECT upon approval by the contracting officers (Paragraph 13).

Within one year of completion of PROJECT if there are monies including interest earned remaining which are not committed, obligated, or disbursed, each party shall receive a share of such monies, which shares shall be computed as were the original shares; or at COUNTY or CCBWQA request, COUNTY or CCBWQA share of remaining monies shall be transferred to another special fund held by DISTRICT.

3. All other terms and conditions of Agreement No. 13-06.01 shall remain in full force and effect.

WHEREFORE, PARTIES hereto have caused this instrument to be executed by properly authorized signatories as of the date and year first above written.



URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT D/B/A  
MILE HIGH FLOOD DISTRICT

By \_\_\_\_\_

Name Laura Kroeger

Title Executive Director

Date \_\_\_\_\_

\_\_\_\_\_  
Checked by

BOARD OF COUNTY COMMISSIONERS  
OF THE COUNTY OF DOUGLAS

ATTEST:

By: \_\_\_\_\_  
Chair

Date \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Kristin Randlett, Deputy Clerk to the Board

APPROVED AS TO CONTENT:

APPROVED AS TO LEGAL FORM:

\_\_\_\_\_  
Douglas J. DeBord, County Manager

\_\_\_\_\_  
Chris Pratt, Senior Assistant County Attorney

APPROVED AS TO FISCAL CONTENT:

\_\_\_\_\_  
Andrew Copland, Director of Finance

CHERRY CREEK BASIN  
WATER QUALITY AUTHORITY

\_\_\_\_\_  
CCBWQA Checked by

By \_\_\_\_\_

Name Joshua Rivero

Title CCBWQA Chairman

Date \_\_\_\_\_

\_\_\_\_\_  
Attest: John McCarty, CCBWQA Secretary

APPROVED AS FORM:

\_\_\_\_\_  
Timothy J. Flynn, General Counsel for CCBWQA

CITY OF LONE TREE

By \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_  
Attest: Rick Parsons, City Clerk



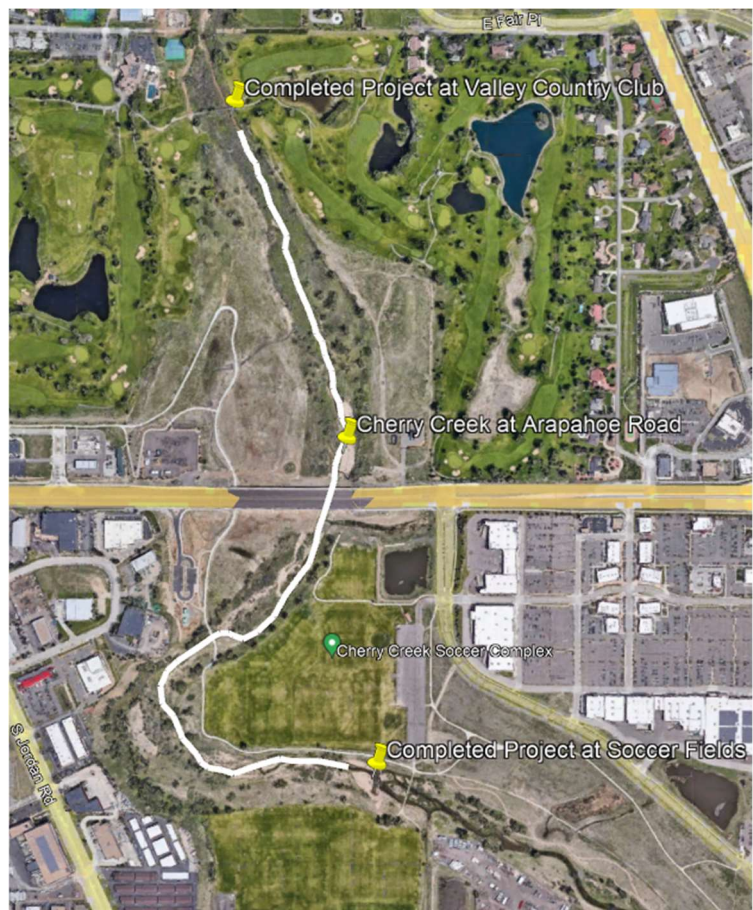
## ACTION ITEM MEMORANDUM

To: CCBWQA Board of Directors  
From: Richard Borchardt, Pollution Abatement Project Manager  
Date: October 20, 2022  
Subject: Cherry Creek Stream Reclamation at Arapahoe Road – IGA Amendment

**Request:** The Board authorize the execution of the Amendment to the Intergovernmental Agreement (IGA Amendment) for the Stream Improvements on Cherry Creek at Arapahoe Road which includes revised additional funding of \$470,000 (\$145,000 CCBWQA; \$50,000 Aurora; \$50,000 SEMSWA, and \$225,000 MHFD) and a transfer of \$288,828.30 (the remaining balance from the previous project on Cherry Creek near the soccer fields) for a combined total of \$758,828.30.

**Project:** The Project is in Arapahoe County and the Cities of Aurora and Centennial. The Project sponsors are CCBWQA, City of Aurora (CITY), Southeast Metro Stormwater Authority (SEMSWA), and Mile High Flood District (MHFD) who is the project lead. The proposed stream improvements benefit the water quality in Cherry Creek and the Cherry Creek Reservoir by reducing bed and bank erosion and immobilizing Phosphorus in the adjacent soils. It is estimated that this 0.98 mile long-project will immobilize 88 pounds of phosphorus annually

**Funding:** The current funding level for the project \$245,000 (see Table 1) includes previous contributions of \$25,000 from CCBWQA. The TAC and Board have previously authorized an expenditure of \$180,000 for this project; however, Aurora lowered their funding level. To meet CCBWQA's 25% participation level on partner projects, CCBWQA's funding is now at \$145,000. The attached IGA Amendment, which has been reviewed by CCBWQA's attorney, includes revised additional funding of \$470,000 (\$145,000 CCBWQA; \$50,000 Aurora; \$50,000 SEMSWA, and \$225,000 MHFD) and a transfer of \$288,828.30 (the remaining balance from the previous project on Cherry Creek near the soccer fields) for a combined total of \$758,828.30. The total current project costs are estimated at \$1,003,828.30 from the IGA Amendment.



2022					
Funding Source	Project Sponsor %	Previously Contributed	Fund Transfer of Balance from Completed Project	Additional Contribution	Maximum Contribution
MHFD	43.9%	\$100,000.00	\$115,531.32	\$225,000.00	\$440,531.32
Aurora	23.9%	\$100,000.00	\$90,258.84	\$50,000.00	\$240,258.84
SEMSWA	7.2%	\$20,000.00	\$1,790.74	\$50,000.00	\$71,790.74
CCBWQA	25.0%	\$25,000.00	\$81,247.40	\$145,000.00	\$251,247.40
Total	100.0%	\$245,000.00	\$288,828.30	\$470,000.00	\$1,003,828.30

**Table 1**

**TAC Review:** TAC recommended that the Board authorize this IGA Amendment, a revised expenditure of \$145,000, the transfer of the remaining balance from the previous project, and subject to final language as approved by CCBWQA’s attorney which is now included in the attached IGA Amendment.

**Budget:** The Project is within CCBWQA’s 2022 Budget of \$180,000.

**Motion:** I move that the Board authorize CCBWQA to execute the revised IGA Amendment, a revised expenditure of \$145,000, the transfer of the remaining balance from the previous project.



**Photo of Cherry Creek downstream of Arapahoe Road**

FIRST AMENDMENT TO  
AGREEMENT REGARDING  
FINAL DESIGN, RIGHT-OF-WAY ACQUISITION, AND CONSTRUCTION  
OF DRAINAGE AND FLOOD CONTROL IMPROVEMENTS FOR CHERRY CREEK  
RESTORATION AT ARAPAHOE ROAD

Agreement No. 21-06.17A  
Project No. 108670

THIS FIRST AMENDMENT TO AGREEMENT (hereinafter called "FIRST AMENDMENT"), by and between URBAN DRAINAGE AND FLOOD CONTROL DISTRICT D/B/A MILE HIGH FLOOD DISTRICT (hereinafter called "DISTRICT") and CITY OF AURORA, Colorado, a Colorado municipal corporation of the counties of Adams, Arapahoe, and Douglas acting by and through its Utility Enterprise (hereinafter called "CITY"); SOUTHEAST METRO STORMWATER AUTHORITY (hereinafter called "SEMSWA"); CHERRY CREEK BASIN WATER QUALITY AUTHORITY (hereinafter called "CCBWQA") and collectively known as "PARTIES"; and ARAPAHOE COUNTY, Colorado (hereinafter called "Arapahoe County") ONLY as to Paragraphs 10 and 11 of the original AGREEMENT;

WITNESSETH:

WHEREAS, PARTIES have entered into "Agreement Regarding Final Design, Right-of-Way Acquisition and Construction of Drainage and Flood Control Improvements for Cherry Creek Restoration at Arapahoe Road" (Agreement No. 21-06.17) dated December 21, 2021, (hereinafter called "AGREEMENT"); and

WHEREAS, PARTIES now desire to proceed with the design, right-of-way acquisition and construction of drainage and flood control improvements for Cherry Creek Restoration at Arapahoe Road (hereinafter called "PROJECT"); and

WHEREAS, PARTIES completed the previous projects under Cherry Creek at Arapahoe Road Agreement No. 12-08.04 as amended and desire to transfer the remaining balance to PROJECT; and

WHEREAS, PARTIES desire to increase the level of funding by \$758,828.30 which includes transfer of \$288,828.30 from Cherry Creek at Arapahoe Road Agreement No. 12-08.04 as amended and additional contributions of \$470,000; and

WHEREAS, DISTRICT's Board of Directors has authorized additional DISTRICT financial participation for PROJECT (Resolution No. 11, Series of 2022); and

WHEREAS, the City Council of City; Board of Directors of SEMSWA; Board of Directors of CCBWQA; and the Board of Directors of DISTRICT have authorized, by appropriation or resolution, all of PROJECT costs as set forth in this First Amendment of the respective PARTIES.

WHEREAS, Arapahoe County is a voting member of SEMSWA and PROJECT is located in Arapahoe County; and

WHEREAS, Arapahoe County has not delegated its land use and police powers in regard to the regulation and control of floodplains located within unincorporated Arapahoe County to SEMSWA; and

WHEREAS, Arapahoe County and CITY are therefore the only governmental entities that can make the agreement contained in Paragraph 10 of Agreement No. 21-06.17; and

WHEREAS, Paragraph 10 of the AGREEMENT incorrectly listed SEMSWA as the Floodplain Administrator and Arapahoe County was omitted thus necessitating the amendment of Paragraph 10 and Arapahoe County’s signature on this First Amendment.

NOW, THEREFORE, in consideration of the mutual promises contained herein, PARTIES hereto agree as follows:

1. Paragraph 4. PROJECT COSTS AND ALLOCATION OF COSTS is deleted and replaced as follows:

4. PROJECT COSTS AND ALLOCATION OF COSTS

A. PARTIES agree that for the purposes of this AGREEMENT, PROJECT costs shall consist of and be limited to the following:

1. Final design services;
2. Delineation, description and acquisition of required rights-of-way/ easements;
3. Construction of improvements;
4. Contingencies mutually agreeable to PARTIES.

B. It is understood that PROJECT costs as defined above are not to exceed \$1,003,828.30 without amendment to this AGREEMENT.

PROJECT costs for the various elements of the effort are estimated as follows:

<u>ITEM</u>	<u>AS AMENDED</u>	<u>ORIGINAL</u>
1. Final Design	\$ 345,000	\$ 245,000
2. Right-of-way	\$ -0-	\$ -0-
3. Construction*	\$ 658,828.30	\$ -0-
4. Contingency	\$ -0-	\$ -0-
Grand Total	\$ 1,003,828.30	\$ 245,000

\* It is anticipated that additional funding for construction will be added through future amendments.

This breakdown of costs is for estimating purposes only. Costs may vary between the various elements of the effort without amendment to this Agreement provided the total expenditures do not exceed the maximum contribution by all PARTIES plus accrued interest, if applicable.

C. At the request of CITY, SEMSWA, and CCBWQA, the following CITY, SEMSWA, CCBWQA, and DISTRICT funds shall be transferred to PROJECT from a separate special fund held by DISTRICT:



Transfer from: Cherry Creek at Arapahoe Road; Project No. 100407; Account No. 5603; Agreement No. 12-08.04 Amendment E; Amount: \$288,828.30.  
 Project No. 100407 funds shall be transferred into PROJECT according to the contribution percentage share specified in Agreement No. 12-08.04E.

D. Based on total PROJECT costs, the maximum percent and dollar contribution by each party by this First Amendment shall be:

	<u>Percentage Share</u>	<u>Previously Contributed</u>	<u>Special Funds Transfer from Account No. 5603</u>	<u>Additional Contribution</u>	<u>Maximum Contribution</u>
DISTRICT Special Funds Transfer	43.9%	\$100,000	\$115,531.32	\$225,000	\$440,531.32
CITY Special Funds Transfer	23.9%	\$100,000	\$90,258.84	\$50,000	\$240,258.84
SEMSWA Special Funds Transfer	7.2%	\$20,000	\$1,790.74	\$50,000	\$71,790.74
CCBWQA Special Funds Transfer	25.0%	\$25,000	\$81,247.40	\$145,000	\$251,247.40
<b>TOTAL</b>	<b>100.00%</b>	<b>\$245,000</b>	<b>\$288,828.30</b>	<b>\$470,000</b>	<b>\$1,003,828.30</b>

E. DISTRICT Acknowledges that (i) CCBWQA does not by this Agreement irrevocably pledge present cash reserves for payments in future fiscal years, and (ii) It is understood and agreed that notwithstanding any other provision contained herein to the contrary, any additional contribution obligation of CCBWQA hereunder, whether direct or contingent, shall extend only to funds duly and lawfully appropriated and encumbered by the Board of Directors of CCBWQA for the purposes of the Agreement, and paid into the Treasury of CCBWQA, and shall under no circumstances exceed \$251,247.40 without CCBWQA's prior express written consent.

2. Paragraph 5. MANAGEMENT OF FINANCES is deleted and replaced as follows:

5. MANAGEMENT OF FINANCES

As set forth in DISTRICT policy (Resolution No. 11, Series of 1973, Resolution No. 49, Series of 1977, and Resolution No. 37, Series of 2009), the funding of a local body's (as defined in said Resolution) one-half share may come from its own revenue sources or from

funds received from state, federal or other sources of funding without limitation and without prior DISTRICT approval.

Payment of each PARTY's full share (CITY - \$240,258.84; SEMSWA - \$71,790.74; CCBWQA - \$251,247.40; DISTRICT - \$440,531.32) shall be made to DISTRICT subsequent to execution of this AGREEMENT and within 30 days of request for payment by DISTRICT. The payments by PARTIES shall be held by DISTRICT in a special fund to pay for increments of PROJECT as authorized by PARTIES, and as defined herein. DISTRICT shall provide a periodic accounting of PROJECT funds as well as a periodic notification to CITY, SEMSWA and CCBWQA of any unpaid obligations. Any interest earned by the monies contributed by PARTIES shall be accrued to the special fund established by DISTRICT for PROJECT and such interest shall be used only for PROJECT upon approval by the contracting officers (Paragraph 13).

Within one year of completion of PROJECT if there are monies including interest earned remaining which are not committed, obligated, or disbursed, each party shall receive a share of such monies, which shares shall be computed as were the original shares; or at CITY request, CITY share of remaining monies shall be transferred to another special fund held by DISTRICT.

3. Paragraph 10. FLOODPLAIN REGULATION is deleted and replaced as follows:

10. FLOODPLAIN REGULATION

Arapahoe County and CITY agree to regulate and control the floodplain of Cherry Creek within Unincorporated Arapahoe County and CITY in the manner prescribed by the National Flood Insurance Program and prescribed regulations thereto as a minimum. PARTIES understand and agree, however, that Arapahoe County and CITY cannot obligate itself by contract to exercise its police powers. If Arapahoe County or CITY fails to regulate the floodplain of Cherry Creek within Arapahoe County or CITY in the manner prescribed by the National Flood Insurance Program and prescribed regulations thereto as a minimum, DISTRICT may exercise its power to do so and Arapahoe County and CITY shall cooperate fully.

4. All other terms and conditions of this AGREEMENT shall remain in full force and effect. WHEREFORE, PARTIES hereto have caused this FIRST AMENDMENT to be executed by properly authorized signatories as of the date and year written below.

URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT D/B/A  
MILE HIGH FLOOD DISTRICT

By \_\_\_\_\_

Name Laura Kroeger

Title Executive Director

Date \_\_\_\_\_

\_\_\_\_\_  
Checked By



CHERRY CREEK BASIN  
WATER QUALITY AUTHORITY

\_\_\_\_\_  
CCBWQA Checked by

By \_\_\_\_\_

Name Joshua Rivero

Title CCBWQA Chairman

Date \_\_\_\_\_

\_\_\_\_\_  
Attest: John McCarty, CCBWQA Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
Timothy J. Flynn, General Counsel for CCBWQA

SOUTHEAST METRO STORMWATER  
AUTHORITY

By \_\_\_\_\_

Name Dan Olsen

Title Executive Director

Date \_\_\_\_\_

ARAPAHOE COUNTY

By \_\_\_\_\_

Title Director, Public Works & Development

Authorized by Resolution Number \_\_\_\_\_  
As to the obligations contained in  
Paragraphs 10 and 11 only

Date \_\_\_\_\_

**FIRST AMENDMENT TO AGREEMENT**  
**FOR**  
**TECHNICAL MANAGER SERVICES**

**THIS FIRST AMENDMENT TO AGREEMENT FOR TECHNICAL MANAGER SERVICES** (“First Amendment”) is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2022, to be effective as of November 1, 2022 (“Effective Date”), by and between the **CHERRY CREEK BASIN WATER QUALITY AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado (“Authority”), whose address is c/o: Manager, Post Office Box 3166, Centennial, Colorado 80161, and **WRIGHT WATER ENGINEERS, INC.**, a Colorado corporation (“Consultant”), whose address is 2490 West 26<sup>th</sup> Avenue, Suite 100A, Denver, Colorado 80211. Consultant and Authority may hereinafter singularly be referred to as a “Party” and collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Authority was established for the purpose of preserving and protecting the water quality in Cherry Creek, the Cherry Creek Reservoir (“Reservoir”) and the Cherry Creek Watershed (“Watershed”); and

**WHEREAS**, effective March 21, 2022, Consultant and Authority entered into an Agreement for Technical Manager Services (“Agreement”), whereby Consultant agreed to coordinate and facilitate the various technical consultants that perform work for and on behalf of the Authority; and

**WHEREAS**, while the Agreement extends through March 31, 2023, it was contemplated at the time the Agreement was signed, that the Agreement would be shortened so that it expired on December 31, 2022, and replaced with a new Agreement for calendar year 2023; and

**WHEREAS**, the Technical Manager has provided services that were not anticipated at the time the Agreement was entered into, such as but not limited to the nature and extent of the Technical Manager’s involvement with upcoming Regulation 31 and Regulation 38 lake nutrient criterial hearings and a proposed Lone Creek trail and related stream improvements (“Project”); and

**WHEREAS**, additional investigation is required regarding the feasibility of the Authority’s participation in the Project; and

**WHEREAS**, said investigators can be provided by consultant using funds budgeted for and available under the Agreement; and

**WHEREAS**, in connection therewith, it appears that the Consultant can provide



services that would facilitate the resolution of issues around the Lone Tree Trail without increasing the contract price under the Agreement.

**WHEREAS**, for the foregoing reasons, the Parties desire to enter into this First Amendment for the purpose of shortening the Term of the Agreement and compensating Consultant for the additional services Consultant has provided to date and will provide in connection with the investigation of the Project, all without increasing the Agreement's total contract price.

**NOW, THEREFORE**, in consideration of the promises herein contained, the Parties agree as follows:

1. **Completion Date.** The term of the Agreement and in particular the date by which all services are to be delivered under the Agreement is hereby changed from March 31, 2023, to December 31, 2022.

2. **Compensation.** Recognizing that the services the Technical Manager has provided to date and that Consultant hereby agrees to provide with respect to the Project, are in addition to those set forth in the Agreement's scope of services, the Parties agree that Consultant's compensation under the Agreement shall not change. Specifically, Consultant's compensation as set forth in paragraph five of the Agreement, being an amount not to exceed \$137,849.00 for services provided from and after the initial Transition Activities shall remain the same notwithstanding the shortened Term of the Agreement.

3. **Counterparts.** This First Amendment may be executed in counterparts, each of which shall be deemed an original and all of which together will be deemed to constitute one and the same document. This First Amendment may be executed and delivered by facsimile signature or portal document format ("PDF"), or electronic email.

4. **Effective Date of Amendment.** This First Amendment shall become effective as of the Effective Date set forth above when fully executed by the Parties hereto.

5. **Reaffirmance of Agreement.** Upon the Effective Date, the Agreement shall remain in full force and effect in accordance with its terms and provisions, as amended by this First Amendment. In the event of a conflict between the terms and provisions of this First Amendment and the Agreement, this First Amendment shall control.

6. **Binding Effect.** This First Amendment shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.

7. **Severability.** In the event any one of more of the provisions of this First Amendment shall, for any reason, be held to be invalid or unenforceable, the remaining

provisions of this First Amendment shall be unimpaired and shall remain in full force and effect to be binding upon the Parties hereto.

8. **Governing Law.** This First Amendment shall be governed by and construed in accordance with the laws of the State of Colorado.

**IN WITNESS WHEREOF**, the Parties have executed this First Amendment as of the date set forth below.

**CHERRY CREEK BASIN WATER  
QUALITY AUTHORITY**, a quasi-municipal  
corporation and political subdivision of the  
State of Colorado

By: \_\_\_\_\_  
Joshua Rivero, Chair

Attest:

\_\_\_\_\_  
John McCarty, Secretary/Treasurer

Approved as to Form:

\_\_\_\_\_  
Timothy J. Flynn, General Counsel

**WRIGHT WATER ENGINEERS, INC.**, a  
Colorado corporation

By: \_\_\_\_\_

By execution, signor certifies that he/she is authorized to accept and bind Consultant to the terms of this First Amendment.

**AGREEMENT  
FOR  
TECHNICAL MANAGER SERVICES**

**THIS AGREEMENT FOR TECHNICAL MANAGER SERVICES** (“Agreement”) is made and entered into this \_\_\_\_\_ day of October, 2022, to be effective as of January 1, 2023 (“Effective Date”) by and between the **CHERRY CREEK BASIN WATER QUALITY AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado (“Authority”), whose address P.O. Box 3166, Centennial, Colorado 80161, and **WRIGHT WATER ENGINEERS, INC.**, a Colorado corporation (“Consultant”) whose address is 2490 West 26<sup>th</sup> Avenue, Suite 100A, Denver, Colorado 80211. Consultant and Authority may hereinafter singularly be referred to as a “Party” and collectively as the “Parties.”

**RECITALS**

**WHEREAS**, the Authority was established for the purpose of preserving and protecting the water quality in the Cherry Creek Reservoir (“Reservoir”) and the Cherry Creek Watershed (“Watershed”); and

**WHEREAS**, in furtherance of its purposes, the Authority has retained and continues to retain, from time to time, numerous technical consultants; and

**WHEREAS**, Authority desires to continue utilizing Consultant to coordinate and oversee the other various technical consultants that perform work for and on behalf of the Authority; and

**WHEREAS**, Consultant represents that it has the personnel and expertise necessary to perform such coordination and oversight services for the Authority in a competent and timely manner.

**NOW, THEREFORE**, in consideration of the promises set forth herein, Authority and Consultant agree as follows:

1. **Scope of Services.** Consultant agrees to perform the services described in the Scope of Services attached hereto as **Exhibit A** (consisting of 3 pages) and incorporated herein by this reference, together with all necessary labor, materials, scheduling, procurement and related work and services, including all things reasonably inferable from the Scope of Services as may be necessary to complete the totality of the obligations imposed upon Consultant by this Agreement (“Services”). The Services have been divided into five categories consisting of: (1) routine coordination activities; (2) Technical Manager administrative activities; (3) technical activities (routine); (4) other Authority business; and (5) additional technical support and regulatory activities. In addition, there is a contingency of an additional two (2) hours of work per week to allow flexibility for additional support for unforeseen activities as directed by the Board.

The Services will be performed in accordance with this Agreement, including the Scope of Services; provided, however, in the event of a conflict or inconsistency between the terms and provisions of the Scope of Services, and the text of this Agreement, the text of this Agreement shall control.

2. **Notice to Proceed.** As of the Effective Date of this Agreement, Consultant is authorized to provide the Services provided Authority has received satisfactory certificates of insurance as required by paragraph 16 below. Any Services identified in the Scope of Services as requiring prior Authority approval, will not be performed by Consultant until Consultant receives specific written direction from the Authority to proceed with such Services.

3. **Completion Date.** Consultant shall give this Agreement and the Services to be performed hereunder such priority as is necessary to cause the Services to be timely and promptly performed in accordance with the time periods contemplated or expressly provided for in the Scope of Services. Unless delayed by acts or the failure to act of Authority or other causes beyond the control of Consultant, and without extending any deadline established elsewhere in this Agreement or otherwise, all Services required under this Agreement shall be entirely completed to Authority's reasonable satisfaction and all deliverables, if any, as set forth in the Scope of Services shall be delivered to Authority no later than December 31, 2023.

4. **Responsibility for Services.** The Authority shall not supervise the work of Consultant or instruct the Consultant on how to perform the Services. Consultant shall be fully responsible for the professional quality, technical accuracy, timely completion, and coordination of Services including all work and reports that are a part thereof, whether such work is performed directly by Consultant or by any subconsultant or subcontractor hired by Consultant and approved Authority in accordance with paragraph 12 below. Without additional compensation and without limiting Authority's remedies, Consultant shall promptly remedy and correct any errors, omissions, or other deficiencies in the Services. The Services provided under this Agreement shall be performed with competence and in accordance with the standard of care of Consultant's profession prevailing in Colorado.

5. **Compensation.** Authority shall compensate Consultant in accordance with Consultant's hourly rates and reimbursable costs as set forth on **Exhibit B** (consisting of 1 page) attached hereto and incorporated herein by this reference; provided, however, that the total amount of compensation that Consultant shall receive under this Agreement for the performance of Services for calendar year 2023, shall not exceed \$232,876 without the prior written consent of the Authority. If Consultant is requested to perform any Services that are outside the Scope of Services as herein defined, or that will cause the estimated time to perform any Services to be increased, Consultant will immediately notify Authority in writing and will not perform such Services until authorized to do so in writing by Authority's representative.

The compensation to be paid Consultant under this Agreement is entire and complete and includes any and all reimbursable and other costs as set forth, and only as set forth on **Exhibit B**. Consultant further represents and agrees that the reimbursable costs to Authority together with any approved subconsultant or approved subcontractor costs are at Consultant's actual cost and do not include any additional mark-up whatsoever. It is understood and agreed that Consultant will contract with and pay directly all approved subconsultants or approved subcontractors retained by Consultant for the performance of any Services or portion thereof.

5.1 **Rates and Employee Categories**. Page 3, Table 1 of the Scope of Services sets forth the estimated man hours for each of the five categories of Consultant's Scope of Services that are expected to be performed under this Agreement. Table 1 also sets forth the hourly rates for each category of Consultant's employees that will perform Services under this Agreement. Consultant agrees that all labor performed hereunder shall be performed for the hourly rate and by the category of employee as identified in **Exhibit B**, and Table 1, except that if any work is performed by an employee whose hourly rate is less than the rate described in Table 1 and **Exhibit B**, Authority shall be charged the lesser rate. Further, should any employee's job category or classification change during the term of this Agreement, that change shall not in any way affect or modify the employee's billing rate under this Agreement unless the billing rate has been reduced as a result of such job reclassification, in which case the reduced billing rate shall be applied for purposes of the invoices prepared and submitted to the Authority.

6. **Method of Payment**. Consultant shall provide an invoice each month for the Services completed through the last day of the preceding month. Each invoice shall be submitted only for those Services performed during the period for which the invoice is submitted. Consultant shall submit with each invoice such supporting documentation as Authority may reasonably request. Each invoice submitted by Consultant shall constitute a representation to Authority that the Services are completed to the point as represented in the billing invoice. Unless Consultant does not properly perform the Services, invoices will be paid within thirty (30) to forty-five (45) days after receipt. Authority shall have the right to refuse to pay all or a portion of any invoice that is inconsistent with this Agreement. Authority may delay payment until it can verify the accuracy of an invoice, obtain releases or waivers with respect to Services covered in the invoice, or resolve a dispute with Consultant regarding an invoice.

Notwithstanding the foregoing, Consultant's invoice for work performed during the month of December shall include all work performed up to and including the last day of the month or, in the alternative, Consultant may submit two invoices for December. The first invoice shall be for work performed through the 26<sup>th</sup> day of the month and the second invoice shall be for work performed for 27<sup>th</sup> day of the month through the end of the month. Invoice shall be submitted via email to [manager@ccbwwqa.org](mailto:manager@ccbwwqa.org) with copies to Bill Ruzzo at [Bill.Ruzzo@comast.net](mailto:Bill.Ruzzo@comast.net) and to John McCarty [JohnMcCarty1972@gmail.com](mailto:JohnMcCarty1972@gmail.com) and to

Timothy Flynn at [tflynn@cogovlaw.com](mailto:tflynn@cogovlaw.com). Invoices shall be submitted in accordance with procedures set forth on Attachment II to **Exhibit A**.

7. **Conflict of Interest**. Consultant agrees to notify the Authority of any potential conflicts of interest that may arise on Consultant's part. After the Authority receives notification, the Parties will mutually determine if an informed consent agreement is necessary between the Parties. Consultant agrees that it shall not accept any employment during the Term of this Agreement that creates a conflict of interest or compromises the effectiveness of Consultant or otherwise interferes with the ability of Consultant to perform the Services required by this Agreement. Consultant has entered into a separate agreement with Authority for the performance of a BMP Effectiveness Study. Said agreement and any future separate agreement that Consultant may enter into with the Authority for purposes of evaluating BMPs will not be deemed a conflict of interest for purposes of this Agreement.

8. **Records and Audits**. Consultant shall at all times maintain a system of accounting records in accordance with its normal billing procedures, together with supporting documentation for all work, purchases, Services and billings under this Agreement. Consultant shall make available for audit and reproduction by Authority all records, in whatever form, related to the Services. Consultant shall provide such availability during the term of this Agreement and for two (2) years after final payment. Consultant shall refund to Authority any charges determined by Authority's audit to be inconsistent with this Agreement.

9. **Confidentiality of Information**. Except as required by law or as is necessary for the performance of the Services, Consultant shall retain in strictest confidence all information furnished by Authority and the results of any reports or studies conducted as a result of this Agreement, along with all supporting work papers and any other substantiating documents. Consultant shall not disclose such information to others without the prior written consent of Authority's representative. Notwithstanding the foregoing, Consultant shall have no confidentiality obligation with respect to information that: (i) becomes generally available to the public other than as a result of disclosure by Consultant or its agents or employees; (ii) was available to Consultant on a nonconfidential basis prior to its disclosure by Authority; and (iii) becomes available to Consultant from a third party who is not, to the knowledge of Consultant, bound to retain such information in confidence.

10. **Ownership of Work Product and Documents**. All printed materials and electronic documents produced as a result of the Services performed under this Agreement shall become the sole property of Authority after payment to Consultant and may not be used, sold or disposed of by Consultant in any manner without prior written consent of Authority, except that Consultant may use and reproduce such materials and documents for purposes solely relating to Consultant's performances of Services under this Agreement including but not limited to Consultant's archival records.

The Authority acknowledges that the Consultant's work papers, and preliminary documents are Consultant's instruments of service. Nevertheless, the final documents prepared under this Agreement shall become the property of the Authority upon completion of the Services and payment in full of all monies due to the Consultant. The Authority agrees, to the fullest extent permitted by law but without waiving any of the protections immunities and defenses available to Authority under the Colorado Governmental Immunity Act to indemnify and hold Consultant, its officers, directors, employees and subconsultants (collectively, the Consultant) harmless from and against any damages, liabilities or costs, including reasonable attorneys' fees, arising out of Authority's negligent or wrongful use of such materials and final documents.

Under no circumstances shall the transfer of ownership of the Consultant's drawings, specifications, electronic files, or other instruments of service be deemed a sale by the Consultant that contains any warranties, either express or implied, of merchantability and fitness for any particular purpose.

11. **Changes in Services.** The Authority acting by and through its Executive Committee shall have the right to order additions, deletions or changes in the Services at any time and for any reason, but especially for purposes of improving coordination between the Authority's consultants and eliminating the duplication of Services. Requests for material changes in the Services may be made by Authority's representative orally or in writing; provided, however, that oral requests shall be confirmed by a written request within ten (10) days after the oral request. If Authority directs Consultant to proceed with a material change, Consultant shall be paid for the change as agreed to by the Parties.

12. **Approval of Subconsultants.** Consultant shall not employ any subconsultant or subcontractor without the prior written approval of Authority's representative nor shall Consultant assign any rights or obligations under this Agreement in whole or in part without the Authority's prior written approval which may be withheld for any reason. Consultant shall be responsible for the coordination, accuracy, and completeness of all Services in accordance with generally accepted principles and practices of Consultant's profession, regardless of whether the Services are performed by Consultant or one or more subconsultants. Consultant shall endeavor to bind each of its approved subcontractors or approved subconsultants, if any, to the terms of this Agreement. In the event that a subconsultant or subcontractor is unwilling or unable to comply with any term or provision of this Agreement, Consultant will inform Authority of the specific term or provision at issue. Authority may accept the lack of compliance to the terms of this Agreement on the part of the subconsultant or subcontractor or may request that a different subconsultant or subcontractor be retained. This Agreement may be terminated by Authority if subcontracted or assigned, either in whole or in part, by the Consultant without the express written consent of Authority's representative.

13. **Independent Contractor.** In the performance of the Services, Consultant shall be, for all purposes, an independent contractor and not an employee or agent of

Authority. Consultant and its employees and subconsultants shall in no way represent themselves to third parties as agents or employees of Authority.

14. **No Unemployment Insurance or Workers' Compensation Benefits.** Consultant agrees that it is not entitled to unemployment insurance or workers' compensation benefits as a result of performance of the Services for Authority. Consultant is required to provide workers' compensation and unemployment insurance benefits for its employees and/or subconsultants as required by law.

15. **Payment of Taxes.** Consultant is solely liable for any federal, state and local income and withholding taxes, unemployment taxes, FICA taxes and workers' compensation payments and premiums applicable to the performance of the Services under this Agreement. Consultant shall indemnify Authority for any liability resulting from nonpayment of such taxes and sums.

16. **Insurance.** Neither the Consultant nor any subconsultant, agent, or employee thereof shall continue work on any Services until the following minimum insurance coverages have been obtained:

16.1 **Workers' Compensation Insurance.** The Consultant and each subconsultant and each subcontractor, if any, shall carry workers' compensation insurance to cover liability under the laws of the State of Colorado in connection with the Services performed pursuant to this Agreement. Consultant and each subconsultant or subcontractor shall carry separate policies.

16.2 **Commercial General Liability Insurance.** The Consultant and each subconsultant and subcontractor, if any, shall carry commercial general liability insurance, which shall include blanket contractual liability coverage. Such insurance shall be in an amount not less than \$1,000,000 per occurrence and having a \$1,000,000 aggregate limit for bodily injury and property damage.

16.3 **Automobile Liability Insurance.** The Consultant and each subconsultant and subcontractor, if any, shall carry automobile liability insurance to include owned, non-owned and hired vehicles used in the performance of Services under this Agreement. Such insurance shall be in an amount not less than \$1,000,000 per occurrence and having a \$1,000,000 aggregate limit for bodily injury and property damage.

16.4 **Professional Liability Insurance.** The Consultant and each subconsultant and subcontractor, if any, shall carry professional liability insurance in the amount of \$1,000,000 per claim and aggregate limit, unless an alternate amount is agreed to in writing by the Authority.

Prior to commencing any Services under this Agreement, Consultant shall provide Authority a certificate of insurance evidencing the policies required by this paragraph as well as the amounts of coverage for the respective types of coverage required. The required



commercial general liability and automobile policies shall: (i) name the Authority as an additional insured for coverage only, with no premium payment obligation; (ii) provide a cross-liability/severability of interest clause; and (iii) provide that the coverage for the Authority will not be impaired by the Consultant's subconsultant's or subcontractor's failure to comply with any of the terms or conditions of the policy.

The Consultant and each subconsultant and subcontractor, if any, shall provide Certificates of Insurance (and renewals thereof) identifying this Agreement and demonstrating that the required coverages have been obtained. The Consultant shall not allow any subcontractor, agent, or employee to commence work until appropriate Certificates of Insurance have been obtained and approved by the Authority. The coverages specified in each certificate of insurance shall not be terminated, reduced, or modified without providing at least thirty (30) prior written days' notice to the Authority.

17. **Compliance with Laws**. In performing this Agreement, Consultant shall comply with all applicable laws, rules and regulations, including but not limited to all federal, state and local laws.

18. **Communications**. It is understood by Authority and Consultant that successful progress under this Agreement requires frequent, concise, and documented communication between the Party's representatives. Authority hereby designates Board members Bill Ruzzo and/or John McCarty, or either of them, as its representatives for purposes of giving and receiving information from Consultant under this Agreement. Authority may change its designated representative or name additional representatives from time to time.

Consultant hereby designates Jane Clary, as its representative who will give information to and receive information from Authority. Consultant may change its designated representative only with the prior written approval of Authority. Each designated representative shall have full authority to not only accept and receive information but also to accept notices, give approvals and to fully represent its respective Party for all purposes under this Agreement; except that for the Consultant all contract documents must be executed by the President or Treasurer of the Consultant.

19. **Indemnification**. The Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Authority, its officers, directors, and employees (collectively, the "Authority") from and against any and all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Consultant's negligent performance of Services under this Agreement and that of its subconsultants or anyone for whom the Consultant is legally liable.

Consultant assumes no liability for non-performance or negligent performance of the Authority's other contractors and consultants. Consultant's services shall not be considered supervision, in any form, of the Authority's other contractors and consultants. Therefore, Authority agrees to release and discharge Consultant from any and all claims,

demands, and causes of action (“Claims”) arising out of or relating to the work or Services provided by Authority or any contractor or consultant retained by Authority.

20. **Acceptance Not a Waiver.** The Authority’s approval of studies, drawings, designs, plans, specifications, reports, computer programs and other work or material shall not in any way relieve Consultant of responsibility for the technical accuracy of the Services. The Authority’s approval or acceptance of, or payment for, any Services shall not be construed to operate as a waiver of any rights under this Agreement, or of any cause of action arising out of the performance of this Agreement.

21. **Termination or Suspension.** The Authority reserves the exclusive right to terminate or suspend all or a portion of the Services under this Agreement for any reason or no reason by giving ten (10) calendar days written notice to the Consultant. If any portion of the Services shall be terminated or suspended, the Authority shall pay the Consultant equitably for all services properly performed pursuant to this Agreement. If the work is suspended and the Consultant is not given an order to resume work within sixty (60) days from the effective date of the suspension, this Agreement will be considered terminated. Upon termination, the Consultant shall immediately deliver to the Board any documents then in existence, that have been prepared by the Consultant pursuant to this Agreement.

22. **Default.** Each and every term and condition of this Agreement shall be deemed to be a material element of this Agreement. In the event either Party shall fail or refuse to perform according to the material terms of this Agreement, such Party may be declared in default by the other Party by a written notice.

23. **Remedies.** In the event a Party has been declared in default, such defaulting Party shall be allowed a period of fifteen (15) days within which to correct or commence correcting the default. In the event that the default has not been corrected or begun to be corrected, or the defaulting Party has ceased to pursue the correction with due diligence, the Party declaring default may elect to (1) terminate this Agreement and seek damages; (2) treat the Agreement as continuing and require specific performance; or (3) avail itself of any other remedy at law or in equity.

24. **Term.** Unless sooner terminated in accordance with the provisions of paragraph 21 above, this Agreement shall remain in effect until December 31, 2023, at which time the Agreement shall terminate and be of no further force and effect unless the Services have not been completely performed by then. Notwithstanding the foregoing sentence, the Parties understand and agree that all terms, conditions, and covenants of this Agreement, together with any exhibits and attachments thereto, any or all of which by reasonable implication, contemplate continued performance or compliance beyond the expiration or termination of this Agreement (by expiration of the Term or otherwise) shall survive such expiration or termination and shall continue to be enforceable as provided herein. Without limiting the generality of the foregoing, paragraphs 8, 9, 10, and 19 shall survive expiration or termination of this Agreement.

25. **Force Majeure.** The Parties shall not be responsible for any failure or delay in the performance of any obligations under this Agreement caused by acts of God, flood, fire, war or public enemy or the failure of Authority to furnish timely information or to approve or disapprove Consultant's instruments of service within a reasonable period of time.

26. **Assignment.** Subject to the provisions of paragraph 12, this Agreement shall bind and inure to the benefit of the Parties and their respective successors and assigns.

27. **No Third-Party Beneficiaries.** This Agreement is intended to benefit only the Parties and neither subconsultants, subcontractors nor suppliers of Consultant nor any other person or entity is intended by the Parties to be a third-party beneficiary of this Agreement.

28. **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of Colorado.

29. **Notice.** All notices required or given under this Agreement shall be in writing and shall be deemed effective: (1) when delivered personally to the other Party; or (2) seven (7) days after being deposited in the United States mail, first-class postage prepaid, properly addressed as follows; or (3) when sent by facsimile transmission and receipt is confirmed by return facsimile transmission or by email to the email addresses set forth below.

Or such other persons or addresses as the Parties may designate in writing.

If to Consultant: Jane Clary  
Wright Water Engineers, Inc.  
2490 W. 26<sup>th</sup> Ave., #100A  
Denver, Colorado 80211  
[clary@wrightwater.com](mailto:clary@wrightwater.com)

If to Authority: Bill Ruzzo and/or John McCarty  
Cherry Creek Basin Water Quality Authority  
Post Office Box 3166  
Centennial, Colorado 80161  
[Bill.Ruzzo@comast.net](mailto:Bill.Ruzzo@comast.net)  
[JohnMcCarty1972@gmail.com](mailto:JohnMcCarty1972@gmail.com)

With a copy to: Timothy J. Flynn  
Collins Cole Flynn Winn & Ulmer, PLLC  
165 South Union Boulevard, Suite 785  
Lakewood, Colorado 80228  
[tflynn@cogovlaw.com](mailto:tflynn@cogovlaw.com)

30. **Governmental Immunity.** The Parties understand and agree that the Authority is relying upon, and has not waived, the monetary limitations of \$387,000 per person, \$1,093,000 per occurrence, and all other rights, immunities and protections provided by the Colorado Governmental Immunity Act § 24-10-101 et. seq., C.R.S., as it may be amended from time to time.

31. **No Multiple Fiscal Year Obligations.** No provision of this Agreement shall be construed or interpreted as creating an indebtedness or a multiple fiscal year direct or indirect debt, or other multiple year financial obligation whatsoever of Authority within the meaning of any constitutional or statutory debt limitation provision, including, without limitation, Article XI, §§ 1, 2 and 6, and Article X, § 20 of the Colorado Constitution. This Agreement shall not directly or indirectly obligate the Authority to make any payments beyond the funds legally available to it for the then current fiscal year. No provision of this Agreement shall be construed to pledge or create a lien on any class or source of monies of the Authority, nor shall any provision of this Agreement restrict or limit the discretion of the Authority in the budgeting and appropriating its funds. The Authority shall notify Consultant if funds are exhausted for any fiscal year, and Consultant may, at its discretion, decide whether to continue working for the Authority during that fiscal year.

32. **Entire Agreement.** This Agreement constitutes the entire agreement between the Authority and Consultant and replaces all prior written or oral agreements and understandings. It may be altered, amended, or repealed only by a duly executed written instrument.

33. **Effective Date.** This Agreement shall become effective on the date it is signed by the appropriate representatives of the Authority.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement in duplicate original as of the date set forth above. This Agreement must have the signature of an authorized person of Consultant on both original copies.

**AUTHORITY:  
CHERRY CREEK BASIN WATER  
QUALITY AUTHORITY**

By: \_\_\_\_\_  
Joshua Rivero, Chair

Attest:

\_\_\_\_\_  
John A. McCarty, Secretary

Approved as to Form:

---

Timothy J. Flynn, General Counsel  
Cherry Creek Basin Water Quality Authority

**CONSULTANT:  
WRIGHT WATER ENGINEERS, INC.,**

By: \_\_\_\_\_  
Jane Clary

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
TECHNICAL MANAGER SCOPE OF WORK**

October 10, 2022

The primary focus of the Technical Manager is to coordinate and oversee day-to-day operations and manage projects and personnel retained by contract<sup>1</sup> by the Cherry Creek Basin Water Quality Authority (“Authority”) to facilitate implementation of the Board’s ongoing projects and the Board’s Mission, Vision, Goals and Objectives.

Primary responsibilities are:

1. Coordination with Legal Counsel
2. Board of Directors
3. Committees
4. Contract Management
5. Public Information & Education
6. Administration

The actual time will vary from time to time based upon the needs of the Authority, Authority’s Executive Committee, and outside third parties resulting in an increase or decrease of the scope items, therefore it is understood that there is uncertainty associated with estimating time.

The Technical Manager will be assisted by the Administrative Assistant whose duties are described on the attached Administrative Assistant Scope of Services and will overlap to some extent with the Technical Manager’s scope.

Board direction to the Technical Manager will occur at the monthly Board meetings with additional support from members of the Authority’s Executive Committee.

For the purpose of organization and time estimation, the primary tasks for General Technical Manager role are divided into Routine Coordination Activities, Technical Manager Administrative Activities, Technical Activities, and Other Authority Business. For 2023, several additional Technical Activities have been added to the scope of work. The description of the scope of work follows and Table 1 provides a budget estimate.

**Routine Coordination Activities**

1. Board meetings: one (1) per month
2. TAC meetings: one (1) per month
3. Special TAC/Board meetings: assume one (1) per year.
4. Authority Consultant Meetings: approximately weekly.
5. Preparatory calls with Board Executive Committee, one (1) per month.
6. Coordination calls with Authority Consultants
  - a. Review performance and provide feedback on direction
  - b. Discuss short/long-range plans
  - c. TAC agenda discussions
7. Oversee Administrative Assistant activities through regular/frequent communications

---

<sup>1</sup> For the purpose of this agreement, personnel retained by contract shall include: LRE Water Engineers, R2R Engineers, Hydros Consulting, RESPEC, Inc., Cherry Creek Stewardship Partners, RG Consultants, Administrative Assistant, Accountant.

### **Technical Manger Administrative Activities**

1. Assist in preparation of monthly TAC meeting agenda and attachments
2. Assist in preparation of monthly Board meeting agenda and attachments
3. Review Consultant and other invoices<sup>2</sup>
4. Routine review, action and/or assignment of tasks related to email or phone requests.
5. Verify Authority Contractors and subcontractors maintain required insurance and liability coverages

### **Technical Activities (routine)**

1. Review agreements (IGA, construction contracts, other)
2. Review and participate in regulatory proceedings and processes
3. Regularly review Authority Consultants' activities, schedules, and assignments for contract compliance
4. Prepare annual budget in coordination with the Board Executive Committee and Authority's accounting and legal firms
5. Review and comment on Authority Consultants Action Item Memos (AIM), technical reports prepared as part of their scopes of service
6. Provide direction during Pollution Abatement Planning and construction projects
7. Prepare for and attend other Board appointed committees and assist Administrative Assistant in preparing agendas, minutes, and follow up assignments from the Board

### **Other Authority Business<sup>3</sup>**

1. Reaching out to and coordinating with Authority members and water quality related agencies that address issues relevant to Authority's Mission
2. In accordance with and as directed by the Board, annually assist the Authority's Administrative Assistant in coordinating an event focused on the Authority's work for Colorado State Representatives and Senators whose districts include land with the Authority's boundaries
3. Support technical agenda and planning for Cherry Creek Stewardship Annual Conference.
4. Miscellaneous services from time to time at the Board's direction.

### **Additional Technical Support and Regulatory Activities**

1. Regulation 38 Rulemaking Hearing: Lead the Authority's involvement in the Regulation 38 Rulemaking Hearing related to adoption of Lakes Nutrient Criteria.
2. Site Specific Standard Development: Coordination with Hydros and CDPHE on development of site-specific nutrient standards for Cherry Creek Reservoir.
3. Special Projects Support: Assume the coordination role previously provided by R2R Engineers on selected projects such as the BMP Effectiveness Study and certain Muller projects within the State Park boundaries.
4. Strategic Planning/Work Planning: Participate in strategic planning and multi-year project planning.
5. Model Activities: Coordinate and direct modeling team on modeling efforts directed by the Board, as needed.
6. Watershed Plan Update Approach and Review: Review Watershed Plan to identify needed updates and approach to update plan in 2024. May include initial work on Watershed Plan Update as directed by the Executive Committee.

### **Contingency**

A contingency of an additional two hours per week is included for the Technical Manager to

---

<sup>2</sup> See attached Invoice Processing Policy dated 2/22/22.

<sup>3</sup> Authority business and interests' examples that may occur from time to time as directed by the Board.

allow flexibility for additional support for unforeseen activities, as directed by the Board.

**Table 1. Wright Water Engineers 2023 Scope of Services**

Role	Rate	Task Description	Hours/Event	# of Events	Hours	Estimate	
<b>Technical Manager General Responsibilities</b>	\$ 231	Staff Coordination	2	50	100	\$ 23,100	
	\$ 231	TAC Meetings	3	12	36	\$ 8,316	
	\$ 231	Board Meetings	3	12	36	\$ 8,316	
	\$ 231	Routine Coordination/Email/Misc. Reviews/Input	5	50	250	\$ 57,750	
	\$ 231	Peer Review	8	12	96	\$ 22,176	
	\$ 231	Annual Budget Planning	24	1	24	\$ 5,544	
	\$ 231	Annual Conference/Other Outreach	24	1	24	\$ 5,544	
	<b>Subtotal</b>				<b>566</b>	<b>\$ 130,746</b>	
<b>Technical Manager Technical Activities and Regulatory Support</b>	\$ 231	Regulatory Support (Technical Oversight for Site-specific Standard Process & Regulation 38 Rulemaking)	54	2	108	\$ 24,948	
	\$ 231	Special Projects Support (Assume certain 2022 R2R Projects)	60	1	60	\$ 13,860	
	\$ 231	Technical Projects (Strategic Planning/Work Planning, Model Scenarios, Watershed Plan Update [initial], Other)	138	1	138	\$ 31,878	
	<b>Subtotal</b>				<b>306</b>	<b>\$ 70,686</b>	
<b>Technical Manager Subtotal</b>						<b>872</b>	<b>\$ 201,432</b>
WWE Additional Staff Support	\$ 242	Additional Peer Review by Subject Matter Experts at WWE			32	\$ 7,744	
Other Direct Cost Allowance (e.g., mileage, photocopies, etc.)						\$ 600	
	<b>Subtotal</b>				<b>32</b>	<b>\$ 8,344</b>	
<b>WWE Subtotal (Pre-Contingency)</b>						<b>32</b>	<b>\$ 209,776</b>
Contingency	\$ 231	Additional level of effort for other tasks, as approved by the Board	2	50	100	\$ 23,100	
<b>Total</b>		<b>WWE Total With Contingency</b>			<b>1004</b>	<b>\$ 232,876</b>	

**Senior Principal Advisors and Subject Matter Experts**

Jonathan Jones, P.E.	Multiple Topics, Organizational Feedback/Opportunities
Andrew Earles, Ph.D., P.E.	Stormwater, BMPs, Stream Restoration, Modeling
Wayne Lorenz, P.E.	Wastewater, In-Reservoir Treatment
Rachel Pittinger, P.E.	Water Rights
Dr. William Lewis (WWE Adjunct Scientist)	Limnology

**Staff Support (when appropriate, according to WWE Hourly Rate Schedule)**

Haley Rogers, EIT	General Technical Support, Event Support, Outreach (as needed)
Missy Waters	Administrative Assistant (will rely primarily on Authority Admin.)

**Notes**

Certain 2022 Borchardt Projects include: project management/coordination for the BMP Effectiveness Study and wrap-up of Muller special studies within the Park boundary.

Construction-related tasks described in scope exclude construction oversight and formal engineering field observation.

Water rights related services include general consultation, but in-depth water rights work would need to be scoped separately.

Assumes detailed event-planning responsibilities primarily the responsibility of the Administrative Assistant.

"Other Authority Business" may require additional scopes of work for tasks not included in this scope, depending on level of effort.



**WRIGHT WATER ENGINEERS, INC.  
2022 SCHEDULE OF HOURLY RATES**

<b>PERSONNEL</b>	<b>RATE PER HOUR</b>
SENIOR PRINCIPAL/CONSULTANT	\$242
PRINCIPAL/CONSULTANT	\$231
SENIOR PROJECT ENGINEER/CONSULTANT	\$207
SENIOR ENGINEER/SCIENTIST CONSULTANT	\$184
ENGINEERING/SCIENTIST PROFESSIONAL I	\$171
ENGINEERING SPECIALIST/CONSULTANT	\$157
ENGINEERING/SCIENTIST PROFESSIONAL II	\$140
ENGINEERING DESIGNER/PROFESSIONAL III	\$129
ENGINEERING TECHNICIAN I	\$115
ENGINEERING TECHNICIAN II	\$100
ENGINEERING TECHNICIAN III	\$97
ENGINEERING TECHNICIAN IV	\$80
ENGINEERING TECHNICIAN V	\$73
◆ Automobile at 60 cents per mile	◆ GIS computer at 20 dollars per hour.
◆ Four-wheel drive/Pick-up truck vehicle at 70 cents per mile	◆ Info water® at 20 dollars per hour.
◆ AutoCAD computer at 15 dollars per hour.	◆ Civil 3D at 25 dollars per hour.
<i>Seven and one-half percent (7.5%) will be added to all reimbursable expenses to cover administration for special consultants, independent laboratory tests, direct printing costs, telephone, supplies, lodging and subsistence, all in-house computer, auto, postage, fax, and travel.</i>	

**TERMS OF PAYMENT:** It is agreed that this account will be billed on a monthly basis. Unless otherwise approved by the Company, payment is due upon receipt of invoice. Mail payment to the main office of the Company at 2490 West 26th Avenue, Suite 100A, Denver, Colorado 80211.

**AGREEMENT FOR CONSULTING SERVICES**

**FOR**

**CERRY CREEK BASIN WATER QUALITY AUTHORITY**

**THIS AGREEMENT FOR CONSULTING SERVICES** (“Agreement”) is entered into as of the \_\_\_ day of \_\_\_\_\_, 2022 to be effective as of January 1, 2023 between the **CERRY CREEK BASIN WATER QUALITY AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado (“Authority”), whose address is P.O. Box 3166, Centennial, Colorado 80161, and **RG AND ASSOCIATES, LLC**, a Colorado limited liability company, (“Consultant”) whose address is 4885 Ward Road, Suite 100, Wheat Ridge, Colorado 80033. Authority and Consultant may hereinafter singularly be referred to as “Party” and collectively as the “Parties.”

**RECITALS**

**WHEREAS**, the Authority was established for the purpose of preserving and protecting the water quality in the Cherry Creek Reservoir and the Cherry Creek Watershed; and

**WHEREAS**, in furtherance of its purposes, the Authority has retained and continues to retain, from time to time, numerous technical consultants;

**WHEREAS**, Consultant has performed services for the Authority in the past and Authority desires to continue receiving services from Consultant during calendar year 2023 in accordance with the terms and provisions of this Agreement; and

**WHEREAS**, Consultant represents that is has the personnel and expertise necessary to perform such services for Authority in a competent and timely manner.

**NOW, THEREFORE**, in consideration of the promises set forth herein, Authority and Consultant agree as follows:

1. **Scope of Services.** Consultant, agrees to perform the services as described in the scope of services attached hereto as **Exhibit A** (consisting of two pages) and incorporated herein by this reference (“Scope of Services”), together with all labor, materials, scheduling, procurement and related work reasonably inferable from the Scope of Services and necessary to provide such liaison and consulting services as contemplated by the Scope of Services (“Services”). The Services will be performed in accordance with this Agreement. In the event of a conflict or inconsistency between the terms and provisions of the Scope of Services and the text of this Agreement, the text of this Agreement shall control.

2. **Notice to Proceed.** As of the effective date of this Agreement and subject to receipt by the Authority of the Certificates of Insurance required by paragraph 16, Consultant is hereby authorized to provide the Services.

3. **Completion Date.** The Services shall be completed by Consultant on or before December 31, 2023 (“Completion Date”).

4. **Responsibility for Services.** The Authority shall not supervise the work of Consultant or instruct the Consultant on how to perform Services. Consultant shall be responsible for the professional quality, technical accuracy, timely completion and coordination of all work, reports and other Services rendered, whether such work is performed directly by Consultant or by any subconsultant or subcontractor hired by Consultant and approved by Authority in accordance with paragraph 12 below. Without entitling Consultant to additional compensation, and without limiting Authority’s remedies, Consultant shall promptly remedy and correct any errors, omissions, or other deficiencies in the Services. Consultant warrants that all Services provided under this Agreement shall be performed with competence, and in accordance with the standard of care of Consultant’s profession prevailing in Colorado.

5. **Compensation.** Authority shall compensate Consultant for the work items described in Parts A and B of the Scope of Services at the rate of \$160.00 per hour; provided, however, that the total amount of compensation to be paid Consultant during calendar year 2023 shall not exceed \$50,000.00 without the prior express written consent of Authority, which may be withheld for any reason. The compensation to be paid Consultant under this Agreement is entire and complete and includes any and all reimbursable costs.

6. **Method of Payment.** Consultant shall provide invoices each month for work completed through the last day of the preceding month. Consultant shall submit with each invoice such supporting documentation as Authority may reasonably request. Authority will not compensate Consultant for preparing or responding to Authority’s questions regarding Consultant’s invoices. Unless Consultant has not properly performed the Services, invoices will be paid within thirty (30) days after receipt. The Authority shall have the right to refuse to pay all or a portion of an invoice that is inconsistent with this Agreement. The Authority may delay payment until it can verify the accuracy of an invoice, obtain releases or waivers with respect to Services covered in the invoice, or resolve a dispute with the Consultant regarding an invoice.

7. **Conflict of Interest.** Consultant agrees that it shall not accept any employment during the term of this Agreement that creates a conflict of interest or compromises the effectiveness of the Consultant or otherwise interferes with the ability of Consultant to perform the Services required by this Agreement.

8. **Records and Audits.** The Consultant shall at all times maintain a system of accounting records in accordance with its normal billing procedures, together with supporting documentation for all work, purchases, services and billings under this Agreement. Consultant shall make available for audit and reproduction by the Authority all records, in whatever form, related to the Services. Consultant shall provide such availability during the term of this Agreement and for two (2) years after final payment. Consultant shall refund to the Authority any charges determined by an Authority's audit to be inconsistent with this Agreement.

9. **Confidentiality of Information.** Except as required by law or as is necessary for the performance of the Services, Consultant shall retain in strictest confidence all information furnished by the Authority and the results of any reports prepared, studies conducted or plan produced as a result of this Agreement, along with all supporting work papers and any other substantiating documents. Consultant shall not disclose such information to others without the prior written consent of the Authority's representative. Notwithstanding the foregoing, Consultant shall have no confidential obligation with respect to information that: (i) becomes generally available to the public other than as a result of disclosure by Consultant or its agents and employees; (ii) was available to Consultant on a non-confidential basis prior to its disclosure by Authority; and (iii) becomes available to Consultant from a third party who is not, to the knowledge of Consultant, bound to retain such information and confidence.

10. **Ownership of Work Product and Documents.** All printed material and electronic documents produced as a result of the Services performed under this Agreement shall be the sole property of Authority and may not be used, sold or disposed of in any manner without prior written consent of Authority's representative. All reports, electronic or otherwise, and any other documents identified in the Scope of Services as being deliverable to the Authority shall be delivered to and turned over to the Authority upon completion of the Services, but in no event, later than the Completion Date. Notwithstanding the foregoing, Consultant may retain a copy of all printed material, electronic or other documents prepared under this Agreement.

11. **Changes in Services.** Authority and, in particular, the Authority's manager shall have the right to order additions, deletions or changes in the Services at any time and for any reason, but especially for purposes of improving coordination between the Authority's consultants and eliminating the duplication of Services, so long as such changes are within the general Scope of Services covered by this Agreement. Requests for material changes in the Services may be made by the Authority's representative orally or in writing; provided, however, that oral requests shall be confirmed by a written request within ten (10) days after the oral request. If the Authority directs the Consultant to proceed with any material change, Consultant shall be paid for the change as agreed to by the Parties.

12. **Approval of Subconsultants.** Consultant shall not employ any subconsultant or subcontractor without the prior written approval of Authority's representative nor shall Consultant assign any rights or obligations under this Agreement in whole or in part without the Authority's prior written approval which may be withheld for any reason. Consultant shall be responsible for the coordination, accuracy and completeness of all Services in accordance with generally accepted principles and practices of Consultant's profession, regardless of whether the Services are performed by Consultant or one or more subconsultants. Consultant shall endeavor to bind each of its approved subcontractors or approved subconsultants, if any, to the terms of this Agreement. In the event that the subconsultant or subcontractor is unwilling or unable to comply with any term or provision of this Agreement, Consultant will inform Authority of the specific term or provision at issue. Authority may accept the lack of compliance to the terms of this Agreement on the part of the subconsultant or subcontractor, or may request that a different subconsultant or subcontractor be retained. This Agreement may be terminated by Authority if subcontracted or assigned, either in whole or in part, by the Consultant without the express written consent of Authority's representative.

13. **Independent Contractor.** In the performance of the Services, the Consultant shall be, for all purposes, an independent contractor and not an employee or agent of the Authority. Consultant and its employees and Subconsultants shall in no way represent themselves to third parties as agents or employees of the Authority.

14. **No Unemployment Insurance or Workers' Compensation Benefits.** Consultant is not entitled to unemployment insurance or workers' compensation benefits as a result of performance of the Services for the Authority. Consultant is required to provide workers' compensation and unemployment insurance benefits for its employees and/or subconsultants and subcontractors as required by law.

15. **Payment of Taxes.** Consultant is solely liable for any federal and state income and withholding taxes, unemployment taxes, FICA taxes and Worker's Compensation payments and premiums applicable to this Agreement or any services provided. Consultant shall indemnify the Authority for any liability resulting from nonpayment of such taxes and sums.

16. **Insurance.** Neither the Consultant nor any subconsultant, agent or employee thereof, shall continue work on any Services until the following minimum insurance coverages have been obtained:

16.1 **Workers' Compensation Insurance.** The Consultant and each subconsultant shall carry workers' compensation insurance to cover liability under the laws of the State of Colorado in connection with the Services performed pursuant to this Agreement. Consultant and each subconsultant or subcontractor shall carry separate policies.

16.2 **Commercial General Liability Insurance.** The Consultant and each subconsultant or subcontractor shall carry commercial general liability insurance, which shall include blanket contractual liability coverage. Such insurance shall be in an amount specified in the Colorado Governmental Immunity Act, § 24-10-101, *et. seq.*, C.R.S., as may be amended from time to time (currently \$387,000 per person, \$1,093,000 per occurrence for bodily injury and property damage).

16.3 **Automobile Liability Insurance.** The Consultant and each subconsultant shall carry automobile liability insurance to include owned, non-owned and hired vehicles used in the performance of Services under this Agreement. Such insurance shall be in the amounts specified in the Colorado Governmental Immunity Act § 24-10-101, *et. seq.*, C.R.S., as it may be amended from time to time (currently \$387,000 per person, \$1,093,000 per occurrence for bodily injury and property damage).

16.4 **Professional Liability Insurance.** The Consultant and each subconsultant or subcontractor shall carry professional liability insurance in the amount of \$1,000,000 per claim and aggregate limit, unless an alternate amount is agreed to in writing by the Authority.

The required commercial general liability and automobile policies shall: (1) name the Authority as an additional insured for coverage only, with no premium payment obligation; (2) provide a cross-liability/severability of interest clause; and (3) provide that the coverage for the Authority will not be impaired by the Consultant or subconsultant's failure to comply with any of the terms or conditions of the policy.

The Consultant and each subconsultant shall provide Certificates of Insurance (and renewals thereof) identifying this Agreement and demonstrating that the required coverages have been obtained. The Consultant shall not allow any subcontractor, agent or employee to commence work until appropriate Certificates of Insurance have been obtained and approved by the Authority. The coverages specified in each Certificate of Insurance shall not be terminated, reduced, or modified without providing at least thirty (30) prior written days' notice to the Authority.

17. **Compliance with Laws.** In performing this Agreement, Consultant shall comply with all applicable laws, rules and regulations, including but not limited to all federal, state and local laws.

18. **Communications.** It is understood by Authority and Consultant that successful progress under this Agreement requires frequent, concise and documented communication between the Party's representatives. Authority hereby designates John McCarty, Bill Ruzzo and Jane Clary as the representatives, each of whom individually shall have authority to give information to and receive information from Consultant. Authority may change its designated representative or name additional representatives from time to time.

Consultant hereby names Rick Gonçalves, as its representative who will give information to and receive information from Authority. Consultant may change its designated representative only with the prior written approval of Authority.

19. **Liability.** This paragraph 19 shall survive termination of this Agreement and shall overrule any contrary provision in amendment set forth on **Exhibit A**. Consultant agrees to provide a defense and pay any damages and costs for any liability or claim of whatsoever nature arising in any way out of this Agreement, to the extent caused by any negligent or wrongful act or omission of the Consultant, or Consultant's officers, agents or employees. This paragraph 19 shall survive termination of this Agreement.

20. **Acceptance Not a Waiver.** The Authority's approval of studies, drawings, designs, plans, specifications, reports, computer programs and other work or material shall not in any way relieve Consultant of responsibility for the technical accuracy of the Services. The Authority's approval or acceptance of, or payment for, any Services shall not be construed to operate as a waiver of any rights under this Agreement, or of any cause of action arising out of the performance of this Agreement.

21. **Termination or Suspension.** The Authority reserves the exclusive right to terminate or suspend, for any reason or no reason, all or a portion of the Services under this Agreement by giving ten (10) calendar days written notice to the Consultant. If any portion of the Services shall be terminated or suspended, the Authority shall pay the Consultant equitably for all services properly performed pursuant to this Agreement. If the work is suspended and the Consultant is not given an order to resume work within sixty (60) days from the effective date of the suspension, this Agreement will be considered terminated. Upon termination, the Consultant shall immediately deliver to the Board any documents then in existence, that have been prepared by the Consultant pursuant to this Agreement.

22. **Default.** Each and every term and condition of this Agreement shall be deemed to be a material element of this Agreement. In the event either Party shall fail or refuse to perform according to the material terms of this Agreement, such Party may be declared in default by the other Party by a written notice.

23. **Remedies.** In the event a Party has been declared in default, such defaulting Party shall be allowed a period of fifteen (15) days within which to correct, or commence correcting, the default. In the event that the default has not been corrected or begun to be corrected, or the defaulting Party has ceased to pursue the correction with due diligence, the Party declaring default may elect to (i) terminate this Agreement and seek damages; (ii) treat the Agreement as continuing and require specific performance; or (iii) avail itself of any other remedy at law or in equity. In the event Consultant fails or neglects to perform the Services in accordance with this

Agreement, the Authority may elect to correct such deficiencies and charge Consultant for the full cost of the corrections.

24. **Term.** Unless sooner terminated in accordance with the provisions of paragraph 21 above, this Agreement shall remain in effect until the Services are fully performed, at which time the Agreement shall terminate and be of no further force and effect, except as to those provisions which expressly survive termination, including but not limited to paragraphs 8, 9, 10, and 12.

25. **Force Majeure.** The Parties shall not be responsible for any failure or delay in the performance of any obligations under this Agreement caused by acts of God, flood, fire, war or public enemy.

26. **Assignment.** Subject to the provisions of paragraph 12 above, this Agreement shall bind and inure to the benefit of the Parties and their respective successors and assigns. This Agreement is intended to benefit only the Parties and neither subconsultants, subcontractors nor suppliers of Consultant nor any other person or entity is intended by the Parties to be a third-party beneficiary of this Agreement.

27. **Governing Law.** This Agreement shall be governed by and construed under the laws of the State of Colorado.

28. **Notice.** All notices required or given under this Agreement shall be in writing, and shall be deemed effective: (i) when delivered personally to the other Party; or (ii) seven (7) days after being deposited in the United States mail, first-class postage prepaid, properly addressed as follows; or (iii) when sent by facsimile transmission and receipt is confirmed by return facsimile transmission or when sent by email to the email addresses set forth below.

If to Consultant:

Rick Gonçalves  
RG and Associates, LLC  
4885 Ward Road, Suite 100  
Wheat Ridge, Colorado 80033  
rickg@rgengineers.com

If to Authority:

Manager  
Cherry Creek Basin Water Quality Authority  
P.O. Box 3166  
Centennial, Colorado 80161  
manager@ccbwwqa.org



With a copy to:

Timothy J. Flynn  
Collins Cole Flynn Winn & Ulmer, PLLC  
165 S. Union Boulevard, Suite 785  
Lakewood, Colorado 80228  
tflynn@cogovlaw.com

or such other persons or addressees as the Parties may designate in writing.

29. **Governmental Immunity.** The Parties understand and agree that the Authority is relying upon, and has not waived, the monetary limitations of \$387,000 per person, \$1,093,000 per occurrence, and all other rights, immunities and protections provided by the Colorado Governmental Immunity Act §24-10-101 *et seq.*, C.R.S., as it may be amended from time to time.

30. **Entire Agreement.** This Agreement constitutes the entire agreement between the Authority and Consultant and replaces all prior written or oral agreements and understandings. It may be altered, amended or repealed only by a duly executed written instrument.

31. **Effective Date.** This Agreement shall become effective as of January 1, 2023.

**CHERRY CREEK BASIN WATER  
QUALITY AUTHORITY**, a quasi-municipal  
corporation and political subdivision of the  
State of Colorado

By: \_\_\_\_\_  
Joshua Rivero, Chair

Attest:

\_\_\_\_\_  
John McCarty, Secretary/Treasurer

Approved as to Form:

\_\_\_\_\_  
Timothy J. Flynn, General Counsel

This Agreement is accepted by:

**CONSULTANT:**  
**RG AND ASSOCIATES, LLC**, a Colorado  
limited liability company

By: \_\_\_\_\_  
Rick Gonçalves, President

By execution the signor for Consultant certifies that he or she is authorized to accept and bind Consultant to the terms of this Agreement.



September 30, 2022

Bill Ruzzo, Tim Flynn  
Cherry Creek Basin Water Quality Authority  
tflynn@cogovlaw.com  
Bill.Ruzzo@comcast.net

**RE: Scope and Budget for 2023**

Bill and Tim,

Following is my scope and budget for Water/Wastewater coordination and RDS coordination activities:

**Scope of Work and Budget**

**A. Water/Wastewater Coordinator**

1. Act as the Authority's engineering consultant on water and wastewater related issues and Reservoir treatment activities, including enhanced de-stratification.

48 hrs @ \$160 = \$7,680

2. Attend board meetings, TAC meetings and staff meetings and committee meetings.

120 hrs @ \$160= \$19,200

3. Review , provide comments and recommendations on all Wastewater Treatment Plant and Lift Station Site Location Applications that are referred to the authority and attend pertinent meetings related to them.

40 hrs @ \$160 = \$6,400

4. As staff, head up "break out group" sessions with the TAC and Board members on the "Reservoir" component for future modeling efforts.

10 hrs @160 = \$1,600

5. Address any other issues as directed by the manager or board..

Yearly Budget = \$34,880

**B. Reservoir Destratification System(RDS) Coordination Activities**

1. Assist with the management of the system and help coordinate Operation and Maintenance activities.
  - a. Perform pre-season check of RDS
  - b. Operate RDS for season (see attached operations policy) including start-up and shutdown
  - c. Coordinate compressor maintenance with CCBWQA's contractor (currently Ingersoll Rand)
  - d. Coordinate annual in-lake maintenance with CCBWQA's contractor (currently B&RW)
  - e. Order parts needed for in-lake maintenance from suppliers (varies)
  - f. Respond to system warnings, shutdowns, or repairs and coordinate CCBWQA's contractors to take action needed to get RDS operational
  - g. Review and authorize invoices for maintenance and repair by CCBWQA's contractors
  - h. Prepare annual report (see attached example)
  - i. Provide notifications and updates of system operation and repair to Colorado Parks and Wildlife and Marina Vendor
  - j. Evaluate and recommend improvements to operations, policies, and maintenance (as needed)

90 hours at \$160/hour = \$14,400

2. Prepare Annual report and provide other services requested by CCBWQA management.

4.5 hours at \$160/hour = \$720

Yearly Budget = \$15,120

**C. Total Budget \$50,000**

If you have any questions, please do not hesitate to call.

Sincerely,

RG AND ASSOCIATES, LLC



Ricardo Gonçalves, PE  
President



CONNECTING WATER TO LIFE

## MEMORANDUM

<b>Date:</b>	10/10/22
<b>To:</b> <b>Cc:</b>	Cherry Creek Basin Water Quality Authority Board, Jane Clary, CCBWQA Technical Manager
<b>From:</b>	Erin Stewart, LRE Water
<b>Subject:</b>	Sampling and Analysis Plan/ Quality Assurance Project Plan (SAP/QAP) revisions for 2023

**Project:** Requested Revisions to CCBWQA SAP/QAPP for 2023

### **Background:**

The CCBWQA Sampling and Analysis Plan/ Quality Assurance Plan is updated on an as-needed basis to account for changes to the monitoring program based on regulatory support, modeling inputs, or other technical information needed. Suggested revisions and updates to the SAP/QAPP for 2023 have been reviewed and approved by Jane Clary, the Technical Manager.

Most of the changes are minor, just providing clarification of the sampling program methodology or analysis parameters. The only substantive change is the addition of soil sampling to evaluate the water quality benefit of stream improvement projects and the effectiveness of phosphorus removal from PRF ponds during sediment removal.

The links to the redlined and final versions are available at the following links :

[2023 Draft SAP/ QAPP w/ redlines](#)

[2023 SAP/ QAPP Final](#)

### **Budget Impact:**

No significant budget changes for the changes to the 2023 SAP are anticipated. The addition of the soil sampling for new stream restoration projects and maintenance activities will add a small amount (~\$3,000) to Task 2 – Watershed Sampling but will be completed with other CCBWQA field projects, when possible, to reduce additional costs.

### **Action Requested:**

A summary and redlined version of the changes was provided to the TAC earlier this month. The TAC accepted the suggested changes and recommended that the updated 2023 SAP/QAPP be sent to the CCBWQA Board of Directors for final approval.

Request for a motion to approve the suggested changes and updates to the 2023 SAP/QAPP.

### **Next Steps:**

The final version of the 2023 SAP/QAPP will be saved in the CCBWQA files. Approved changes, by addendum, will be used in the monitoring program until the next revision is completed in the future.

Current Sampling Procedure	Recommended Change	Background	Support
No soil sampling is included in SAP.	Adding soil sampling procedure and analysis methods into SAP.	<p>Soil sampling and analysis are used to evaluate the potential for phosphorus immobilization from stream restoration projects.</p> <p>Soil analysis of sediment removed from PRF ponds during maintenance activities (sediment removal) helps to inform the efficiency of phosphorus removal.</p>	Adding this to SAP makes the collection procedure and analytical methods consistent and comparable.
Surface and groundwater samples analyzed per Table 3.	Clarification of parameters analyzed in text.	Parameters for stream and groundwater sample analysis were not consistent in table and text descriptions.	
Dissolved Nitrogen analyzed in reservoir samples	Clarification of TDN analysis in Table 1. and text.	TDN has been analyzed in the past but was not listed in current version of SAP.	Important information used in modeling and nutrient ratios.
DO loggers installed in CCR at 0.5m and 7m.	Adding specifications on DO logger installation and data collection to SAP.	DO loggers were installed in the CCR in 2020 and SAP has not been revised to include information.	DO loggers were installed at the request of Hydros to provide continuous DO information for model updates.
WQCC Regulation Hearing timeline is updated during SAP updates.	Update of WQCC Regulation Timeline (Table 1.) is included in the 2023 SAP.	Timeline is based on regulation hearing schedule and relevance to the CCBWQA.	



## Memorandum

**To:** CCBWQA Board  
**From:** Jessica DiToro, PE, LRE Water  
**Date:** October 11, 2022  
**Subject:** Lakes and Reservoirs Nutrients Criteria Rulemaking Hearing

---

**Background:** On August 29<sup>th</sup>, a group of parties (the “water users”) to the Lake Nutrients Criteria rulemaking hearing (RMH) filed a motion<sup>1</sup> to delay the RMH by 90 days. The basis of water users’ motion is the 90-day delay would allow time for the Water Quality Control Commission (WQCC) to consult with the State Engineer’s Office (SEO) to evaluate potential impacts to water rights that could arise with the adoption of the proposed lake nutrients criteria, and to allow the Department of Regulatory Agencies to conduct a cost-benefit analysis of the proposed rulemaking.

On September 1<sup>st</sup>, a second motion was submitted to the WQCC by a different group of parties to the RMH consisting of Northern Water, the Colorado Wastewater Utility Council (CWWUC), and the Lower Arkansas Valley Water Conservancy District (the “joint parties”). The joint parties’ motion requested a 1-year delay (minimum) to the RMH, based on the fact that the Water Quality Control Division (WQCD) released the draft criteria eight months later than originally promised, significantly reducing the review and comment period previously promised to stakeholders. Additionally, the joint parties’ motion also references Dr. Jean Marie Boyer’s (Hydros) and Dr. James McCutchin’s (CU Boulder) independent reviews of the WQCD’s methodology, model, data, and assumptions that were used to develop the draft criteria, as a number of technical issues and concerns were identified by both reviewers.

On September 8<sup>th</sup>, the WQCC released an order in response to the two motions. In the order, the WQCC ordered that the RMH be continued and rescheduled for April 10, 2023. All prehearing deadlines for the RMH were stayed until formally rescheduled. A virtual status conference was held on September 14<sup>th</sup> to establish a new schedule of events related to the RMH. On September 19<sup>th</sup>, the WQCC issued an official procedural order outlining the new schedule for the April RMH. The schedule is as follows (a more detailed schedule that includes CCBWQA TAC and Board meeting dates is included as Attachment 1 to this memorandum):

- October 5<sup>th</sup>: WQCD to submit supplemental proponent's prehearing statement (sPPHS)

---

<sup>1</sup> Motions and Responses: <https://drive.google.com/drive/folders/11KjisiIhfjIVYZTdytxYse9MERYQJiB9>

- December 21, 2022: Responsive prehearing statement (RPHS) due and parties should submit economic information for cost benefit and regulatory analyses to the Division
- February 15, 2023: Rebuttals due
- February 22, 2023: Last day to submit motions
- March 1, 2023: Complete outstanding issues index
- March 7, 2023: Prehearing conference (mandatory for all parties)
- March 16, 2023: Negotiations cutoff
- March 30, 2023: Consolidated proposal due
- March 31, 2023: Cost-benefit analysis due
- April 5, 2023: Regulatory analysis due
- April 10, 2023: Rulemaking Hearing

On October 5<sup>th</sup> the WQCD submitted a supplement to its PPHS. Prior to this, the WQCD had requested that stakeholders provide them with updated and corrected datasets so that the model could be rerun and proposed criteria adjusted as appropriate. CCBWQA provided a corrected dataset to the WQCD in August with its RPHS. The result of incorporating these updated and corrected datasets in the model is as follows:

Parameter	Original Proposal	Updated Proposal
Total Phosphorus (µg/L)	36	40
Total Nitrogen (µg/L)	600	610

**Next Steps:** Staff has reviewed the supplement to the WQCD's PPHS and currently does not envision substantive changes to CCBWQA's previously prepared and submitted RPHS. If Staff has any recommendations regarding supplementing the CCBWQA's RPHS, it is anticipated that Staff will bring a recommendation to the November TAC meeting and a motion to the November Board meeting. For example, it may be appropriate to include a statement indicating that CCBWQA has reviewed the sPPHS and that the revisions do not substantively affect CCBWQA's conclusions in its RPHS. If consensus cannot be met at these November meetings, there would still be time for additional discussion and action to occur at the December TAC and Board meetings. Additionally, Staff will continue to coordinate with the WQCD, EPA, and Colorado Parks and Wildlife (CPW), and will participate in Lake Nutrients Criteria TAC meetings if any are scheduled between now and the April 2023 RMH.



## Attachment 1

Lakes Nutrients Criteria (Regulations 31-38) RMH Schedule + CCBWQA Meeting Schedule		
Event	Date	Activity
Nutrient Town Hall	May 2 <sup>nd</sup>	Proposed criteria released by WQCD
May TAC	May 5 <sup>th</sup>	1 <sup>st</sup> discussion related to draft criteria at TAC level
May Board	May 19 <sup>th</sup>	1 <sup>st</sup> discussion related to draft criteria at Board level
June TAC	June 2 <sup>nd</sup>	2 <sup>nd</sup> discussion related to draft criteria at TAC level
June Board	June 16 <sup>th</sup>	2 <sup>nd</sup> discussion related to draft criteria at Board level
July TAC	July 7 <sup>th</sup>	3 <sup>rd</sup> discussion related to draft criteria at TAC level – Motion for Party Status
July Board	July 21 <sup>st</sup>	3 <sup>rd</sup> discussion related to draft criteria at Board level – Motion for Party Status
PPHS	August 3 <sup>rd</sup>	Review WQCD's PPHS
August TAC	August 4 <sup>th</sup>	4 <sup>th</sup> discussion related to draft criteria at TAC level – Motion for RPHS
Party Status Requests	August 17 <sup>th</sup>	Submit Party Status Request
August Board	August 18 <sup>th</sup>	4 <sup>th</sup> discussion related to draft criteria at Board level – Motion for RPHS
September TAC	September 1 <sup>st</sup>	5 <sup>th</sup> discussion related to draft criteria at TAC level – Discuss Rebuttal
September Board	September 15 <sup>th</sup>	5 <sup>th</sup> discussion related to draft criteria at Board level – Motion for Rebuttal if needed
<b>Supplemental PPHS</b>	<b>October 5<sup>th</sup></b>	<b>Review WQCD's Supplemental PPHS</b>
<b>October TAC</b>	<b>October 6<sup>th</sup></b>	<b>6<sup>th</sup> discussion related to draft criteria at TAC level – Update on status</b>
<b>October Board</b>	<b>October 20<sup>th</sup></b>	<b>6<sup>th</sup> discussion related to draft criteria at Board level – Update on status</b>
<b>November TAC</b>	<b>November 3<sup>rd</sup></b>	<b>7<sup>th</sup> discussion related to draft criteria at TAC level – Discuss RPHS</b>
<b>November Board</b>	<b>November 17<sup>th</sup></b>	<b>7<sup>th</sup> discussion related to draft criteria at Board level – Motion for RPHS</b>
<b>December TAC</b>	<b>December 1<sup>st</sup></b>	<b>8<sup>th</sup> discussion related to draft criteria at TAC level – Discuss RPHS(?)</b>
<b>December Board</b>	<b>December 15<sup>th</sup></b>	<b>8<sup>th</sup> discussion related to draft criteria at Board level – Motion for RPHS(?)</b>
<b>RPHS</b>	<b>December 21<sup>st</sup></b>	<b>Submit Supplemental RPHS – TBD + Review other parties' RPHSs</b>
<b>January TAC</b>	<b>January 5<sup>th</sup></b>	<b>9<sup>th</sup> discussion related to draft criteria at TAC level – Discuss Rebuttals</b>
<b>January Board</b>	<b>January 19<sup>th</sup></b>	<b>9<sup>th</sup> discussion related to draft criteria at Board level – Motion for Rebuttals(?)</b>
<b>February TAC</b>	<b>February 2<sup>nd</sup></b>	<b>10<sup>th</sup> discussion related to draft criteria at TAC level – Update on status</b>
<b>Rebuttals</b>	<b>February 15<sup>th</sup></b>	<b>Submit Rebuttal Statement – TBD + Review other parties' Rebuttals</b>
<b>February Board</b>	<b>February 16<sup>th</sup></b>	<b>10<sup>th</sup> discussion related to draft criteria at Board level – Update on status</b>
<b>Motions</b>	<b>February 22<sup>nd</sup></b>	<b>TBD</b>
<b>Complex Outstanding Issues Index</b>	<b>March 1<sup>st</sup></b>	<b>Review Index</b>
<b>March TAC</b>	<b>March 2<sup>nd</sup></b>	<b>11<sup>th</sup> discussion related to draft criteria at TAC level – Discuss RMH Presentation</b>
<b>Prehearing Conference</b>	<b>March 7<sup>th</sup></b>	<b>Participate (virtually) in conference to maintain Party Status</b>
<b>March Board</b>	<b>March 16<sup>th</sup></b>	<b>11<sup>th</sup> discussion related to draft criteria at Board level – Motion for RMH Presentation</b>
<b>Negotiation Cutoff</b>	<b>March 16<sup>th</sup></b>	<b>Final negotiations with WQCD and other parties today</b>
<b>Consolidated Proposal</b>	<b>March 30<sup>th</sup></b>	<b>Review Proposal</b>
<b>Cost Benefit Analysis</b>	<b>March 31<sup>st</sup></b>	<b>Review Cost Benefit Analysis</b>
<b>Regulatory Analysis</b>	<b>April 5<sup>th</sup></b>	<b>Review Regulatory Analysis</b>
<b>April TAC</b>	<b>April 6<sup>th</sup></b>	<b>12<sup>th</sup> discussion related to draft criteria at TAC level – Update on status</b>
<b>RMH</b>	<b>April 10<sup>th</sup></b>	<b>Participate (virtually) in RMH</b>
<b>April Board</b>	<b>April 20<sup>th</sup></b>	<b>Update on RMH outcome</b>
<b>May TAC</b>	<b>May 4<sup>th</sup></b>	<b>Update on RMH outcome</b>

### Key

CCBWQA TAC Meetings
CCBWQA Board Meetings
High Priority RMH Deadlines
Other RMH Deadlines

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY**  
**ANNUAL BUDGET**  
**FOR THE YEAR ENDING DECEMBER 31, 2023**

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
SUMMARY  
2023 BUDGET  
WITH 2021 ACTUAL AND 2022 ESTIMATED  
For the Years Ended and Ending December 31,**

10/11/22

	ACTUAL 2021	BUDGET 2022	ACTUAL 6/30/2022	ESTIMATED 2022	BUDGET 2023
BEGINNING FUNDS AVAILABLE	\$ 5,329,539	\$ 5,116,380	\$ 5,758,590	\$ 5,758,590	\$ 4,635,823
REVENUE					
Property Taxes	2,416,896	2,660,534	2,586,575	2,659,698	2,787,609
Specific Ownership Tax	207,780	201,351	104,042	214,000	215,432
Interest Income	4,235	3,250	16,379	37,362	76,000
Reimbursed expenditures	8,619	-	-	-	-
Recreation Fees	300,908	380,000	131,308	262,000	300,000
Building Permit Fees	245,879	182,000	144,644	280,000	250,000
Wastewater Surcharge	111,320	85,000	55,203	111,000	111,000
Other Revenue	-	-	2,665	2,665	5,000
Total revenue	<u>3,295,637</u>	<u>3,512,135</u>	<u>3,040,816</u>	<u>3,566,725</u>	<u>3,745,041</u>
TRANSFERS IN	<u>1,972,196</u>	<u>2,957,161</u>	<u>1,762,873</u>	<u>2,137,035</u>	<u>2,739,225</u>
Total funds available	<u>10,597,372</u>	<u>11,585,676</u>	<u>10,562,279</u>	<u>11,462,350</u>	<u>11,120,089</u>
EXPENDITURES					
General Fund	860,727	981,338	503,334	1,011,992	1,239,550
Pollution Abatement Fund	1,986,486	4,818,000	702,087	2,730,000	3,872,400
Enterprise Fund	19,373	995,100	81,566	947,500	391,000
Total expenditures	<u>2,866,586</u>	<u>6,794,438</u>	<u>1,286,987</u>	<u>4,689,492</u>	<u>5,502,950</u>
TRANSFERS OUT	<u>1,972,196</u>	<u>2,957,161</u>	<u>1,762,873</u>	<u>2,137,035</u>	<u>2,739,225</u>
Total expenditures and transfers out requiring appropriation	<u>4,838,782</u>	<u>9,751,599</u>	<u>3,049,860</u>	<u>6,826,527</u>	<u>8,242,175</u>
ENDING FUNDS AVAILABLE	<u>\$ 5,758,590</u>	<u>\$ 1,834,077</u>	<u>\$ 7,512,419</u>	<u>\$ 4,635,823</u>	<u>\$ 2,877,914</u>
EMERGENCY RESERVE	\$ 79,000	\$ 85,900	\$ 81,100	\$ 87,100	\$ 91,900
RESERVOIR DESTRATIFICATION SERVICE PLAN RESERVE	80,772	69,772	69,772	69,772	43,372
FACILITIES MAINTENANCE RESERVE	100,000	100,000	100,000	100,000	100,000
CAPITAL RESERVE	750,000	750,000	750,000	750,000	750,000
TOTAL DESIGNATED RESERVE	<u>\$ 1,009,772</u>	<u>\$ 1,005,672</u>	<u>\$ 1,000,872</u>	<u>\$ 1,006,872</u>	<u>\$ 985,272</u>

No assurance provided. See summary of significant assumptions.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY**  
**PROPERTY TAX SUMMARY INFORMATION**  
**2023 BUDGET**  
**WITH 2021 ACTUAL AND 2022 ESTIMATED**  
**For the Years Ended and Ending December 31,**

10/11/22

	ACTUAL 2021	BUDGET 2022	ACTUAL 6/30/2022	ESTIMATED 2022	BUDGET 2023
<b>ASSESSED VALUATION - ARAPAHOE</b>					
Residential	\$ 1,139,288,420	\$ 1,199,207,306	\$ 1,199,207,306	\$ 1,199,207,306	\$ 1,036,759,868
Residential Multi-Family	-	-	-	-	136,972,895
Commercial	878,260,273	1,001,435,625	1,001,435,625	1,001,435,625	999,979,575
Industrial	5,192,160	6,461,200	6,461,200	6,461,200	6,461,200
Agricultural	316,142	365,898	365,898	365,898	359,723
State assessed	28,410,130	2,529,200	2,529,200	2,529,200	3,026,620
Vacant land	41,664,426	37,768,626	37,768,626	37,768,626	33,585,156
Personal property	118,694,890	151,299,748	151,299,748	151,299,748	146,354,737
Other	13,559	13,587	13,587	13,587	13,588
Certified Assessed Value	<u>\$ 2,211,840,000</u>	<u>\$ 2,399,081,190</u>	<u>\$ 2,399,081,190</u>	<u>\$ 2,399,081,190</u>	<u>\$ 2,363,513,362</u>
<b>MILL LEVY</b>					
General	0.500	0.500	0.500	0.500	0.500
Temporary Mill Levy Reduction	(0.022)	(0.021)	(0.021)	(0.021)	0.000
Total mill levy	<u>0.478</u>	<u>0.479</u>	<u>0.479</u>	<u>0.479</u>	<u>0.500</u>
<b>PROPERTY TAXES</b>					
General	\$ 1,105,920	\$ 1,199,541	\$ 1,199,541	\$ 1,199,541	\$ 1,181,757
Temporary Mill Levy Reduction	(48,660)	(50,381)	(50,381)	(50,381)	-
Levied property taxes	1,057,260	1,149,160	1,149,160	1,149,160	1,181,757
Adjustments to actual/rounding	(16,556)	-	(38,506)	(139)	-
Budgeted property taxes	<u>\$ 1,040,704</u>	<u>\$ 1,149,160</u>	<u>\$ 1,110,654</u>	<u>\$ 1,149,021</u>	<u>\$ 1,181,757</u>
<b>ASSESSED VALUATION - DOUGLAS</b>					
Residential	\$ 1,841,969,370	\$ 2,039,108,800	\$ 2,039,108,800	\$ 2,039,108,800	\$ 2,075,528,520
Commercial	575,093,680	600,191,990	600,191,990	600,191,990	620,837,310
Industrial	134,403,590	163,237,070	163,237,070	163,237,070	169,842,810
Agricultural	11,006,580	11,494,050	11,494,050	11,494,050	10,884,420
State assessed	2,856,400	3,260,900	3,260,900	3,260,900	5,174,900
Vacant land	167,049,180	192,875,070	192,875,070	192,875,070	175,734,090
Personal property	198,117,880	200,763,990	200,763,990	200,763,990	209,799,450
Other	139,300	160,790	160,790	160,790	166,030
Adjustments	2,930,635,980	3,211,092,660	3,211,092,660	3,211,092,660	3,267,967,530
Adjustments to actual/rounding	(50,528,361)	(55,822,571)	(55,822,571)	(55,822,571)	(56,262,904)
Certified Assessed Value	<u>\$ 2,880,107,619</u>	<u>\$ 3,155,270,089</u>	<u>\$ 3,155,270,089</u>	<u>\$ 3,155,270,089</u>	<u>\$ 3,211,704,626</u>
<b>MILL LEVY</b>					
General	0.500	0.500	0.500	0.500	0.500
Temporary Mill Levy Reduction	(0.022)	(0.021)	(0.021)	(0.021)	0.000
Total mill levy	<u>0.478</u>	<u>0.479</u>	<u>0.479</u>	<u>0.479</u>	<u>0.500</u>
<b>PROPERTY TAXES</b>					
General	\$ 1,440,054	\$ 1,577,635	\$ 1,577,635	\$ 1,577,635	\$ 1,605,852
Temporary Mill Levy Reduction	(63,362)	(66,261)	(66,261)	(66,261)	-
Levied property taxes	1,376,691	1,511,374	1,511,374	1,511,374	1,605,852
Adjustments to actual/rounding	(499)	-	(35,453)	(697)	-
Budgeted property taxes	<u>\$ 1,376,192</u>	<u>\$ 1,511,374</u>	<u>\$ 1,475,921</u>	<u>\$ 1,510,677</u>	<u>\$ 1,605,852</u>
<b>BUDGETED PROPERTY TAXES</b>					
General	<u>\$ 2,416,896</u>	<u>\$ 2,660,534</u>	<u>\$ 2,586,575</u>	<u>\$ 2,659,698</u>	<u>\$ 2,787,609</u>
	<u>\$ 2,416,896</u>	<u>\$ 2,660,534</u>	<u>\$ 2,586,575</u>	<u>\$ 2,659,698</u>	<u>\$ 2,787,609</u>

No assurance provided. See summary of significant assumptions.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
GENERAL FUND  
2023 BUDGET  
WITH 2021 ACTUAL AND 2022 ESTIMATED  
For the Years Ended and Ending December 31,**

10/11/22

	ACTUAL 2021	BUDGET 2022	ACTUAL 6/30/2022	ESTIMATED 2022	BUDGET 2023
BEGINNING FUND BALANCE	\$ 1,226,554	\$ 1,532,684	\$ 1,417,208	\$ 1,417,208	\$ 1,566,706
REVENUE					
Property taxes	2,416,896	2,660,534	2,586,575	2,659,698	2,787,609
Specific ownership tax	207,780	201,351	104,042	214,000	215,432
Interest income	3,776	2,500	13,443	30,000	60,000
Other revenue	-	-	27	27	-
Total revenue	<u>2,628,452</u>	<u>2,864,385</u>	<u>2,704,087</u>	<u>2,903,725</u>	<u>3,063,041</u>
Total funds available	<u>3,855,006</u>	<u>4,397,069</u>	<u>4,121,295</u>	<u>4,320,933</u>	<u>4,629,747</u>
EXPENDITURES					
General and Administrative					
Accounting	59,222	55,000	29,759	62,000	70,000
Administrative Assistant	-	-	-	-	86,300
Auditing	6,800	7,700	7,200	7,200	7,500
CC Stewardship Partners	27,000	30,250	18,000	30,250	30,250
County Treasurer's fee	36,275	39,908	38,809	39,908	39,900
Dues and licenses	1,488	5,000	1,238	1,700	2,000
Insurance and bonds	7,685	12,000	6,863	6,863	10,000
Management/administration	-	-	24,997	25,000	69,000
Legal services	107,698	53,000	63,685	125,000	100,000
Office/Miscellaneous Expense	12,097	15,100	3,817	7,500	7,400
TAC coordination	26,604	12,000	11,910	12,000	20,800
Information & education coordination	-	16,500	113	16,500	35,000
CCBWQA website	13,002	14,300	8,643	14,300	10,000
Regulatory support	35,255	33,000	59,440	60,000	228,000
Personnel	77,826	86,350	541	541	-
Repairs and Maintenance	-	16,830	-	16,830	-
Optional Mgr Support	-	30,000	17,813	30,000	-
	<u>410,952</u>	<u>426,938</u>	<u>292,828</u>	<u>455,592</u>	<u>716,150</u>
Watershed Management					
Annual report	15,833	26,000	19,881	26,000	32,000
Data management	37,793	50,000	10,489	50,000	45,000
Site application review	-	-	1,879	2,000	6,400
General watershed management	160,417	153,400	64,390	153,400	125,000
	<u>214,043</u>	<u>229,400</u>	<u>96,639</u>	<u>231,400</u>	<u>208,400</u>
Sampling and Analysis Program					
General technical support	31,930	86,000	27,955	86,000	55,000
Monitoring - Reservoir	58,973	86,000	28,686	86,000	36,000
Monitoring - Watershed	99,575	128,000	48,948	128,000	48,000
Monitoring - Laboratory	-	-	-	-	120,000
Data management	44,355	25,000	8,278	25,000	56,000
	<u>234,833</u>	<u>325,000</u>	<u>113,867</u>	<u>325,000</u>	<u>315,000</u>
Special Projects					
Special projects - Undesignated	899	-	-	-	-
	<u>899</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total expenditures	<u>860,726</u>	<u>981,338</u>	<u>503,334</u>	<u>1,011,992</u>	<u>1,239,550</u>
TRANSFERS OUT					
Transfers to Pollution Abatement Fund	1,577,072	1,718,631	1,615,268	1,742,235	1,837,825
Supplemental transfers	-	850,000	-	-	500,000
Total transfers out	<u>1,577,072</u>	<u>2,568,631</u>	<u>1,615,268</u>	<u>1,742,235</u>	<u>2,337,825</u>
Total expenditures and transfers out requiring appropriation	<u>2,437,798</u>	<u>3,549,969</u>	<u>2,118,602</u>	<u>2,754,227</u>	<u>3,577,375</u>
ENDING FUND BALANCE	<u>\$ 1,417,208</u>	<u>\$ 847,100</u>	<u>\$ 2,002,693</u>	<u>\$ 1,566,706</u>	<u>\$ 1,052,372</u>
EMERGENCY RESERVE	\$ 79,000	\$ 85,900	\$ 81,100	\$ 87,100	\$ 91,900
TOTAL DESIGNATED RESERVE	<u>\$ 79,000</u>	<u>\$ 85,900</u>	<u>\$ 81,100</u>	<u>\$ 87,100</u>	<u>\$ 91,900</u>

No assurance provided. See summary of significant assumptions.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
POLLUTION ABATEMENT FUND  
2023 BUDGET  
WITH 2021 ACTUAL AND 2022 ESTIMATED  
For the Years Ended and Ending December 31,**

10/11/22

	ACTUAL 2021	BUDGET 2022	ACTUAL 6/30/2022	ESTIMATED 2022	BUDGET 2023
BEGINNING FUND BALANCE	\$ 2,446,816	\$ 1,970,727	\$ 2,441,170	\$ 2,441,170	\$ 1,853,205
REVENUE					
Interest income	26	200	124	2,362	8,000
Other revenue	-	-	2,638	2,638	5,000
Reimbursed expenditures	8,619	-	-	-	-
Total revenue	<u>8,645</u>	<u>200</u>	<u>2,762</u>	<u>5,000</u>	<u>13,000</u>
TRANSFERS IN					
Transfers from General Fund	1,577,072	1,718,631	1,615,268	1,742,235	1,837,825
Transfers from Enterprise Fund	275,700	388,530	147,605	394,800	401,400
Supplemental transfers	119,424	850,000	-	-	500,000
Total transfers in	<u>1,972,196</u>	<u>2,957,161</u>	<u>1,762,873</u>	<u>2,137,035</u>	<u>2,739,225</u>
Total funds available	<u>4,427,657</u>	<u>4,928,088</u>	<u>4,206,805</u>	<u>4,583,205</u>	<u>4,605,430</u>
EXPENDITURES					
General and Administrative					
Management/administration	242,158	307,000	133,473	307,000	396,100
Personnel	116,738	182,000	-	-	-
PAPS - Undesignated	44,723	225,000	5,534	100,000	-
Contingency	-	-	-	-	10,000
	<u>403,619</u>	<u>714,000</u>	<u>139,007</u>	<u>407,000</u>	<u>406,100</u>
Pollution Reduction Facilities - O&M					
PRF Routine	-	35,000	990	35,000	10,000
Repairs and maintenance	-	-	-	-	111,200
Utilities - reservoir destratification	60,124	60,000	16,732	60,000	65,000
Res Destrat service plan	16,180	11,000	-	11,000	26,400
PRF Emergency repairs	-	90,000	-	5,000	-
PRF Weed Control	-	-	-	-	10,000
Wetlands harvesting	-	-	-	-	108,000
Meteorological Station Service	-	6,000	-	3,000	3,000
PRF Restoration	92,255	288,000	745	185,000	40,000
Contingency	-	-	-	-	25,000
	<u>168,559</u>	<u>490,000</u>	<u>18,467</u>	<u>299,000</u>	<u>398,600</u>
Reservoir Projects					
Meteorological station	17,238	-	-	-	-
RDS Rehabilitation	11,487	270,000	11,133	35,000	47,700
Internal Loading Evaluation	-	150,000	-	-	-
Shoreline Stabilization	-	-	-	-	-
Reservoir Shoreline Stabilization - East Shade Shelter	10,850	349,000	28,342	349,000	599,000
Reservoir Shoreline Stabilization - Tower Loop	4,932	810,000	-	-	-
Contingency	-	-	-	-	50,000
	<u>44,507</u>	<u>1,579,000</u>	<u>39,475</u>	<u>384,000</u>	<u>696,700</u>
Stream Reclamation Projects					
CC Arapahoe (R 3-4)	-	180,000	25,000	180,000	605,000
Stream reclamation - CC 12-Mile Park	194,802	388,000	337,138	388,000	-
Stream reclamation - CC Scott Road	275,000	275,000	-	275,000	-
Stream reclamation - CC Dransfeldt Extension	60,000	170,000	-	170,000	170,000
Dove Creek: Otero to Chambers	25,000	100,000	75,000	100,000	138,000
Happy Canyon: Jordan to Broncos Pkwy	25,000	68,000	68,000	68,000	88,000
Happy Canyon: The I25 Upstream	250,000	250,000	-	250,000	-
Stream reclamation - McMurdo Gulch	540,000	171,000	-	171,000	907,000
Stream reclamation - Piney Creek	-	38,000	-	38,000	63,000
Watershed Priority Projects	-	250,000	-	-	-
Reservoir to LV Road	-	-	-	-	200,000
Lone Tree Creek	-	95,000	-	-	-
Preservation - Acquisition lease	-	50,000	-	-	100,000
Contingency	-	-	-	-	100,000
	<u>1,369,802</u>	<u>2,035,000</u>	<u>505,138</u>	<u>1,640,000</u>	<u>2,371,000</u>
Total expenditures	<u>1,986,487</u>	<u>4,818,000</u>	<u>702,087</u>	<u>2,730,000</u>	<u>3,872,400</u>
Total expenditures and transfers out requiring appropriation	<u>1,986,487</u>	<u>4,818,000</u>	<u>702,087</u>	<u>2,730,000</u>	<u>3,872,400</u>
ENDING FUND BALANCE	<u>\$ 2,441,170</u>	<u>\$ 110,088</u>	<u>\$ 3,504,718</u>	<u>\$ 1,853,205</u>	<u>\$ 733,030</u>
RESERVOIR DESTRATIFICATION SERVICE PLAN RESERVE	\$ 80,772	\$ 69,772	\$ 69,772	\$ 69,772	\$ 43,372
TOTAL RESERVE	<u>\$ 80,772</u>	<u>\$ 69,772</u>	<u>\$ 69,772</u>	<u>\$ 69,772</u>	<u>\$ 43,372</u>

No assurance provided. See summary of significant assumptions.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
ENTERPRISE FUND  
2023 BUDGET  
WITH 2021 ACTUAL AND 2022 ESTIMATED  
For the Years Ended and Ending December 31,**

10/11/22

	ACTUAL 2021	BUDGET 2022	ACTUAL 6/30/2022	ESTIMATED 2022	BUDGET 2023
BEGINNING FUNDS AVAILABLE	\$ 1,656,169	\$ 1,612,969	\$ 1,900,212	\$ 1,900,212	\$ 1,215,912
REVENUE					
Recreation fees	300,908	380,000	131,308	262,000	300,000
Building permit fees	245,879	182,000	144,644	280,000	250,000
Wastewater surcharge	111,320	85,000	55,203	111,000	111,000
Interest income	433	550	2,812	5,000	8,000
Total revenue	<u>658,540</u>	<u>647,550</u>	<u>333,967</u>	<u>658,000</u>	<u>669,000</u>
Total funds available	<u>2,314,709</u>	<u>2,260,519</u>	<u>2,234,179</u>	<u>2,558,212</u>	<u>1,884,912</u>
EXPENDITURES					
General and administrative					
Management/administration	-	50,000	-	-	21,000
Equipment	6,862	1,100	3,425	3,500	65,000
Planning					
Partner Planning	-	39,000	-	39,000	-
Reservoir to 12-Mile Park Study	-	250,000	35,350	250,000	5,000
CCBWQA Planning	-	295,000	-	295,000	105,000
Tributary Planning	11,881	50,000	35,785	50,000	-
Special Studies/Projects					
Special Studies/Projects - Bow Tie	630	100,000	490	100,000	-
Special Studies/Projects: BMP Effectiveness	-	95,000	-	95,000	75,000
Special Studies/Projects - PRF/PAP WQ Benefits	-	50,000	-	50,000	5,000
Reservoir Nutrient Mitigation	-	-	-	-	50,000
Emerging SCM	-	50,000	-	50,000	-
Watershed Master Plan	-	-	-	-	50,000
Contingency	-	15,000	6,516	15,000	15,000
Total expenditures	<u>19,373</u>	<u>995,100</u>	<u>81,566</u>	<u>947,500</u>	<u>391,000</u>
TRANSFERS OUT					
Transfers to Pollution Abatement Fund	275,700	388,530	147,605	394,800	401,400
Supplemental transfers	119,424	-	-	-	-
Total transfers out	<u>395,124</u>	<u>388,530</u>	<u>147,605</u>	<u>394,800</u>	<u>401,400</u>
Total expenditures and transfers out requiring appropriation	<u>414,497</u>	<u>1,383,630</u>	<u>229,171</u>	<u>1,342,300</u>	<u>792,400</u>
ENDING FUNDS AVAILABLE	<u>\$ 1,900,212</u>	<u>\$ 876,889</u>	<u>\$ 2,005,008</u>	<u>\$ 1,215,912</u>	<u>\$ 1,092,512</u>
FACILITIES MAINTENANCE RESERVE	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
CAPITAL RESERVE	750,000	750,000	750,000	750,000	750,000
TOTAL DESIGNATED RESERVE	<u>\$ 850,000</u>	<u>\$ 850,000</u>	<u>\$ 850,000</u>	<u>\$ 850,000</u>	<u>\$ 850,000</u>

No assurance provided. See summary of significant assumptions.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
2023 BUDGET  
SUMMARY OF SIGNIFICANT ASSUMPTIONS**

**Services Provided**

Cherry Creek Basin Water Quality Authority (the Authority) is a quasi-municipal corporation and political sub-division of the State of Colorado. Formed on June 16, 1988, the Authority was created by Colorado HB1029 to monitor the water quality in the Cherry Creek Basin and to construct facilities to control the accumulation of pollutants.

The District has an employee, and some operations and administrative functions are contracted.

The District prepares its budget on the modified accrual basis of accounting in accordance with the requirements of Colorado Revised Statutes C.R.S. 29-1-105 using its best estimates as of the date of the budget hearing. These estimates are based on expected conditions and its expected course of actions. The assumptions disclosed herein are those that the Authority believes are significant to the budget. There will usually be differences between the budget and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. For financial statement reporting under generally accepted accounting principles (GAAP), the Authority uses the full accrual basis of difference from GAAP accounting for Fund Balance. Funds Available represents each fund's current assets less its current liabilities except for the current portion of long-term debt. In addition, the budget separates individual funds which are included as one entity in the GAAP presentation.

Colorado Revised Statute 25-8.5-111(3), as amended by Senate Bill 01-066 in 2001, states that the Authority must spend a minimum of 60% of revenues (collected from fees, tolls, and property tax) on the construction and maintenance of pollution abatement projects in the Cherry Creek Basin or on payments due on debt incurred entirely for such projects. The minimum pollution abatement expenditure requirement is not restricted by fund but is applied to the Authority as a whole.

**Revenues**

**Property Taxes**

The primary source of revenue is property taxes. Property taxes are levied by the Authority's Board of Directors. The levy is based on assessed valuations determined by the County Assessor generally as of January 1 of each year. The levy is normally set by December 15 by certification to the County Commissioners to put the tax lien on the individual properties as of January 1 of the following year. The County Treasurer collects the determined taxes during the ensuing calendar year. The taxes are payable by April or, if in equal installments, at the taxpayer's election, in February and June. Delinquent taxpayers are notified in August and generally sales of the tax liens on delinquent properties are held in November or December. The County Treasurer remits the taxes collected monthly to the Authority.

The calculation of the taxes levied is displayed on the Property Tax Summary Information page of the budget.

Senate Bill 21-293 among other things, designates multi-family residential real property (defined generally, as property that is a multi-structure of four or more units) as a new subclass of residential real property. For tax collection year 2023, the assessment rate for single family residential property decreases to 6.95% from 7.15%. The rate for multifamily residential property, the newly created subclass, decreases to 6.80% from 7.15%. Agricultural and renewable energy production property decreases to 26.4% from 29.0%. Producing oil and gas remains at 87.5%. All other nonresidential property stays at 29%.



**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
2023 BUDGET  
SUMMARY OF SIGNIFICANT ASSUMPTIONS**

**Revenues - (continued)**

**Specific Ownership Taxes**

Specific ownership taxes are set by the State and collected by the County Treasurer, primarily on vehicle licensing within the County as a whole. The specific ownership taxes are allocated by the County Treasurer to all taxing entities within the County. The budget assumes that the Authority's share will be equal to approximately 7% of the property taxes collected from Arapahoe County and 8% of the property taxes from Douglas County.

**Net Investment Income**

Interest earned on the Authority's available funds has been estimated based on historical interest earnings.

**Fees**

The Authority receives recreation fees from the State of Colorado. These fees are a portion of the entry fees to Cherry Creek State Park. The fees are remitted to the Authority on a monthly basis.

The Authority receives building permit fees from various governmental entities that reside within the Authority's borders. These fees are typically remitted on a quarterly basis.

The Authority receives wastewater surcharges from the surrounding water and sanitation districts that operate wastewater treatment facilities and discharge into the Cherry Creek Basin. These surcharges are remitted to the Authority on a quarterly basis by each District.

**Expenditures**

**Administrative and Operating Expenditures**

Operating expenditures include the estimated services necessary to maintain the Authority administrative viability such as legal, management, accounting, insurance, banking, meeting expense and other administrative expenses. Estimated expenditures related to water quality management were also included in the General Fund budget.

**County Treasurer's Fees**

County Treasurer's fees have been computed at 1.50% of property tax collections.

**Capital Projects**

Anticipated expenditures for capital projects are detailed on the Pollution Abatement Fund page of the budget.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY  
2023 BUDGET  
SUMMARY OF SIGNIFICANT ASSUMPTIONS**

**Debt and Leases**

The Authority has no bond indebtedness or any operating or capital leases.

**Reserves**

**Emergency Reserve**

The Authority has provided for an Emergency Reserve equal to at least 3% of fiscal year spending as defined under the TABOR Amendment.

**Reservoir Destratification Service Plan Reserve**

The Authority has provided for a reservoir destratification service plan reserve of \$43,372 for use in subsequent year destratification service plan expenditures.

**Facilities Maintenance Reserve**

The Authority has provided for a facilities maintenance reserve of \$100,000 for use in subsequent year capital maintenance projects.

**Capital Reserve**

The Authority has provided for a total capital reserve of \$750,000 for use in subsequent year capital replacement projects.

**This information is an integral part of the accompanying budget.**

	A	B	C	D	E	F	G	H	J	K	L	M	O	P	Q	R	W	AB	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM
1	CHERRY CREEK BASIN WATER QUALITY AUTHORITY																											
2	<b>TABLE 2 - SUMMARY OF RECOMMENDED POLLUTANT REDUCTION FACILITIES</b>																											
3	<b>2023 - 2032 BUDGET PROJECTIONS (1000\$)</b>																											
4																												
9																												
10		<b>October 5, 2022</b>	<b>Current Project Budget</b>				<b>Prior Year Obligated Funds<sup>3</sup></b>	<b>Proposed 2022 Budget</b>				<b>Proposed 2023 Budget</b>				<b>Proposed 2024 Budget</b>	<b>Proposed 2025 Budget</b>	<b>Proposed 2026 Budget</b>	<b>Proposed 2027 Budget</b>	<b>Proposed 2028 Budget</b>	<b>Proposed 2029 Budget</b>	<b>Proposed 2030 Budget</b>	<b>Proposed 2031 Budget</b>	<b>Proposed 2032 Budget</b>	<b>2023-2032 Total</b>			
11	<b>Project No.</b>	<b>Project Title</b>	<b>Capital<sup>1</sup></b>	<b>Total</b>	<b>O&amp;M</b>	<b>Authority Portion</b>	<b>Authority Portion</b>	<b>Design</b>	<b>Capital</b>	<b>Land</b>	<b>Total</b>	<b>Design</b>	<b>Capital</b>	<b>Water</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>
12	<b>Budget Category - General</b>																											
14	<b>Budget Category - Reservoir Projects</b>																											
17	CCR-2	Reservoir Destratification System - Distribution Preliminary Design - Includes evaluation of Optimization of Distribution with WWE Expansion Alternative	\$ 2,140	\$ 2,140		\$ 2,140	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 270	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 935	\$ 935	\$ -	\$ 2,140		
18	CCR-3	Reservoir Nutrient Mitigation Alternatives Study	\$ 100	\$ 100		\$ 100	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100		
19	CCB-17.5	East Shade Shelter Shoreline Stabilization Phase III	\$ 710	\$ 650		\$ 710	100%	\$ 51	\$ -	\$ -	\$ -	\$ 59	\$ 600	\$ -	\$ 659	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 659		
20	CCB-17.6	West Shade Shelter Shoreline Stabilization PRF	\$ 704	\$ 704		\$ 704	100%	\$ 154	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550		
21	CCB-17.7	Tower Loop Shoreline Stabilization Phase II	\$ 1,500	\$ 1,500		\$ 1,500	100%	\$ 90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,410	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,410		
22	<b>Budget Category - Stream Reclamation Projects</b>																											
23	CCB-5.4	Cherry Creek Stream Reclamation at Main Street (Parker)	\$ 1,776	\$ 1,776		\$ 200	11%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ 200		
24	CCB-5.6	Cherry Creek Stream Stabilization at Lincoln Avenue (Parker)	\$ 1,447	\$ 1,447		\$ 304	21%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 304	\$ -	\$ -	\$ -	\$ 304		
28	CCB-5.14	Cherry Creek Stream Reclamation - Reach 3	\$ 2,567	\$ 2,567		\$ 640	25%	\$ -	\$ -	\$ -	\$ -	\$ 130	\$ -	\$ -	\$ 130	\$ 510	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 640		
29	CCB-5.14	Cherry Creek Stream Reclamation - Reach 4	\$ 2,720	\$ 2,720		\$ 680	25%	\$ 25	\$ 180	\$ -	\$ 180	\$ -	\$ 475	\$ -	\$ 475	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 475		
30	CCB-5.16	Cherry Creek - Reservoir to Lake View Drive Alternatives Analysis	\$ 200	\$ 200		\$ 200	100%	\$ -	\$ -	\$ -	\$ -	\$ 200	\$ -	\$ -	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200		
32	CCB-5.17	Cherry Creek Stream Reclamation - U/S Scott Road (Douglas County)	\$ 2,500	\$ 2,500		\$ 625	25%	\$ 350	\$ -	\$ 275	\$ 275	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
34	CCB-5.17.1B	Cherry Creek Stream Reclamation - at Dranfheldt Extension (Parker)	\$ 3,048	\$ 3,048		\$ 400	13%	\$ 60	\$ -	\$ 170	\$ 170	\$ -	\$ 170	\$ -	\$ 170	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170		
36	CCB-7.4	McMurdo Gulch Reclamation (Castle Rock)	\$ 4,308	\$ 4,308		\$ 1,078	25%	\$ -	\$ 171	\$ -	\$ 171	\$ -	\$ 907	\$ -	\$ 907	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 907		
37	CCB-13.5.3	Cottonwood Creek Tributary - Shooting Area Tributary (CCSP)	\$ 300	\$ 300		\$ 75	25%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75	\$ -	\$ -	\$ -	\$ -	\$ 75		
38	CCB-13.5.4	Cottonwood Creek and Tributary C (IWSD)	\$ 1,664	\$ 1,664		\$ 416	25%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 416	\$ -	\$ -	\$ 416		
39	CCB-21.1	Lone Tree Creek in CCSP downstream of Pond (CCBWQA Only)	\$ 340	\$ 340		\$ 340	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 340	\$ -	\$ 340		
40	CCB-21.3	Lone Tree Creek in CCSP upstream of Pond (Done in conjunction with Centennial Trail Project)	\$ 380	\$ 380		\$ 95	25%	\$ -	\$ -	\$ 95	\$ 95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
41	CCB-21.3a	Lone Tree Creek in CCSP upstream of Pond (CCBWQA Only)	\$ 450	\$ 450		\$ 450	100%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450	\$ 450		
42	CCB-22.1	Happy Canyon Creek County Line to Cherry Creek (SEMSWA)	\$ 1,520	\$ 1,520		\$ 381	25%	\$ 25	\$ 68	\$ -	\$ 68	\$ -	\$ 88	\$ -	\$ 88	\$ 50	\$ 75	\$ 75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 288		
43	CCB-22..2	Happy Canyon Creek Upstream of I-25 (MHFD)	\$ 3,943	\$ 3,943		\$ 500	13%	\$ 250	\$ -	\$ 250	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
44	CCB-23.1	Dove Creek U/S Pond D-1 to Chambers Rd (SEMSWA)	\$ 650	\$ 650		\$ 163	25%	\$ -	\$ 25	\$ -	\$ 25	\$ -	\$ 63	\$ -	\$ 63	\$ 75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138		
45	CCB-23.2	Dove Creek Otero to Chambers Rd. (SEMSWA)	\$ 700	\$ 700		\$ 175	25%	\$ 25	\$ -	\$ 75	\$ 75	\$ -	\$ 75	\$ -	\$ 75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75		
46	CCB-6.5	Piney Creek Reach 1 to 2 (SEMSWA)	\$ 2,350	\$ 2,350		\$ 515	22%	\$ -	\$ 38	\$ -	\$ 38	\$ 63	\$ -	\$ -	\$ 63	\$ 39	\$ 25	\$ 75	\$ 150	\$ 125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 477		
47	CCB-6.6	Piney Creek Tower to Orchard (SEMSWA)	\$ 3,000	\$ 3,000		\$ 710	24%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75	\$ 150	\$ 235	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 710		
48		Cherry and Piney Creeks in CCSP	\$ 22,500	\$ 22,500			0%	\$ -	\$ 250	\$ -	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ 450	\$ 1,400	\$ 1,000	\$ 1,355	\$ 1,900	\$ 2,000	\$ 920	\$ 960	\$ 1,500	\$ 11,485			
49	CCB-5.14?	Cherry Creek Stream Reclamation - Remaining Sections (not included in Reaches 3 and 4) from Valley Country Club to Soccer Fields	\$ 2,980	\$ 2,980		\$ 745	25%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100	\$ 100	\$ 545	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 745			
50	<b>Budget Category - PRF Water Quality/Wetland Ponds</b>																											
51	<b>Budget Category - PRF Preservation, Acquisition, Lease</b>																											

	A	B	C	D	E	F	G	H	J	K	L	M	O	P	Q	R	W	AB	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM
1	CHERRY CREEK BASIN WATER QUALITY AUTHORITY																											
2	<b>TABLE 2 - SUMMARY OF RECOMMENDED POLLUTANT REDUCTION FACILITIES</b>																											
3	<b>2023 - 2032 BUDGET PROJECTIONS (1000\$)</b>																											
4																												
9																												
10		<b>October 5, 2022</b>	<b>Current Project Budget</b>					<b>Prior Year Obligated Funds<sup>3</sup></b>	<b>Proposed 2022 Budget</b>				<b>Proposed 2023 Budget</b>				<b>Proposed 2024 Budget</b>	<b>Proposed 2025 Budget</b>	<b>Proposed 2026 Budget</b>	<b>Proposed 2027 Budget</b>	<b>Proposed 2028 Budget</b>	<b>Proposed 2029 Budget</b>	<b>Proposed 2030 Budget</b>	<b>Proposed 2031 Budget</b>	<b>Proposed 2032 Budget</b>	<b>2023-2032 Total</b>		
11	<b>Project No.</b>	<b>Project Title</b>	<b>Capital<sup>1</sup></b>	<b>Total</b>	<b>O&amp;M</b>	<b>Authority Portion</b>	<b>Authority Portion</b>		<b>Design</b>	<b>Capital</b>	<b>Land</b>	<b>Total</b>	<b>Design</b>	<b>Capital</b>	<b>Water</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>
52	CCB-16	PRF Preservation, Acquisition, Lease of Land or Water	\$ 500	\$ 500		\$ -	0%	\$ -	\$ -	\$ -	\$ 50	\$ 50		\$ 100	\$ -	\$ 100	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 550
53		<b>SUB-TOTALS</b>										\$ 2,035				\$ 2,930	\$ 3,029	\$ 1,800	\$ 2,085	\$ 2,350	\$ 2,350	\$ 2,354	\$ 2,321	\$ 2,285	\$ 2,000	\$ 23,504		

CHERRY CREEK BASIN WATER QUALITY AUTHORITY

**TABLE 2 - SUMMARY OF RECOMMENDED POLLUTANT REDUCTION FACILITIES  
2023 - 2032 BUDGET PROJECTIONS (1000\$)**

10	October 5, 2022		Current Project Budget				Prior Year Obligated Funds <sup>3</sup>	Proposed 2022 Budget				Proposed 2023 Budget				Proposed 2024 Budget	Proposed 2025 Budget	Proposed 2026 Budget	Proposed 2027 Budget	Proposed 2028 Budget	Proposed 2029 Budget	Proposed 2030 Budget	Proposed 2031 Budget	Proposed 2032 Budget	2023-2032 Total	
	Project No.	Project Title	Capital <sup>1</sup>	Total	O&M	Authority Portion		Authority Portion	Design	Capital	Land	Total	Design	Capital	Water	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
54	<b>OPERATIONS AND MAINTENANCE</b>																									
56	<b>Routine Category</b>																									
57	OM-7	Reservoir Destratification	\$ 350	\$ 350		\$ 350	100%		\$ 27		\$ 27		\$ 35		\$ 35	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 395
58	OM-14.1	PRF Weed Control	\$ 100	\$ 100		\$ 100	100%		\$ 8		\$ 8		\$ 10		\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 100
59	OM-14.2	PRF Reseeding at CCSP	\$ 50	\$ 50		\$ 27	100%		\$ -		\$ -		\$ 5		\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
60	OM-14.3	PRF Mowing	\$ 50	\$ 50		\$ 45	100%		\$ -		\$ -		\$ 5		\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
61		<b>SUB-TOTAL</b>	\$ 550	\$ 550		\$ 522			\$ 35		\$ 35		\$ 55		\$ 55	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 595
62	<b>Operations Category</b>																									
63	O - 1	RDS Utilities	\$ 650	\$ 650		\$ 650	100%		\$ 60		\$ 60		\$ 65		\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 650
64	O - 2	RDS Service Plan	\$ 155	\$ 155		\$ 155	100%		\$ 11		\$ 11		\$ 12		\$ 12	\$ 13	\$ 14	\$ 15	\$ 16	\$ 17	\$ 18	\$ 19	\$ 20	\$ 20	\$ 20	\$ 164
65	O - 3	PRF Emergency Repairs	\$ -	\$ -		\$ -	#DIV/0!		\$ 90		\$ 90		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66	O - 4	Meteorological Station	\$ 36	\$ 36		\$ 36	100%		\$ 6		\$ 6		\$ 3		\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 30
67		<b>SUB-TOTAL</b>	\$ 841	\$ 841		\$ 841			\$ 167		\$ 167		\$ 80		\$ 80	\$ 81	\$ 82	\$ 83	\$ 84	\$ 85	\$ 86	\$ 87	\$ 88	\$ 88	\$ 88	\$ 844
68	<b>Restorative Category</b>																									
69	OM -	Tree/Shrub Planting	\$ 18	\$ 18		\$ 18	100%		\$ -		\$ -		\$ -		\$ -	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 18
70	OM -	Fence Repair	\$ 72	\$ 72		\$ 72	100%		\$ -		\$ -		\$ -		\$ -	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 72
71	OM -	Shoreline / Bank Restoration																								\$ -
72		Average Annual Cost							\$ -		\$ -		\$ -		\$ -	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 1,755
73		Shop Creek Concrete Repairs	\$ 10	\$ 10		\$ 10			\$ -		\$ -		\$ 10		\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10
74		Mountain/Lake Loop Shoreline	\$ 24	\$ 24		\$ 24	100%		\$ 24		\$ 24		\$ 30		\$ 30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30
75	OM -	Wetland Harvesting	\$ 900	\$ 900		\$ 900	100%		\$ 90		\$ 90		\$ 90		\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 900
76		<b>SUB-TOTAL</b>	\$ 1,024	\$ 1,024		\$ 1,024			\$ 114		\$ 114		\$ 130		\$ 130	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 295	\$ 2,785
77	<b>Rehabilitation Category</b>																									
78	OM -						#DIV/0!																			
79		<b>SUB-TOTAL</b>	\$ -	\$ -		\$ -			\$ -		\$ -		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
81		<b>SUB-TOTAL O&amp;M</b>	\$ 2,415						\$ 316		\$ 316		\$ 265		\$ 265	\$ 436	\$ 437	\$ 438	\$ 439	\$ 440	\$ 441	\$ 442	\$ 443	\$ 443	\$ 443	\$ 4,540
82		<b>GRAND TOTAL</b>							\$ 2,351		\$ 2,351		\$ 3,195		\$ 3,195	\$ 3,465	\$ 2,237	\$ 2,523	\$ 2,789	\$ 2,790	\$ 2,795	\$ 2,763	\$ 2,728	\$ 2,443	\$ 30,079	

\$ 2,351 2.8 \$ 5,546 \$ 9,011 \$ 11,248 \$ 13,771 \$ 16,560 \$ 19,350 \$ 22,145 \$ 24,908 \$ 24,873 \$ 27,351  
5.6 8.4 11.2 14 16.8 19.6 22.4 25.2 28 28

Cherry Creek Basin Water Quality Authority Land Use Referral Summary							
Prepared:	October 13, 2022						
September yielded 26 reviews down from 29 in August. 12 were commercial, 8 were residential, 5 were parks and open space and 1 was highway road and bridge. October has yielded 11 reviews to date.							
Oct-22							
Referral Agency	Proposed Development	Type of Land Use	Date Received	Review Deadline	Approx. Dev. Size (acres)	Review Date	Comments
Arapahoe County	Dove Valley Project Enyalius	commercial	9/1/2022	9/19/2022	42.7	9/19/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with used of regional facility for WQCV treatment. As for the 20/10 water quality enhancement, it was not clear in the report how this requirement was being met, please clarify. 3. In the interim GESG plan, is the hatched area labeled "CS" supposed to be "SP" topsoil stockpile area? The curb sock designation, does not appear to make sense in this area and should be noted correctly.
Arapahoe County	Dove Valley Project Enyalius	commercial	9/1/2022	9/19/2022	42.7	9/19/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with used of regional facility for WQCV treatment. As for the 20/10 water quality enhancement, it was not clear in the report how this requirement was being met, please clarify. 3. In the interim GESG plan, is the hatched area labeled "CS" supposed to be "SP" topsoil stockpile area? The curb sock designation, does not appear to make sense in this area and should be noted correctly.
Town of Parker	O'Brien Park L1 - Landscape and Urban Design	Other - Parks and Open Space	9/2/2022	10/3/2022	10.7	9/28/2022	1. This project site is within the Cherry Creek Basin, The Cherry Creek Basin Water Quality Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2.Please provide more information: It appears the concrete pavement will result in a change of imperviousness greater than 500sf, resulting in a Tier 2 or Tier 3 designation (Tier 3 if the change in impervious area is greater than 5000sf). Control regulation 72 requires post construction BMPs. See section 72.7.2(c)(6)(i) for requirements. 3.Construction BMPs during the work shall meet the requirements of the permittee (Town of Parker).
Town of Parker	Vantage Point Pedestrian Bridge	Other - Parks and Open Space	9/2/2022	Not Provided	0.14	9/7/2022	No exceptions taken with the Construction BMPs (CBMP plans)  As for the post construction BMP authorized exclusion, it would be appropriate to include the discussion about the trail draining to this vegetated buffer "Grass buffer" prior to entering the tributary in the drainage letter. It should also include discussion about the vegetated buffer design characteristics and how it is sized to treat the runoff from the new impervious areas. As a reminder, the CR72 states the following regarding post construction BMP Authorized exclusions.  "The permittee may exclude the following activities from the requirements in Section 72.7.2(c) of this regulation on a site-specific basis, upon submission by the owner of a written request for exemption to the permittee and following adequate review and determination by the permittee that a permit is not needed to insure adequate protection of water quality"  It appears the letter is already addressed to Town of Parker (Permittee), we would like to ensure enough information is provided for them to make the determination that adequate water quality is provided
Town of Parker	Vantage Point Pedestrian Bridge	Other - Parks and Open Space	9/9/2022	Not Provided	0	9/14/2022	No exceptions taken with the proposed construction and post construction BMP
SEMSWA	Sawdust LLC	commercial	9/8/2022	9/13/2022	1.6	9/9/2022	Previously Reviewed 2295 and 2360 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction or construction BMPs. 3. No further referrals to the authority on this project are required.
City of Castle Pines	Canyons Filing No. 2, 1st Amendment	residential	9/7/2022	9/28/2022	43.5	9/27/2022	No exceptions taken with the proposed Right of Way Vacation
City of Aurora	Smoky Hill Crossing F1 L3 B1 - Autozone	commercial	9/8/2022	9/20/2022	0.9	9/19/2022	Previously Reviewed 2334 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction or construction BMPs. 3. No further referrals to the authority on this project are required
City of Castle Pines	Canyonside BMC Residential II	residential	9/8/2022	9/29/2022	42.7	9/27/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction BMPs. 3. When construction BMPs are available, please provide for our review and comment. Please note, Control Regulation 72 requires areas of land disturbance equal to 40 acres or greater must not be exposed for more than 30 consecutive days without temporary or permanent stabilization.
SEMSWA	Heritage Heights Academy CDOC	commercial	9/8/2022	9/20/2022	8.4	9/19/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction or construction BMPs.
SEMSWA	Inverness Bike Path - County CIP	Other - Parks and Open Space	9/8/2022	9/21/2022	13	9/21/2022	Previously Reviewed 2331 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. Please clarify: Page 6,10, & 16 of the drainage report states an increase in total impervious area of 0.28 acres (12,200 sf) but on pages 13 & 15 it states 0.82 acres (35,720 sf); is this just a typo? 3. Please clarify: It states there will be grass buffer adjacent to the trail for 86% of the length and the buffer width ranges from 2' to 36'. This is proposed as the "trail specific post construction BMP". Is 2' wide enough to provide water quality for the proposed adjacent impervious trail? was there any analysis done for the minimum required width of the buffer? How much of the trail drains to 2' wide buffer compared to the maximum of 36'? 4.Per sections 72.7.2(c)(4)(i)(C) (Page 16) Authorized exclusions can be approved "upon submission by the owner of a written request for exemption to the permittee and following adequate review and determination by the permittee that a permit is not needed to insure adequate protection of water quality". Please provide confirmation by the Permittee (SEMSWA) that the exclusion has been reviewed and approved.
SEMSWA	23281 Dry Creek FIR	Other - Parks and Open Space	9/12/2022	9/27/2022	2.2	9/27/2022	Previously Reviewed 2252 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction and construction BMPs.
City of Aurora	CATTLEMENS AT EAGLE BEND SUBDIVISION FILING NO 1	residential	9/14/2022	9/16/2022	9.1	9/15/2022	Previously Reviewed 2391 No exceptions taken with the proposed construction BMP plan

City of Castle Pines	SIP-001-2022 Service Street Auto Repair	commercial	9/15/2022	9/21/2022	0.61	9/22/2022	Previously reviewed 2335 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction BMPs. 3. When construction BMPs (GESC Plan) is available, please provide for our review and comment
Douglas County	Pinery Center Filing 2, Amendment No. 1	residential	9/19/2022	10/3/2022	2.7	9/28/2022	This property is within the Cherry Creek Basin. No exceptions taken with the proposed subdivision replat. However site plans were not provided for our review in this submittal. When development plans for the property are available, the authority reserves the right to review and comment of future referrals.
SEMSWA	The Garage Den at Dove Valley CDOC	commercial	9/19/2022	10/13/2022	7.4	10/3/2022	Previously Reviewed 2374 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction BMPs. 3. For the Construction BMPs (GESC) what measures will be taken for stockpile protection of the stockpile located on the downstream end of the site.
City of Centennial	Civic Center Parking Lot Solar Canopies	commercial	9/23/2022	10/7/2022	0.2	10/3/2022	1. This site is within the Cherry Creek Basin. The Cherry Creek Basin Water Quality Authority (Authority)'s Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. Since this project is being utilized as part of the larger common development which is a Tier 3 development (i.e park expansion project) reference to section 72.7.2(c)(6)(i)(B)(VII) for Tier 2 BMPs should be removed. If the regional detention pond L3 has capacity to treat the additional WQCV for the proposed canopy improvements, and the grass buffer associated with the park improvements has the capacity to provide 20/10 water quality enhancements, Tier 2 BMPs are not applicable and Tier 3 should be referenced. 3. Construction BMPs such as a staging area and concrete washout area (for the drilled piers) should also be shown on the plan along with the BMPs currently shown.
Town of Parker	The Exchange Minor Development Plat	commercial	9/26/2022	10/17/2022	0.4	---	Voided
Town of Parker	Hilltop Carwash L2 B1 - Ziggli's Coffee	commercial	44830	44858	0.5	10/4/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed construction and post construction BMPs. 3. No further referrals to the authority are needed for this project.
Douglas County	Pinery West Filing 2, Lots 87A and 88A (Redstone Bank).	commercial	9/26/2022	10/17/2022	0.8	10/4/2022	1. This site is within the Cherry Creek Basin. The Cherry Creek Basin Water Quality Authority (Authority)'s Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. Provide information about proposed Post Construction BMPs (permanent water quality) required per control regulation 72 for this development. If existing post construction BMPs exist onsite from previous development please describe in detail. 3. Provide construction BMP plan when available for our review and comment
Town of Parker	Tanterra Filing 3	residential	9/26/2022	10/10/2022	4.2	9/28/2022	Previously Reviewed 2411 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs).
City of Aurora	Kings Point South	residential	9/30/2022	10/12/2022	217	10/4/2022	Previously Reviewed 2318 1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction BMPs. 3. Construction BMP plans is not included as part of this submittal. Please submit for our review and comment when available.
CDOT	Parking Road Resurfacing and Pedestrian Improvements	Other - Road & Bridge	9/30/2022	Not Provided	0.6	10/6/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed construction BMPs (SWMP plans). 3. The increase in impervious area being greater than 500sf, but less than 5000sf would categorize this project as a "Tier 2" development defined by Control Regulation 72 (CR72). Since the increase in impervious area is due to the sidewalk construction, I agree with your assessment, this can meet the authorized exclusion for a sidewalk or driveway. For authorized exclusions from Tier 2 post construction BMP requirements the following is stated per section 72.7.2.(B) (3)(ii) (See below) If you could provide the written request for our records and confirm CDOT (as the Permittee) agrees with the request, then no exceptions would be taken with the post construction BMP requirement. If the project crosses into other MS4 jurisdictions (such as Douglas County/Parker) they would also have to review and approve the exclusion as a permittee as well.  The permittee may exclude the following activities from the requirements in Section 72.7.2(c) of this regulation on a site-specific basis, upon submission by the owner of a written request for exemption to the permittee and following adequate review and determination by the permittee that a permit is not needed to insure adequate protection of water quality:
Douglas County	Cross Creek Preliminary Plan Request	residential	9/30/2022	10/21/2022	29	10/5/2022	1.This site is within the Cherry Creek Basin. The Cherry Creek Basin Water Quality Authority (Authority)'s Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. This site development meets a Tier 3 designation based on the anticipated disturbance and increase in impervious area. Post construction BMPs are required for all areas of development including the OS basins not tributary to Pond A. Please describe what post construction BMPs are provided for these areas. 3. In addition to Tier 3 post construction BMPs, this site appears to include development in the designated stream preservation areas (See Control Regulation 72 Section 72.7.2(c)(8)(i)) Please include a description of the additional post construction BMPs proposed to meet these requirements. 4.Construction BMPs should be provided for our review and comment when available
City of Aurora	East Bank Mall Subdivision Filing 5	commercial	9/30/2022	10/19/2022	7.4	10/5/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction and construction BMPs. 3. No further referrals to the Authority on this project are required.
City of Aurora	Kings Point North - West Infrastructure	residential	9/30/2022	10/14/2022	135	10/6/2022	1.The Authority's Control Regulation 72 requires construction and post-construction Best Management Practices (BMPs). 2. No exceptions taken with the proposed post construction BMPs (extended detention basins) 3. In addition to the required Tier 3 post construction BMPs, this site appears to include development in the designated stream preservation areas (Krageland Tributary floodplain) Control Regulation 72 Section 72.7.2(c)(8)(i)). Include a description of the additional post construction BMPs proposed to meet these requirements. This was not addressed in the current drainage report. 4. Construction BMPs shall be provided for our review and comment when available. Please show construction phasing to show maximum disturbance for each phase of construction.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY**  
**2022 Capital Project, Maintenance, and Planning Status Report**  
October 13, 2022

**RESERVOIR PROJECTS**

1. Reservoir Destratification System (RDS)– Distribution System Concepts (CCR-2)
  - a. Description: The RDS in-lake distribution system consists of several lines and 116 membrane disc diffusers that create the bubble plumes to help mix the reservoir and improve water quality. The RDS reduces the chlorophyll a in the reservoir. The RDS was originally installed in 2008. The in-lake distribution which has been requiring increased maintenance in 2019-2021, which is indicating that replacement may be needed within the 10-year CIP window. In January 2020, Wright Water Engineers (WWE) evaluated in-lake treatment in the Reservoir included an expansion of existing destratification system. This project evaluates the replacement and/or upgrade of the distribution system and informs cost and timing of the work.
  - b. Status: Project is waiting on watershed model runs, at which time it will be brought back to TAC and Board for further discussion, input, and direction (3/31/22).
2. Reservoir Nutrient Mitigation Alternatives Study (CCR-3)
  - a. Description: Nutrients in the Reservoir fuel the chlorophyll a level. In January 2020, Wright Water Engineers (WWE) evaluated in-lake treatment in the Reservoir. In 2021, Solitude Lake Management performed a sediment sampling and testing in the Reservoir. This study combines this recent work with CCBWQA's ongoing water quality sampling in the reservoir and the reservoir model, to inform options to reduce nutrients in the reservoir and refine their viability.
  - b. Status: *Alternatives study has been moved to 2024 pending feasibility and modeling results.*
3. East Shade Shelters Phase III and Tower Loop Phase II Shoreline Stabilization (CCB-17.5 and CCB-17.7)
  - a. Description: These projects were identified in 2014 through the annual inspection. The Tower Loop Phase II connects to the Phase I project and extends shoreline protection 570 feet to the southeast towards Dixon Grove. The East Shade Shelters Phase III starts on the north end of the Shade Structure and goes 400-feet to the south.
  - b. Status: Consultant selection is scheduled for the 1st quarter. A consultant selection committee will be set in February (1/29/21). At the February TAC meeting Jason Trujillo, Jon Erickson, Lanae Raymond, Bill Ruzzo were interested in serving on the consultant selection committee (2/11/21). This selection committee was discussed at the 3/18/21 Board Meeting, and no further members were added. The Request for Proposals (RFP) has been posted on BidNet and Proposals are due 04/21/21 (3/25/21). The pre-proposal meeting was held on 4/7/21. 5 proposals were received on 4/28/21; the selection committee is reviewing them. Interviews were held and a selection is being brought to the May Board meeting (5/14/21). Board authorized negotiations with RESPEC (5/27/21). Agreement has been executed with RESPEC (10/15/21). Field Survey of project areas and topographic mapping is underway (12/30/21). A design kickoff meeting was held on 4/22/22. A design sprint workshop was held on 7/12/22 which included a site visit and evaluation of alternatives. RESPEC is developing a recommended alternative (9/8/22). *RESPEC provided updated project costs for budgeting and is working on 30% submittal (10/13/22).*

**STREAM RECLAMATION PROJECTS**

1. Cherry Creek Monitoring Station CC-10, Flow Measuring Improvements (CCB-5.13)
  - a. Description: This project was identified in 2019 as part of the exploration of the downcut area and through the flow analysis with during the reservoir and watershed modeling effort. It installs equipment upstream of the perimeter road that would be used to measure the flow



that splits off to the west and bypasses the CC-10 and provide a new rating curve at CC-10 to improve measurements of high flow at this location.

- b. Status: RESPEC provided scope of work and fee for the engineering and survey work needed, and it was approved by the Board at their April 2020 meeting. Survey is scheduled for 5/29/20. Survey is complete. Updated rating curves are scheduled to be delivered by late September. Received update from RESPEC that information is under Quality Assurance and Quality Check review and will be submitted soon (10/8/20). RESPEC's draft memo was received on 12/4/20 and comments have been returned. A meeting was held with Erin, Chuck, Chris, and Rich on 12/16/20 to discuss measuring station improvements and scheduling. A tour with Jason Trujillo was held on 2/12/21, no fire damage was noted on CC-10. A stage gage will be added upstream of Lake View Drive to allow for flow measurement of flows that bypass CC-10 and go directly to Cherry Creek reservoir (3/12/21). Work order has been prepared to Hydrologik for stage measurement at Lake View Drive (4/13/21). Hydrologik has installed the stage measurement at Lake View Drive and RESPEC has submitted the Final Draft of the Rating Curve and it is currently under review (8/13/21). Comments on report have been provided to RESPEC (11/11/21). Additional analysis on rating curve for CC10 was done to determine effects of reservoir level (3/31/22). RESPEC prepared a detailed rating curve for Lake View Drive which will facilitate flow comparison between CC10 and Lake View Drive (5/13/22).
2. Cherry Creek Stream Reclamation at Arapahoe Road aka Reaches 3 and 4 (CCB-5.14C)
    - a. Description: This project continues the work on Cherry Creek by CCBWQA, MHFD, and local partners. It ties into the previous stream reclamation projects of Cherry Creek Eco Park to Soccer Fields (CCB-5.14A) and Cherry Creek at Valley Country Club (CCB-5.14B). The 5,167 Linear Feet of stream reclamation reduces bed and bank erosion immobilizing approximately 88 pounds of phosphorus annually. The project is anticipated to be funded over several years and likely be broken into phases.
    - b. Status: In 2021, and IGA was executed between CCBWQA, MHFD, City of Aurora, and SEMSWA to begin this work. IGA Amendment that brings in 2022 funding is under review (5/13/22). Board authorized IGA Amendment for 2022 funding on 7/21/22 (8/12/22). *IGA Amendment has been revised to show Aurora's lower participation; CCBWQA's participation was lowered accordingly to meet 25% partner project level; revised IGA Amendment received TAC recommendation and is being taken to Board for their consideration in October (10/13/22).*
  3. Cherry Creek Stream Reclamation at 12-Mile Park – Phase 3 (CCB 5.16A)
    - a. Description: The design contract with CH2M Hill was executed on November 27, 2018. Notice to proceed included only those services defined as Phase 1 in CH2M Hill's scope of services. As part of the approved Action Item Memo to the Board, staff recommended that a design review committee consisting of the Capital Projects Manager and up to three TAC members be established. The not-to-exceed fee totals \$104,991.88; with the Part 1 services not-to-exceed fee of \$45,078.88, and the Part 2 services not-to-exceed fee of \$59,913.00. The design review committee is David Van Dellen, Jacob James, Casey Davenhill, Bahman Hatami/Jon Erickson, and Richard Borchardt. CH2M Hill is now Jacobs.
    - b. Status: Jacobs is starting data collection for topographic survey and wetland mapping. Survey is scheduled to start 2/28/19 and is coordinated with Colorado State Parks. Survey has been completed and wetland mapping is underway. Jacobs has prepared updated schedule to account for weather delays on surveying and wetland mapping. The design kickoff meeting was held on 5/15/19. Jacobs is preparing concepts and costs for 4 alternatives. A field visit and progress meeting are scheduled for 8/8/19. Jacobs presented alternatives and costs to the design review committee on 8/8/19. Jacobs and the design review committee are preparing a presentation on alternatives and costs for the TAC (9/5/19 and 10/3/19) and Board (10/17/19). Received authorization from Board at 10/17/19 meeting to move project forward in 2 phases; Jacobs is working on scope of work adjustments needed for this approach. Final design of phase 3A (protects existing work done in phases 1 and 2) and permit level design of Phase 3B (adaptive approach downstream of breach area)

are underway. A progress meeting was held on 1/30/20; design on Phase 3A is about 30% complete. The initial site visit with the Army Corps of Engineers has been cancelled due to stay at home orders, approach has changed to supplying them a draft of the materials and addressing questions and comments. Progress meeting and site visit to look at Phase 3B was held on 6/1/20. Scope of work and fee for adaptive management and preliminary design of Phase 3B is under review by committee. A joint Cherry Creek Committees meeting is scheduled for 10/5/20 to discuss optimization between the Cherry Creek 12-mile Phase 3B project and the Cherry Creek Reservoir to Park Boundary study. Phase 3A was submitted to the US Army Corps of Engineers for their 408 review on 11/4/20. Construction BMPs plan and report were reviewed and approved by Arapahoe County on behalf of Cherry Creek State Park on 12/22/20. Jacobs submitted draft Scope of Work (draft SOW) for the optimization for Phase 3B (north of breach repair) for adaptive management approach; the joint committee meeting is schedule for 2/3/21 to review SOW. A meeting is scheduled with USACOE's new contact Bobbi Jo Trout for CCBWQA on 2/1/21 where a status update on the 408 review will be requested. The Joint Cherry Creek Committees recommended holding off on Jacobs draft SOW, as the scope and scale of adaptive management may evolve with Muller's Study of the area between Reservoir and the Park Boundary; Bobbi is checking on status of 408 review (2/11/21). A site visit with Bobbi and Jason was held on 4/26/21 to help facilitate the USACOE's 408 review. A site visit with the Cherry Creek subcommittee was held on 6/24/21, plan modifications associated with additional erosion from spring 2021 runoff and Muller's study work on Cherry Creek are being evaluated by the Cherry Creek subcommittee. A coordination meeting was held on 7/12/21 with Jacobs and Muller to discuss updating the location cutoff wall and layout (based on the erosion from the 2021 Spring runoff and the Muller's geomorphic and 2D modeling effort); Jacobs is preparing exhibits for subcommittee's discussion and consideration (7/29/21). The subcommittee met on 8/12/21 and provided Jacobs direction on cutoff wall location and plan revisions. Revised plans and engineer's opinion of probable construction cost has been sent to project committee (11/11/21). Board is considering the release of the project to Bid (12/9/21). Board authorized project for bidding with the base bid and add alternate at their December 2021 meeting. We received confirmation that plan revisions made are still in conformance with 408 approval; are waiting for response regarding revisions and the 404 permit; received approval on GESG plans and report (12/30/21). CCBWQA received concurrence on conformance with existing 404 permit and project is out for bid (1/13/22). The project is out to bid and the pre-bid meeting was held on 1/28/22. CCBWQA received 10 bids on 2/4/22; the low bidder is 53 Corporation. Notice of Award has been issued to 53 Corporation (3/10/22). Construction Agreement has been executed (3/31/22). The pre-construction meeting was held on 4/6/22 with construction scheduled to start on 4/25/22. Construction is underway (5/13/22). Construction is nearing completions with the final walk-through was held on 6/14/22. Project is substantially complete and is waiting for seeding and planting window to complete willow staking and touch up seeding (7/15/22). Jacobs is scheduled to do a site visit on 9/9/22 to evaluate post-storm condition and recommend repairs needed because of the 8/15/22 storm. *Repairs are minor and are being scheduled with 53 Corporation (10/13/22).*

4. Cherry Creek Stream Reclamation – Upstream of Scott Road (CCB-5.17)
  - a. Description: Design and construction of stream reclamation is in partnership with Douglas County and MHFD. It improves 4,100 feet of Cherry Creek and is located upstream of Scott Road.
  - b. Status: IGA was approved by the Board at their April 2020 meeting. Muller had been selected as consultant, and design scope of work is being prepared. Kickoff meeting was held on 12/11/20; a follow-up field visit will be scheduled for early 2021. Site visit was held on 1/29/21. Conceptual design is complete, negotiations are underway to contract for 60% design (4/8/21). Muller is working on alternatives (4/30/21). Muller is working on preliminary design and an IGA Amendment to bring in additional 2021 funding from Douglas County is being brought to the Board in October (10/15/21); IGA Amendment has been executed (11/11/21). Muller is preparing 60% Design Submittal (1/28/22). Muller submitted 60% Design on 2/2/22; comments have been provided on 60% Design Submittal (3/10/22). IGA

Amendment bringing in 2022 funding is scheduled for TAC and Board consideration in June (5/27/22). IGA Amendment was authorized at the June 16<sup>th</sup> Board Meeting (6/30/22).

5. Cherry Creek Stream Reclamation at Dransfeldt (CCB-5.17.1B)
  - a. Description: Design and construction of stream reclamation is in partnership with Town of Parker and MHFD. It improves 2,400 feet of Cherry Creek near the future location of Dransfeldt bridge which is just downstream of the Cherry Creek at KOA project.
  - b. Status: Initial scoping has begun, and a partners meeting was held on 1/30/21. IGA is scheduled for CCBWQA's May TAC and Board meetings (4/30/21). IGA was approved by all parties and has been executed (6/25/21). Muller Engineering has submitted their Draft Scope of Work for Design Services, and the project sponsors have reviewed it (7/8/21). Design kickoff meeting was held on 10/14/21. Alternatives are being evaluated (12/9/21). Pre-submittal meeting for the 404 permit is being scheduled (12/30/21). CLOMR is being prepared for project (3/10/22) and was submitted to FEMA on 3/31/22. CEI was selected for as project partner to provide contractor input during the design (5/27/22). CLOMR is under review by FEMA (8/12/22).
6. McMurdo Gulch 2020/2021/2022 Stream Reclamation (CCB-7.2)
  - a. Description: The design and construction of stream reclamation is in partnership with Castle Rock. Castle Rock is the lead agency. This phase continues the work from the previous project and the improves the next set of high priority areas about 2,500 feet. The Authority's water quality component share for design and construction is estimated to be \$360,000 (\$60,000 for design in 2020, and \$300,000 for construction in 2021). The total project cost is estimated at \$1,440,000.
  - b. Status: 2020 Funding was approved at June Board Meeting and capital budget restructure will be drafted for future consideration. 60% level progress meeting is scheduled for 10/5/20. Review comments on 60% submittal were provided on 10/6/20. 90% design submittal is scheduled by end of March (3/12/21). 90% design submittal is being reviewed (4/8/21). CCBWQA submitted comments on 90% design on 4/13/21. The 90% design review and progress meeting was held on 7/22/21, and the construction funding for project is being considered by the TAC at their August meetings (7/29/21). The IGA is currently be drafted and will be brought to the Board at their September meeting (8/13/21). The project is being bid by Castle Rock with the bid opening scheduled for 11/12/21. Tezak Construction was the apparent low bidder (12/9/21). The pre-construction meeting was held on 1/3/22. Construction is underway (2/11/22). A construction meeting was held on 3/8/22, with sites 1-3 have the general construction completing and are waiting for a revegetation window and site 4 has started work on riffle structure. Seeding and revegetation are underway during spring planting window (5/13/22).
7. Lone Tree Creek in Cherry Creek State Park (CCB-21.1)
  - a. Description: This project includes a trail connection to Cherry Creek State Park and includes 570 linear feet of stream reclamation on Lone Tree Creek from the State Park Boundary to the Windmill Creek Loop Trail. The City of Centennial is the project lead. CCBWQA participation is for the stream reclamation only.
  - b. Status: 95% submittal is under review (5/13/22); review comments have been returned (5/27/22). Project funding was brought to TAC at their 7/7/22 meeting, during drafting of IGA it was discovered that future maintenance of stream reclamation should be considered, project will be brought back to TAC at an upcoming meeting for maintenance discussion and recommendation (8/12/22). *A stakeholder meeting was held on 9/29/22 to discuss maintenance.*
8. Happy Canyon Creek – County Line to Confluence with Cherry Creek (CCB-22.1)
  - a. Description: The design and construction are in partnership with Southeast Metro Stormwater Authority and MHFD and includes 2,500 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$325,000. The total project cost is estimated at \$1,300,000.

- b. Status: IGA is scheduled for June TAC and Board meetings (5/27/21). IGA has been approved and executed by all parties (7/29/21). Jacobs has been selected as design consultant and project scoping is underway; limits have been extended upstream to the County Line and sediment capture area and transport will be included with the project (10/15/21). Jacobs has submitted their scope of work and fee for design which is under review by project sponsors (11/11/21). Project sponsors have completed a review of Jacobs' fee and scope of work and the agreement is being routed for signatures (1/28/22). IGA Amendment to bring in 2022 funding is in process (3/10/22). A project kickoff meeting was held on 3/28/2022. A site visit was performed on 4/12/22 to document existing conditions and identify sediment source/transport/deposition areas. Project Team is preparing a sampling plan for bank and bed materials to determine phosphorous content (5/13/22). The project team met on 5/24/22 to discuss project goals and Jacobs is progressing through the study. Jacobs and ERC are working on sediment transport analysis and model (6/30/22). The results from the sediment transport model were presented at the 8/23/22 progress meeting and an upstream sediment capture area just south of the JWPP was included in the alternatives analysis (8/26/22). The alternative analysis report is expected to be completed before the end of 2022 (10/13/22).
9. Happy Canyon Creek - Upstream of I-25 (CCB-22.2)
- a. Description: The design and construction are in partnership with Douglas County, City of Lone Tree, and MHFD and includes 2,500 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$500,000. The total project cost is estimated at \$2,000,000.
- b. Status: Douglas County, City of Lone Tree, and MHFD have initially funded and selected Muller Engineering as the design engineer. Design has started and a progress meeting was held on 1/27/21. Design is progressing (2/11/21). Muller has submitted 60% Design Deliverables (5/27/21). IGA for 2021 Funding is being brought to Board in September (9/9/21). 2021 IGA Amendment has been executed (11/11/21). Coordination with CDOT and easement acquisitions are on-going (1/13/22). Board authorized 2022 funding and IGA Amendment at their June 16<sup>th</sup> meeting (6/30/22). The project received environmental clearance from CDOT (8/12/22). The 90% design submittal is scheduled for delivery by end of September (8/26/22). *The 90% design submittal is being reviewed (10/13/22).*
10. Dove Creek - Otero to Chambers Rd. (CCB-23.1)
- a. Description: The design and construction are in partnership with Southeast Metro Stormwater Authority (SEMSWA) and with Mile High Flood District (MHFD) being a key stakeholder; it includes 1,300 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$175,000. The total project cost is estimated at \$700,000.
- b. Status: SEMSWA is drafting the Intergovernmental Agreement to bring in the 2021 funding for the project (3/12/21). RESPEC is the design consultant; two conceptual design alternatives have been prepared and reviewed during meeting on 3/15/21. IGA is scheduled for CCBWQA's May TAC and Board meetings (4/30/21). IGA has been approved and executed by all parties (7/29/21). 30% Design Review Meeting was held on 8/23/21. A Progress meeting is scheduled for 2/26/22 with 60% Plan submittal expected to follow (1/28/22). The 60% Design was submitted on 2/16/2022, comments were provided, and a design review meeting was held on 2/23/2022. IGA Amendment to bring in 2022 funding is in process (3/10/22). Construction costs were prepared by CEI based on 60% submittal (5/13/22). A design progress meeting was held 6/14/22 and 90% design submittal is being prepared (6/30/22). 90% design submittal is expected by the end of July (7/15/22). The 90% design submittal was reviewed, and comments were submitted on 8/22/22. *Construction is anticipated in 2023 (10/13/22).*
11. Piney Creek from Fraser Street to Confluence with Cherry Creek aka Reaches 1 and 2 (CCB-21.1)
- a. Description: This project includes 2900 liner feet of stream reclamation on Piney Creek. The project partners are SEMSWA and CCBWQA.

- b. Status: Project coordination meeting was held with SEMSWA on 6/29/22. IGA drafted and is being reviewed by SEMSWA (8/12/22). IGA was approved by CCBWQA at the 9/15/22 Board meeting.

## MAINTENANCE

1. Reservoir Destratification Operations (OM-7)
  - a. Description: Includes 2022 Annual Operations and Maintenance of the Reservoir Destratification System (RDS).
  - b. Status: Ingersoll Rand replaced the top pressure regulating valve on 4/4/22; the pre-season check was done simultaneously, and no leaks were observed. The RDS was started for the season on 5/1/22. At the request of Colorado Parks and Wildlife (CPW) to aid in search and recovery efforts the RDS was turned off on 5/10/22 and it will be started back up when notified by CPW that it is appropriate. The RDS was restarted on 5/14/22. Ingersoll Rand performed compressor maintenance on 6/14/22 and B&RW repaired a leaky diffuser head on 6/22/22. Annual maintenance on the in-lake distribution system started on 8/22/22 and 8/23/22 with the remaining maintenance scheduled for the end of September. Compressor shut down with a high temperature warning on 9/2/22; the Ingersoll Rand technician responded on 9/7/22, cleaned out coolers, and restarted compressor. *A leak in the reservoir distribution was observed on 9/15/22, the affected zone 1 was turned off until repairs can be made, repairs were completed on 9/27/22 and zone 1 was turned back on then. Annual maintenance continued the week of 10/3/22 and when it was completed the system was turned off for the season on 10/6/22.*
2. PRF Weed Control (OM 14.1)
  - a. Description: Includes 2022 weed control from 2021 Annual Observation of Pollution Reduction Facilities (PRFs).
  - b. Status: *No weed control was performed in 2022.*
3. PRF Reseeding at CCSP (OM 14.2)
  - a. Description: Includes 2022 routine restoration of PRF vegetation at Cherry Creek State Park (CCSP) from 2021 Annual Observation of Pollution Reduction Facilities (PRFs).
  - b. Status: Is being scheduled for Fall seeding window (5/13/22).
4. Mountain and Lake Loop Shoreline Stabilization Phase II (OM 4.6)
  - a. Description: This project was identified in through the 2020 annual inspection and design and permitting started in 2021. It adds about 40 feet of shoreline protection where it has eroded leaving a 1-2 foot tall vertical bank.
  - b. Status: Construction Plans have been prepared and the GESC was submitted to Arapahoe County for review (1/13/22). Plans are being reviewed by US Army Corps of Engineers for 408 clearance (5/13/22).
5. East Boat Ramp Shoreline Stabilization Phase II (OM 4.6)
  - a. Description: This project was identified in through the 2012 annual inspection and design and permitting started in 2019. It connects to the Phase I project and extends shoreline protection 100 feet to the north towards the East Shade Shelters.
  - b. Status: Field work has been completed on the East Boat Ramp Shoreline Stabilization and design is underway. Permitting Meeting was held on 9/16/19. ERO has been contracted to for 404 permitting assistance. Preliminary Design was completed on the East Boat Ramp in December 2019; permitting and final design has begun. Design is about 80% complete. Site meeting with Colorado Parks and Wildlife was held on 3/25/20. ERO has prepared 404 permit application on 4/30/20. 404 permit application has been submitted. East Boat Ramp Plans were submitted on 8/26/20 to USACOE and Cherry Creek State Park staff for their review and approval. USACOE's 408 approval was received and final bid documents are being prepared (1/29/21). Contract Documents are being updated for Bidnet (5/27/21). GESC is being prepared (11/11/21). GESC was submitted to Arapahoe County for review

(1/13/22). Project is out for bid (5/13/22). The pre-bid meeting was held on 5/25/22. The bid opening was on 6/8/22 with 53 Corporation being the low bidder. The Board authorized the award to 53 Corporation and the construction funding at their June 16<sup>th</sup> meeting (6/30/22). 53 Corporation started construction on 8/22/23. *Project is nearing completion and final walk-through was held on 10/4/22.*

6. 2021 Wetland Harvesting Pilot Project (OM WHPP)
  - a. Description: Includes 2021 Wetland Harvesting on Cottonwood Creek (Western Bank) to remove Phosphorus and Nitrogen. Harvesting cuts the above ground biomass, collects and hauls off cuttings effectively removing the Phosphorus and Nitrogen trapped in the cuttings. The preserved below ground biomass will regenerate and regrow, creating a sustainable harvesting program that retains the natural and beneficial functions of the wetlands.
  - b. Status: The Board authorized Wetland Harvesting Pilot Project at their March 2021 meeting (8/13/21). The Pilot Project started on 10/11/21, a site visit was made on 10/13/21, and is scheduled to be completed by 10/31/21. Field work has been completed (11/11/21). Lab data is being compiled (12/9/21). LRE Water is preparing a google earth and GIS boundaries of 2021 harvest limits (12/30/21). Lab data on vegetation samples was received and nutrient removal information from 2021 harvesting is being developed (1/28/22). The 2021 update and data were presented to TAC at their 4/7/22 meeting. Presentation of 2021 Update is scheduled for the May Board meeting (5/13/22). An update on the regrowth of the 2021 Harvest Area will be provided at the 8/18/22 Board Meeting and 9/1/22 TAC Meeting.
7. 2022 Wetland Harvesting Pilot Project (OM WHPP)
  - a. Description: Includes 2022 Wetland Harvesting on Cottonwood Creek (Eastern Bank) to remove Phosphorus and Nitrogen. Harvesting cuts the above ground biomass, collects and hauls off cuttings effectively removing the Phosphorus and Nitrogen trapped in the cuttings. The preserved below ground biomass will regenerate and regrow, creating a sustainable harvesting program that retains the natural and beneficial functions of the wetlands.
  - c. Status: Action for 2022 is scheduled for the May Board meeting (5/13/22). The Board authorized the wetland harvesting work for 2022 (5/27/22). L&M is preparing proposal for 2022 wetland harvesting (8/12/22). The 2022 wetland harvesting is scheduled from 9/12/22 to 9/23/22 (8/26/22). *The 2022 wetland harvesting has been completed; lab results of samples, area measurement, and final weights of harvesting are in progress (10/13/22).*

## PLANNING

1. Cherry Creek Master Plan Cherry Creek State Park Boundary upstream to the Mile High Flood District Boundary (PAPM-0)
  - a. Description: The Mile High Flood District (MHFD), Southeast Metro Stormwater Authority, Town of Parker, Douglas County, and CCBWQA are preparing a Major Drainageway Planning Study for Cherry Creek upstream of Cherry Creek Reservoir. The Plan identifies potential Pollution Abatement Projects (PAPs). Potential PAPs are stream reclamation (immobilizes phosphorus in soil).
  - b. Status: Muller Engineering has been selected as the consultant for the project and their scope of work and fee and currently under review by the project sponsors. Field visits by the consulting team started on 10/8/20 and were completed on 11/6/20. Progress meeting was held on 12/14/20, which included overview of field visits. At the 2/8/21 progress meeting, a water quality parametric was discussed, and could be mapped and used to identify deficiencies along Cherry Creek. Muller is scheduled to present at TAC at the 5/6/21 TAC meeting, and the 2021 Water Quality Planning Scope of Work and Fee will be considered at CCBWQA's May TAC and Board meetings (4/30/21). Muller provided update and 2021 Water Quality Planning work was authorized (5/27/21). A progress meeting was held on 10/11/21. Muller has added a water quality parametric to the overall stream assessment exhibit and is working with RESPEC to include information from watershed model (12/30/21). A draft storyboard of the work was presented at the progress meeting on 4/11/22. Water Quality text for StoryMap/WebPlan submittal is scheduled for mid-August (7/15/22).

Received water quality submittal on 8/26/22 and it is being reviewed (9/8/22). *Muller is incorporating final comments and presented story map at the 9/23/22 Cherry Creek Stewardship Conference.*

2. Cherry Creek Tributaries Major Drainageway Planning (PAPM-1)
  - a. Description: The Mile High Flood District (MHFD), City of Aurora, Southeast Metro Stormwater Authority, and Douglas County are preparing a Major Drainageway Planning Study for Cherry Creek Tributaries upstream of Cherry Creek Reservoir and Dewberry / J3 is the consultant. The tributaries included are Little Raven Creek, Suhaka Creek, Joplin Tributary, Grove Ranch, Valley Club Acres, North Arapahoe Tributary, South Arapahoe Tributary, Chenango Tributary, Tagawa Tributary, Kragelund Tributary, and 17-mile Tributary. This project identifies potential Pollution Abatement Projects (PAPs) within the Cherry Creek Tribs MDP and the areas of those tributaries in CCSP. Potential PAPs are stream reclamation (immobilizes phosphorus in soil) and water quality treatment within detention basins (settlement of sediments and attached phosphorus).
  - b. Status: Board authorized CCBWQA to enter into Agreement with Dewberry at their 2/20/20 meeting, and CCBWQA contracted with Dewberry. Dewberry conducted field work 4/28-4/30/20. Dewberry will continue CCBWQA's work in conjunction with hydrology and alternatives in MHFD master plan. Dewberry has submitted the Alternatives Memo which is being reviewed (10/15/21). Comments have been provided on Alternatives Memo (12/9/21). Dewberry is working on the grading of the proposed water quality ponds (6/10/22). Study progress meetings were held for 17-mile Tributary on 8/15/22 and Kragelund Tributary on 8/22/22. A study progress meeting was held for Chenango Tributary on 9/2/22.
  
3. Cherry Creek Stream Planning and Approach Study Reservoir to 12-Mile Park (BAPM-1)
  - a. Description: Several issues and concerns exist on Cherry Creek between the reservoir and 12 -mile Park: the continued head cut erosion and fallen and dying trees, CCBWQA's CC-10 monitoring station's declining accuracy and reliability of flow measurements, Bank and bed erosion along Cherry Creek from Perimeter Road to downstream, and the change in flow path downstream of the Cherry Creek 12-mile Park Phase 2 project (Breach Area). This study will help determine the water quality implications of these issues, CCBWQA's approach and role in the area, and stake-holders and possible partners.
  - b. Status: Interim committee is being set up to negotiate with Muller and determine scope of work, fee, and deliverables for TAC and Board consideration. Interim committee consists of Bill Ruzzo, John McCarty, Jon Erickson, Jason Trujillo, Rich Borchardt, and Chuck Reid. The scoping meeting is scheduled for 3/30/20. Muller conducted field assessment work on 4/28/20. Drone video is pending permit approval by USACOE. Muller has submitted draft base scope of work and optional additional services, which are being reviewed and considered by interim committee at their next meeting on 5/4/20. The next scoping meeting with interim committee and Muller is scheduled for 5/15/20; with a final draft of scope and fee being prepared for consideration shortly afterwards. Muller's scope of work and fee were distributed to TAC and Board authorized design services at their April 2020 meeting. Muller's revised scope and fee is being reviewed by committee. The study committee of John McCarty, Bill Ruzzo, Jacob James, Lanae Raymond, David VanDellen, and Jon Erickson has been formed to assist with decisions and direction during study. The kickoff meeting was held on 8/11/20. A joint Cherry Creek Committees meeting is scheduled for 10/5/20 to discuss optimization between the Cherry Creek 12-mile Phase 3B project and the Cherry Creek Reservoir to Park Boundary study. Muller is preparing draft scope of work for the optimization approach (11/12/20). Muller has submitted the draft scope of work and fee for the optimization approach on 12/9/20. Muller revised draft Scope of Work (draft SOW) for the optimization to include sub-consultant work; the joint committee meeting is schedule for 2/3/21 to review draft SOW. The Joint Cherry Creek Committees and TAC have reviewed the draft SOW, and the final version is being included for Board consideration at their February Board Meeting (2/11/21). The Board approved Muller's Optimization work at their February Board Meeting (2/26/21). Muller plans to provide an update at July TAC meeting (4/30/21). Muller provided a draft submittal of historical site information and the survey efforts on

5/24/21. Muller will provide an update at the July TAC and Board Meetings (6/25/21). Please submit any comments on Draft report to Rich by 8/20/21 (7/29/21). Muller's additional scope of work for workshops and partnering efforts are scheduled was authorized by the Board in September (10/15/21); amendment to Muller's contract has been executed (11/11/21). It is anticipated that the workshop will be held in 2022 (12/30/21). Muller submitted the water quality assessment report on 4/9/22 which is currently being reviewed by the Pollution Abatement Project Manager. Comments on water quality study and monitoring have been sent to Muller (5/27/22). Muller is revising study to include comments (7/15/22). Muller has submitted revised channel monitoring report on 9/8/22. *Muller has submitted the revised stream assessment report on 10/10/22.*





## MEMORANDUM

<b>Date:</b>	<b>10/14/22</b>
<b>To:</b>	<b>Cherry Creek Basin Water Quality Authority</b>
<b>From:</b>	<b>Erin Stewart, LRE Water</b>
<b>Subject:</b>	<b>Water Quality Update – October 2022</b>

### CCBWQA Data Portal Water Quality Update Page Links

- Chlorophyll- $\alpha$  - <http://ccbwqportal.org/wq-update/chlorophyll-a>
- Navigate to CCR Inflow Concentrations, WQ Inflow Comparison, Field Depth Profile, Nutrients Depth Profile

The Water Quality Update pages provide a brief visual of the data collected during the current water year (WY 2022 - October 2021 through September 2022) with the data from previous years available as a reference. This memo provides a brief description of the highlights from the most recent monitoring data available on the data portal.

### Chlorophyll- $\alpha$

Chl- $\alpha$  concentrations are measured in Cherry Creek Reservoir from March through December. The water quality standard is based on a seasonal average of 18  $\mu\text{g/L}$  from July through September. The mean seasonal chl-a concentration for 2022, through August, is 29.6 $\mu\text{g/L}$  but does not include the two monitoring events from Sept. The highest chl-a concentrations were seen during the cyanobacteria blooms in July, but concentrations decreased significantly through August. September data has not been finalized and added to the seasonal mean, but it appears that CCR will not meet the chl-a standard in 2022.

### CCR Inflow Phosphorus and Nitrogen Concentrations and Comparison to 5-Year Average (2017-2021)

Site	Cherry Creek @ CC-10		Cottonwood Creek @ CT-2	
	Total Phosphorus ( $\mu\text{g/L}$ )	Total Nitrogen ( $\mu\text{g/L}$ )	Total Phosphorus ( $\mu\text{g/L}$ )	Total Nitrogen ( $\mu\text{g/L}$ )
Month – BASE FLOW ONLY				
June	274 (241)	827 (963)	63 (59)	841 (876)
July	258 (306)	916 (992)	58 (76)	1290 (1343)
August	310 (263)	570 (787)	61 (63)	774 (1234)

\* 2017-2021 5-year mean concentration values shown in parentheses for reference.

The averages of the base flow and storm flow concentrations are calculated monthly. Although the values do not represent flow-weighted concentrations, the simple averages are included to provide a comparison to long-term monthly average concentrations.

### Cherry Creek

In comparison to the 5-year mean (2017-2021), the base flow TP concentrations in Cherry Creek were **higher** in June and August but **lower** in July. The base flow TN concentrations in Cherry Creek in June, July, and August 2022 were **lower** than the 5-year mean (2017-2021).

### Cottonwood Creek

In comparison to the 5-year mean (2017-2021), the base flow TP concentrations in Cottonwood Creek were **higher** in June but **lower** in July and August. The base flow TN concentrations in Cottonwood Creek in June, July, and August 2022 were **lower** than the 5-year mean (2017-2021).

### **Plankton**

Phytoplankton populations or “algae” are analyzed from Cherry Creek Reservoir monthly when ice is off (March-December).

In late June, a moderate bloom was observed and identified as *Dolichospermum*. Again, in early July through mid-month, the bloom appeared to be persisting and was very dense out throughout Reservoir. The July bloom was identified as *Aphanizomenon*, a potentially toxic cyanobacteria. However, CPW did not detect toxins during regular sampling and analysis, so “Caution” signs were posted but no closure was required.