



**Notice of Regular Meeting**  
**Cherry Creek Basin Water Quality Authority**  
**Board of Directors Meeting**  
**Thursday, March 21, 2024 at 9:00 a.m.**

**The meeting will be conducted in-person and virtually as set forth below.**  
**In-person attendance is encouraged due to audio limitations in the meeting room.**

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

**Virtual: Zoom**  
<https://us06web.zoom.us/j/87425775963> Passcode: CCBWQA  
Phone (646)931-3860 Mtg ID 874 2577 5963# Passcode: #815374

**CCBWQA Board of Directors Meeting Documents can be found online at the link below.**  
[https://drive.google.com/drive/folders/1KqGcDC9eS\\_gMEdSiXPPPBGefAHTib7pf?usp=share\\_link](https://drive.google.com/drive/folders/1KqGcDC9eS_gMEdSiXPPPBGefAHTib7pf?usp=share_link)

1. Call to Order and Pledge of Allegiance
2. 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 February 15, 2024 Minutes (enclosed)
  - b. Acceptance of the Schedule of Cash Position Dated March, 2024 (enclosed)
  - c. Acceptance of the Paid Claims for February, 2024 (enclosed)
  - d. Approval of Unpaid Claims as of March, 2024 (enclosed)
3. Direction and/or Action (motions enclosed, 30 minutes)
  - a. Authorization to Execute the Piney Creek Reach 1 & 2 IGA Amendment (Loewen, enclosed)
  - b. Acceptance of the [2023 CCBWQA Annual Report on Activities](#) (Clary)
    - i. Letter to WQCC (enclosed)
    - ii. [Executive Summary](#)
  - c. Acceptance of the [WY 2023 Monitoring Report](#) (Clary, link attached)
  - d. Authorization to Apply for Congressionally-Directed Spending (Clary)
    - i. Cherry Creek Reach 1 Status Update and [Exhibits](#) (Muller, enclosed)
    - ii. Letter of Interest and Application (Clary, enclosed)
4. Discussion (15 minutes)
  - a. WQCD 10-Year Water Quality Roadmap Update (DiToro, enclosed)
  - b. Land Use Referral Process Update (Clary)
5. Presentations (none)
6. Board Member Items (As Needed)
  - a. Director Bhaskar: CWCB Funding of Effects of Landscape Transformations on Urban Heat and Water Quality
7. Updates (15 minutes)
  - a. Technical Manager (Clary)
    - i. Project Updates
      - a. [Runoff Reduction Report](#) and [Supporting Documents](#) (links attached)
      - b. Lone Tree Windmill Master Drainage Plan
    - ii. Extended Board Meeting and Watershed Plan Workshop - April 18, 2024 8:30-11:30 am (Lunch to follow)
    - iii. Real-Time Water Quality Monitoring Options for Cherry Creek Reservoir (Update on behalf of Stewart, enclosed)
  - b. Cherry Creek Stewardship Partners (Davenhill)
    - i. [Upcoming Events](#)
  - c. TAC (Knerr)
    - i. CIP Subcommittee with Draft Charter (enclosed)
  - d. Contract Staff (As Needed)
    - i. Pollution Abatement Projects - CIP Status Report (Loewen, enclosed)

- ii. In-Park PRF and RDS Maintenance and Operations (Goncalves)
  - iii. [Water Quality Update](#) (Stewart)
  - iv. Regulatory (DiToro)
    - a. Colorado Water Quality Rulemaking Hearing Information (DiToro, enclosed)
    - v. [Land Use Referral Tracking](#) (Endyk)
  - e. Executive Committee
  - f. Legal
  - g. Other
8. Adjournment

[Board Binder](#) and [2024 Timeline](#)



**Notice of Regular Meeting**  
**Cherry Creek Basin Water Quality Authority**  
**Board of Directors Meeting**  
**Thursday, February 15, 2024 at 9:00 a.m.**

**Board Members Present**

Aditi Bhaskar, Governor's Appointee (zoom)  
Bill Ruzzo, Assistant Secretary, Governor's Appointee  
Jacob James, City of Lone Tree - Alternate  
Leslie Summey - Arapahoe County (zoom)  
Luis Tovar, Special District Representative (zoom)  
Margaret Medellin, Governor's Appointee (zoom)  
Max Brooks, Town of Castle Rock  
Mike Anderson, City of Lone Tree  
Mike Sutherland, City of Centennial (zoom)  
Ryan Adrian, Douglas County - Alternate (zoom)  
Steve Sundberg, City of Aurora  
Tom Downing, Governor's Appointee  
Tom Stahl, City of Greenwood Village (zoom)

**TAC Members Present**

Alex Mestdagh, Town of Parker (zoom)  
Ashley Byerley, SEMSWA  
Caitlin Gappa, Board Appointee, Douglas County Health Department (zoom)  
Casey Davenhill, Board Appointee, Cherry Creek Stewardship Partners (zoom)  
Cayla Cappello, City of Greenwood Village  
David Van Dellen, Town of Castle Rock  
Diana Rashash, Board Appointee, Arapahoe County Public Health (zoom)  
James Linden, SEMSWA - Alternate (zoom)  
Jeremiah Unger, CDOT (zoom)  
Joe Marencik, City of Castle Pines (zoom)  
Jon Erickson, TAC Chair, Board Appointee, Colorado Parks and Wildlife (zoom)  
Lisa Knerr, TAC Vice Chair, Arapahoe County  
Rick Goncalves, Board Appointee  
Wanda DeVargas, Board Appointee, E-470 (zoom)

**Others Present**

Carolyn Nobel, LRE Water (zoom)  
Elysa Loewen, Loewen Engineering  
Erin Stewart, LRE Water  
Jane Clary, Wright Water Engineers, CCBWQA Technical Manager  
Jessica DiToro, LRE Water  
Nichole Kirkpatrick, CLA (zoom)  
Tim Flynn, Collins Cole Flynn Winn & Ulmer, PLLC  
Val Endyk, CCBWQA

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

**a. Introduction of Elysa Loewen, Pollution Abatement Project Manager**

Director Ruzzo called the meeting to order at 9:02 am and led the pledge of allegiance.

Remote Board member attendance and voting was approved by Director Ruzzo and legal counsel due to Board member sickness and scheduling conflicts.

Director Ruzzo introduced Elysa Loewen with Loewen Engineering as CCBWQA's new Pollution Abatement Project Manager. She provided a brief summary of her professional experience.

**2. Oaths of Office**

**a. City of Lone Tree: Jacob James, Alternate**

Director Ruzzo administered an Oath of Office for Jacob James with the City of Lone Tree.

**3. Consent Agenda**

**a. Approval of the January 18, 2024 Minutes**

**b. Acceptance of the Schedule of Cash Position Dated February 2024**

**c. Acceptance of the Paid Claims for January 2024**

**d. Approval of Unpaid Claims as of February 2024**

**e. Acceptance of 2023 Project Summaries for Stream Reclamation**

**i. [Happy Canyon Creek Stream Upstream of I-25](#)**

**ii. [Dove Creek Phase 1 from Otero Avenue to Chambers Road](#)**

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

**4. Direction and/or Action (30 minutes)**

**a. Acceptance of RDS 2023 Annual Operations and Maintenance Report**

Rick Goncalves [presented](#) the [2023 Operation and Maintenance Annual Report](#) on the Reservoir Destratification System (RDS) to the Board and provided recommendations for the 2024 RDS operation as outlined in his [action item memo](#). The recommended maintenance cost and operational activities outlined below are within the 2024 budget and include:

- Authorize additional maintenance of the compressor oil coolers.
- Continue monitoring annual energy consumption.
- Analyze existing aerator equipment replacement options by first developing a scope and budget subject to review and approval of the Executive Committee.

Director Anderson moved to accept the 2023 RDS Annual Report and implement the recommendations during 2024. Seconded by Director Downing. The motion carried.

The [RDS Operations Policy](#) was implemented in 2021 and last reviewed by the TAC on September 2, 2021, and by the Board on January 20, 2022. An [RDS Fact Sheet](#) can be found in the Board Binder.

**b. Acceptance of RESPEC's Watershed Modeling Scenario Report**

Alan Leak prepared a report on the [Watershed Modeling Scenarios](#) for the TAC and Board, explaining that two additional watershed scenarios were completed using the Cherry Creek 2030 Future Development HSPF model.

Director Anderson moved to accept RESPEC's Watershed Modeling Scenario Report, as revised and dated January 22, 2024. Seconded by Director Brooks. The motion carried.

**c. Approval of Reservoir Modeling Scope and Budget for Hydros Consulting**

Jane Clary presented Hydros's [Scope of Work for Linked Reservoir Model Runs in 2024](#) to the Board and recommended approval of the scope, schedule, and budget.

The Modeling Subcommittee will provide input and review at a future meeting.

Director Tovar requested that the consultant team consider additional input from the wastewater dischargers. Jane Clary noted that the modeling subcommittee will continue to consider input from the wastewater

dischargers and noted that the modeling scenarios for nitrogen in the watershed model (which will be linked to the reservoir model) were based on input from the wastewater dischargers.

Director Brooks moved to approve the Reservoir Modeling Scope and Budget for Hydros Consulting as provided to the Board and authorize the Authority's legal counsel to amend the agreement and attached scope of work. Seconded by Director Tovar. The motion carried.

## 5. Discussion (30 minutes)

### a. DRAFT [2023 Annual Report on Activities](#) Presentation (Nobel)

Carolyn Nobel presented the draft 2023 Annual Report on Activities to the Board and provided opportunity for feedback on the [executive summary](#).

Public officials may be interested in providing the executive summary to their municipalities for a big-picture report on the Authority's work in the watershed. The executive summary may also be helpful for public outreach and education. The final report must be submitted to the Water Quality Control Commission by March 31, 2024.

Comments from Casey Davenhill: SPLASH and DC CLEAR have public relations efforts where this report could be highlighted.

Comments from Ryan Adrian: DC CLEARr (<https://www.onethingisclear.org/>) is starting conversations on salt education component in our public education campaign. Wisconsin Salt Wise is a good resource as well as Salt Watch (Links include Salt Wise: <https://www.wisaltwise.com/> and Salt watch: <https://www.iwla.org/water/stream-monitoring/salt-watch>)

### b. CIP Project Identification and Prioritization Process (Ruzzo)

Director Ruzzo led the Board in a [discussion](#) regarding the plan to reinstate and improve the process for identifying and evaluating potential CIP projects for inclusion in the annual budget. Director Ruzzo presented the following questions to the Board for discussion:

- Should local government request for funding be formal (written) and come from a Board member?
- Should potential projects that have been identified in a multi-agency drainage master plan be automatically eligible?
- What role should the watershed/reservoir model play in quantifying benefits and prioritizing projects?
- Given the complexity and uncertainty of determining water quality benefits, what constitutes adequate analysis of the benefits?

The Board provided the following initial feedback:

- CCBWQA work sg directly with its partners in a comprehensive evaluation of projects considering recommendations in master plans, along with phosphorus reduction benefits.
- The models should be considered as a tool in quantifying benefits and prioritizing projects. The model outputs may be particularly useful for identifying the types of projects that provide the greatest benefits.
- The Board understands the complexity of determining water quality benefits and will rely on the experts to provide guidance on projects.

### c. Discussion of the WY 2023 Water Quality Monitoring Report (Stewart)

Erin engaged the Board with any questions and comments regarding the monitoring report. She also noted that she received the updated Reservoir storage information from the USACE this week and has started working on the water balance and nutrient balance information for 2023. She is still working on getting the samples from the laboratory that has been analyzing the plankton samples so that the new lab can analyze the rest of the WY 2023 samples. (The disruption in laboratory services was due to the death of the lead analyst at the original lab, representing circumstances beyond CCBWQA's control..)

### d. Land Use Referral Process Revision (Clary)

Jane Clary discussed the potential need for revisions to the current Land Use Referral process. The two main areas where CCBWQA may want to provide a more detailed review include projects in the stream preservation area and CDOT projects. CCBWQA is already reviewing CDOT projects, based on a request from CDOT.

The TAC and Board requested CCBWQA consultants and technical manager review what revision, if any, are needed and provide suggested revisions to the process at a future Board meeting for further discussion.

**e. Aurora Parker Rd and Quincy Intersection Improvements (Ruzzo/Clary)**

Jane Clary provided a brief background on the Authority's past participation in the review of the Parker Rd and Quincy Intersection project. Aurora recently contacted CCBWQA to review proposed changes to the original stormwater quality approach for the project. Aurora determined that an alternative approach will be used for water quality at the site that will meet its Municipal Separate Storm Sewer System (MS4) permit requirements. Regulation 72, as revised in 2022, requires compliance with MS4 permit requirements for sites disturbing 1 acre or more; therefore, CCBWQA staff do not oppose Aurora's planned revision. Additionally, Aurora expressed support for a regional water quality facility in the area in the future or support of the Cherry Creek Reach 1 improvements where Aurora Water has a pipeline at risk from erosion.

**6. Presentations (none)**

**7. Board Member Items (As Needed)**

**8. Updates (15 minutes)**

**a. Technical Manager**

**i. Project Updates**

- ii. Regulation 72 Dewatering Update:** The Water Quality Control Commission revised construction dewatering permit limits in Regulation 72 at a hearing on February 12, 2024. Jane Clary provided a brief statement at the rulemaking hearing indicating that CCBWQA had participated in the stakeholder process and did not oppose the proposed changes. ([CWQCC Website](#): [WQCC Consolidated Proposal - Google Drive](#))

**iii. Watershed Planning Efforts and New Date for Workshop**

**April 18, 2024 8:30-11:30 am**

**b. Cherry Creek Stewardship Partners (Davenhill)**

**i. [Upcoming Events](#)**

Casey reminded the Board that CCBWQA is a sponsor for the CoorsTek Denver Metro Regional Science and Engineering Fair.

Casey is also coordinating with the USACE surrounding the upcoming dam release in May 2024.

**c. TAC (Knerr)**

**d. Contract Staff (As Needed)**

- i. Pollution Abatement Projects - [CIP Status Report](#) (Loewen, enclosed)**
- ii. In-Park PRF and RDS Maintenance and Operations (Goncalves)**
- iii. [Water Quality Update](#) (Stewart)**
- iv. Regulatory (DiToro)**
- v. [Land Use Referral Tracking](#) (Endyk)**

**e. Legal**

**i. [Final 2024 Budget](#) (enclosed)**

A copy of the final 2024 Budget was included in the packet for the Board and updated on the Authority's website.

**f. Other**

**9. Adjournment**

There being no further business to come before the Board, Director Ruzzo adjourned the meeting at 10:57 am.

[Board Binder](#) and [2024 Timeline](#)

**Cherry Creek Basin Water Quality Authority**  
**Schedule of Cash Position**  
**December 31, 2023**  
**as of March 14, 2024**

	<b>General Fund</b>	<b>Pollution Abatement Fund</b>	<b>Enterprise Fund</b>	<b>Total</b>
<b><u>1st Bank - Checking Account</u></b>				
Balance as of 12/31/23	\$ 27,299.64	\$ 27,240.15	\$ 5,671.85	\$ 60,211.64
Subsequent activities:				
01/02/24 Insurance payment CSD P&L	(121.00)	-	-	(121.00)
01/04/24 Insurance payment CSD P&L	(5,396.00)	-	-	(5,396.00)
01/05/24 VISA Charges	(520.08)	-	-	(520.08)
01/09/24 Bill.com Payment (Hydros)	-	(13,760.10)	-	(13,760.10)
01/18/24 Monthly Transfer for AP	90,000.00	70,000.00	8,000.00	168,000.00
01/23/24 Bill.com Payment	(81,716.72)	(57,819.56)	(7,774.25)	(147,310.53)
01/25/24 Verizon ACH	(51.46)	-	-	(51.46)
01/29/24 XCEL ACH	-	(555.99)	-	(555.99)
01/31/24 Interest Income	6.92	-	-	6.92
02/07/24 VISA Charges	(554.34)	-	-	(554.34)
02/14/24 Monthly Transfer for AP	40,000.00	40,000.00	5,000.00	85,000.00
02/15/24 SDA Membership 2024 Dues (VISA)	(1,237.50)	-	-	(1,237.50)
02/20/24 Bill.com Payment	(47,341.97)	(36,523.35)	(5,785.50)	(89,650.82)
02/27/24 Verizon ACH	(51.46)	-	-	(51.46)
02/29/24 XCEL ACH	-	(563.82)	-	(563.82)
02/29/24 Interest Income	5.99	-	-	5.99
03/06/24 VISA Charges	(249.00)	-	-	(249.00)
<i>Anticipated Activities</i>				
<i>Transfer from ColoTrust for bills</i>	<i>67,000.00</i>	<i>65,000.00</i>	<i>10,000.00</i>	<i>142,000.00</i>
<i>Bill.com open claims</i>	<i>(61,441.16)</i>	<i>(67,364.43)</i>	<i>(7,372.00)</i>	<i>(136,177.59)</i>
<i>Anticipated balance</i>	<u>\$ 25,631.86</u>	<u>\$ 25,652.90</u>	<u>\$ 7,740.10</u>	<u>\$ 59,024.86</u>
<b><u>ColoTrust General - (8001)</u></b>				
Balance as of 12/31/23	\$ 1,229,189.17	\$ 1,643,722.63	\$ 1,512,755.58	\$ 4,385,667.38
Subsequent activities:				
01/10/24 Ptax Arapahoe Cty (Dec)	5,179.31	-	-	5,179.31
01/10/24 Ptax Douglas Cty (Dec)	9,793.37	-	-	9,793.37
01/18/24 Monthly Transfer for AP	(90,000.00)	(70,000.00)	(8,000.00)	(168,000.00)
01/31/24 Deposits Dev Checks	-	-	63,162.95	63,162.95
01/31/24 Interest Income	20,507.60	-	-	20,507.60
02/09/24 Ptax Arapahoe Cty (Jan)	18,589.32	-	-	18,589.32
02/09/24 Ptax Douglas Cty (Jan)	24,190.14	-	-	24,190.14
02/14/24 Monthly Transfer for AP	(40,000.00)	(40,000.00)	(5,000.00)	(85,000.00)
02/29/24 Deposits Dev Checks	-	-	21,126.38	21,126.38
02/29/24 Interest Income	18,877.94	-	-	18,877.94
03/11/24 Ptax Arapahoe Cty (Feb)	366,849.58	-	-	366,849.58
03/11/24 Ptax Douglas Cty (Feb)	670,630.00	-	-	670,630.00
03/14/24 Deposits Dev Checks to Date	-	-	23,571.12	23,571.12
<i>Anticipated Activities</i>				
<i>Monthly Transfer for AP</i>	<i>(67,000.00)</i>	<i>(65,000.00)</i>	<i>(10,000.00)</i>	<i>(142,000.00)</i>
<i>Anticipated balance</i>	<u>\$ 2,233,806.43</u>	<u>\$ 1,533,722.63</u>	<u>\$ 1,607,616.03</u>	<u>\$ 5,375,145.09</u>
<b><u>ColoTrust Pollution Abatement - (8002)</u></b>				
Balance as of 12/31/23	\$ -	\$ 57,306.89	\$ -	\$ 57,306.89
Subsequent activities:				
01/31/24 Interest Income	-	270.27	-	270.27
02/29/24 Interest Income	-	252.17	-	252.17
<i>Anticipated balance</i>	<u>\$ -</u>	<u>\$ 57,829.33</u>	<u>\$ -</u>	<u>\$ 57,829.33</u>
<b><u>CSAFE - Savings Account</u></b>				
Balance as of 12/31/23	\$ 859,161.30	\$ 42,246.04	\$ 422,193.32	\$ 1,323,600.66
Subsequent activities:				
01/31/24 Interest Income	-	-	6,171.98	6,171.98
02/29/24 Interest Income	-	-	5,765.06	5,765.06
<i>Anticipated balance</i>	<u>\$ 859,161.30</u>	<u>\$ 42,246.04</u>	<u>\$ 434,130.36</u>	<u>\$ 1,335,537.70</u>
<b><i>Total funds available as of date above</i></b>	<u>\$ 3,118,599.59</u>	<u>\$ 1,659,450.90</u>	<u>\$ 2,049,486.49</u>	<u>\$ 6,827,536.98</u>

**Effective monthly yield (as of 2/29/2024)**

1st Bank - 0.100%\* if Balance >\$20,000  
ColoTrust Plus - 5.5162%  
CSAFE - 5.44%

**Cherry Creek Basin Water Quality Authority**  
**Paid Claims February 15, 2024 through March 21, 2024**

<b>Process Date</b>	<b>Vendor</b>	<b>Invoice Number</b>	<b>Payment Reference</b>	<b>Amount</b>
2/20/2024	Cherry Creek State Park	Multiple	P24021601 - 1954540	\$ 2,842.83
2/20/2024	Collins Cole Flynn Winn & Ulmer, PLLC	4964	P24021601 - 1954568	7,547.00
2/20/2024	Hydros Consulting Inc.	547-010	P24021601 - 1954548	340.60
2/20/2024	Loewen Engineering, INC	768	P24021601 - 1954552	1,830.31
2/20/2024	LRE Water	Multiple	P24021601 - 1954545	25,055.64
2/20/2024	Muller Engineering Company	37920	P24021601 - 1954550	5,987.75
2/20/2024	Pinpoint Systems Inc.	10181	P24021601 - 1954554	2,257.50
2/20/2024	R2R Engineers, Inc.	2024-01	P24021601 - 1954557	1,317.19
2/20/2024	RG and Associates LLC	153717	P24021601 - 1954561	5,520.00
2/20/2024	Valerie Endyk	202401	P24021601 - 1954564	6,201.50
2/20/2024	Wright Water Engineers, Inc.	Multiple	P24021601 - 1954536	30,750.50
			Subtotal	<b>\$ 89,650.82</b>
<b>Other Payments</b>				
2/15/2024	Special District Association	2024 Dues	Visa	\$ 1,237.50
2/27/2024	Verizon		ACH	51.46
2/29/2024	XCEL Energy	863907023	ACH	563.82
3/6/2024	Streamline		Visa	249.00
			Subtotal	<b>\$ 2,101.78</b>
			<b>Total Payments</b>	<b>\$ 91,752.60</b>



**Cherry Creek Basin Water Quality Authority**  
**Unpaid Claims as of 3/21/24**

Invoice date	Invoice	Vendor*	Fund	Chart of account	Invoice amount
	45291 L241069606	CliftonLarsonAllen LLP	10	7000 - Accounting	\$ 5,052.67
1/31/2024	5823	Collins Cole Flynn Winn & Ulmer, PLLC	10	7460 - Legal	11,848.00
1/12/2024	Credit Memo**	Collins Cole Flynn Winn & Ulmer, PLLC	10	7460 - Legal	(11,373.92)
2/29/2024	5939	Collins Cole Flynn Winn & Ulmer, PLLC	10	7460 - Legal	7,982.00
1/31/2024	547-011	Hydros Consulting Inc.	11	7440 - Management/Administration	6,700.97
2/29/2024	547-012	Hydros Consulting Inc.	11	7440 - Management/Administration	8,415.05
2/25/2024	786	Loewen Engineering, INC	10	7440 - Management/Administration	3,655.00
2/25/2024	786	Loewen Engineering, INC	11	7440 - Management/Administration	6,965.69
2/25/2024	25682	LRE Water	10	Various Budget Codes for General Fund	34,065.60
2/25/2024	25727	LRE Water	10	7504 - WQ Data Reporting	4,676.25
2/20/2024	38078	Muller Engineering Company	11	7762 - SR - Reservoir to LV Road	24,080.00
2/29/2024	10250	Pinpoint Systems Inc.	10	7480 - Office/Miscellaneous	262.50
1/31/2024	INV-0124-1017	RESPEC	11	7511 - RSS East Shade Shelter	2,967.50
1/31/2024	INV-0124-1018	RESPEC	11	7440 - Management/Administration	3,025.00
2/29/2024	153772	RG and Associates LLC	10	Various Budget Codes for General Fund	1,680.00
2/29/2024	153772	RG and Associates LLC	11	7814 - PRF Reservoir Destratification Service Plan	640.00
2/29/2024	202402	Valerie Endyk	10	7201 - Administrative assistant	3,041.50
2/29/2024	FEB	Verizon (Estimate)	10	7480 - Miscellaneous	51.56
1/31/2024	68953	Wright Water Engineers, Inc.	40	7677 - CCBWQA Planning	5,812.75
2/29/2024	69097	Wright Water Engineers, Inc.	40	7685 - SSP BMP Effectiveness	1,559.25
2/29/2024	69098	Wright Water Engineers, Inc.	10	7050 - WQCC Regulation Hearings	500.00
2/29/2024	69098	Wright Water Engineers, Inc.	11	7440 - Management/Administration	14,015.00
2/29/2024	867866131	Xcel Energy	11	7818 - Utilities - Reservoir Destratification	555.22
					<b><u>\$ 136,177.59</u></b>

General Fund - 10	\$ 61,441.16
Pollution Abatement Fund - 11	67,364.43
Enterprise Fund - 40	7,372.00
<b>Total Claims by Funding Source</b>	<b><u>\$ 136,177.59</u></b>

\* by vendor

\*\*Collins Cole Flynn Winn & Ulmer Invoice 4711 was paid twice in error.  
 An credit memo of \$11,373.92 was applied to invoice 5823.



## MEMORANDUM

To: CCBWQA Board of Directors  
From: Val Endyk - CCBWQA Administrative Assistant  
Jane Clary - CCBWQA Technical Manager  
Date: March 15, 2024  
Subject: Motions for Board Consideration: March 21, 2024 Agenda Items 3a-3d

**Motions: 3a: Authorization to Execute the Piney Creek Reaches 1 & 2 IGA Amendment (Loewen, enclosed)**

*Move to authorize the execution of the IGA Amendment for Stream Improvements at Piney Creek Reaches 1 & 2 pending satisfactory resolution of CCBWQA's comments, if any, with an expenditure not to exceed \$39,000 for 2024.*

**3b: Acceptance of the 2023 CCBWQA Annual Report on Activities (Clary, enclosed)**

*Move to accept the 2023 CCBWQA Annual Report on Activities and submit a letter with a link to the annual report and the executive summary to the WQCC by March 31, 2024.*

**3c: Acceptance of the WY 2023 Monitoring Report (Clary, link attached)**

*Move to accept the Water Year 2023 Monitoring Report.*

**3d: Authorization to Apply for Congressionally-Directed Spending (Clary, enclosed)**

*Move to authorize the technical manager to coordinate the application for congressionally-directed spending for water quality improvements with input from the Executive Committee.*



## ACTION ITEM MEMORANDUM

**To:** CCBWQA Technical Advisory Committee (TAC)  
**From:** Elysa Loewen, Pollution Abatement Project Manager  
**Date:** March 21, 2024  
**Subject:** Piney Creek Reaches 1&2 IGA Amendment

**Request:** *Move that the Board authorize the execution of the IGA Amendment for Stream Improvements at Piney Creek Reaches 1 & 2 pending satisfactory resolution of CCBWQA's comments, if any, with an expenditure not to exceed \$39,000 for 2024*

**Project/Issue:** Piney Creek Reach 1 & 2

The Project is located on Piney Creek between the confluence of Cherry Creek and Parker Road in the City of Centennial and Arapahoe County (Project) see figure in the **Enclosure**. The downstream limit of this project is the confluence with Cherry Creek within the State Park. It is a partner project with the Southeast Metro Stormwater Authority (SEMSWA) which is the project lead. The proposed stream reclamation benefits the water quality in Piney Creek and the Cherry Creek Reservoir by reducing bed and bank erosion which immobilizes phosphorus in the adjacent soils. It is estimated that this 0.55-mile-long project will immobilize 49 pounds of phosphorus annually. CCBWQA had a workshop on March 16, 2023, which included the Project and reinforced its priority and importance to the whole system. The degradation of the channel has progressed since the Spring 2023 storm events which evident at another project site visit in February 2024 (see photos below).

The majority of the reach was studied in Muller Engineering's 2022 Assessment report which included Piney Creek from the confluence of Cherry Creek to the pedestrian crossing and was visited in the field during the March 2023 CCBWQA field trip.



Figure 1: Looking Upstream at Approximate Upstream Limits of CC State Park (2024)



Figure 2: Looking Downstream at Pedestrian Crossing (2024)

**Funding:**

The IGA Amendment for Piney Creek Reaches 1 & 2 would include additional funding of \$156,000 (\$39,000 CCBWQA which is in the 2024 approved budget and \$117,000 SEMSWA). The IGA Amendment would include total funding of \$140,000. The table below provides a breakdown of funding by sponsors and shows CCBWQA’s participation is 25% which is consistent with the limit historically used on partner projects. Additional IGA Amendments are anticipated to bring in future funding from the sponsors’ capital improvement programs which currently include funding through 2028, when construction is anticipated.

Project: Piney Creek Reach 1 & 2

Funding Source	2022	2023	2024		
	Initial Funding	Additional Annual Funding	Additional Annual Funding	Cumulative Project Funding	Project Sponsor %
SEMSWA	\$114,000	\$189,000	\$117,000	\$420,000	75.00%
CCBWQA	\$38,000	\$63,000	\$39,000	\$140,000	25.00%
<b>Total</b>	<b>\$152,000</b>	<b>\$252,000</b>	<b>\$156,000</b>	<b>\$560,000</b>	<b>100.00%</b>

**Budget:** The Project was included in CCBWQA’s 2024 Budget of \$39,000 (Piney Creek Reach 1&2)

**TAC Review:** This action item was presented at the March 7, 2024, TAC meeting. The TAC unanimously recommended that the Board authorize the execution of the IGA Amendment for Stream Improvements at Piney Creek Reaches 1 & 2 pending satisfactory resolution of CCBWQA’s comments, if any, with an expenditure not to exceed \$39,000 for 2024

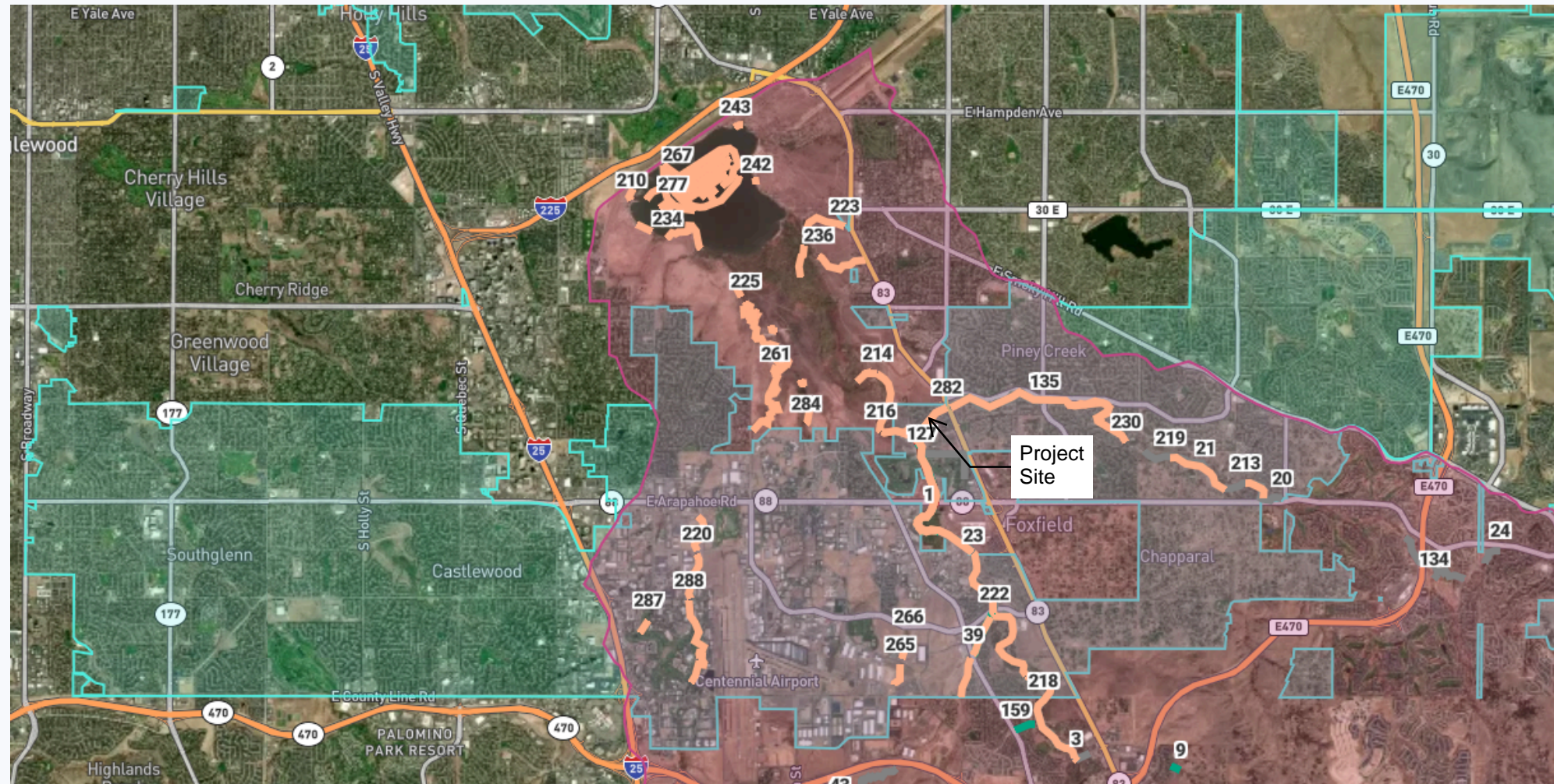
**Motion:** *Move that the Board authorize the execution of the IGA Amendment for Stream Improvements at Piney Creek Reaches 1 & 2 pending satisfactory resolution of CCBWQA’s comments, if any, with an expenditure not to exceed \$39,000 for 2024.*

**Enclosures:** **Project Location Exhibit**  
**Pages from Partners Site Visit Handout (Muller)**

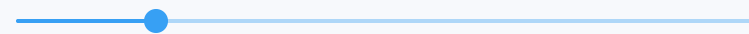


# Cherry Creek Basin Water Quality Authority Map Piney Creek Reach 1 & 2 Location Map

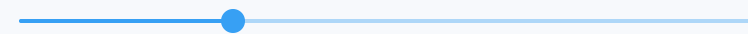
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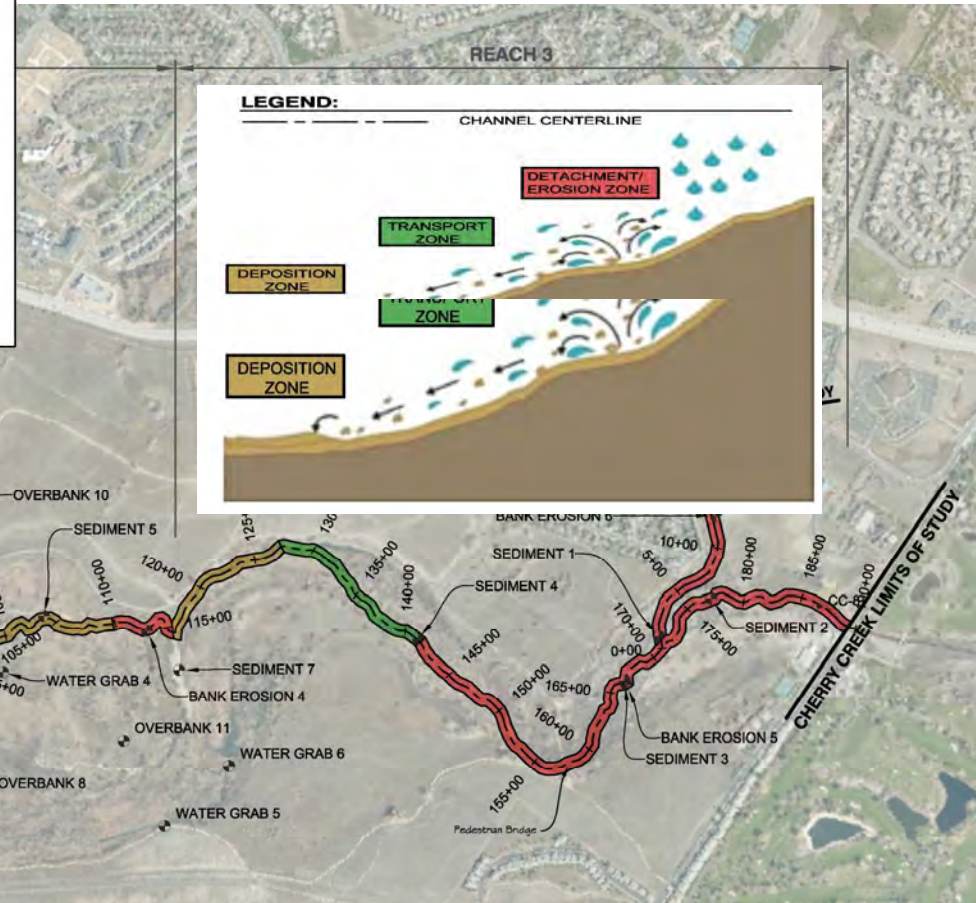
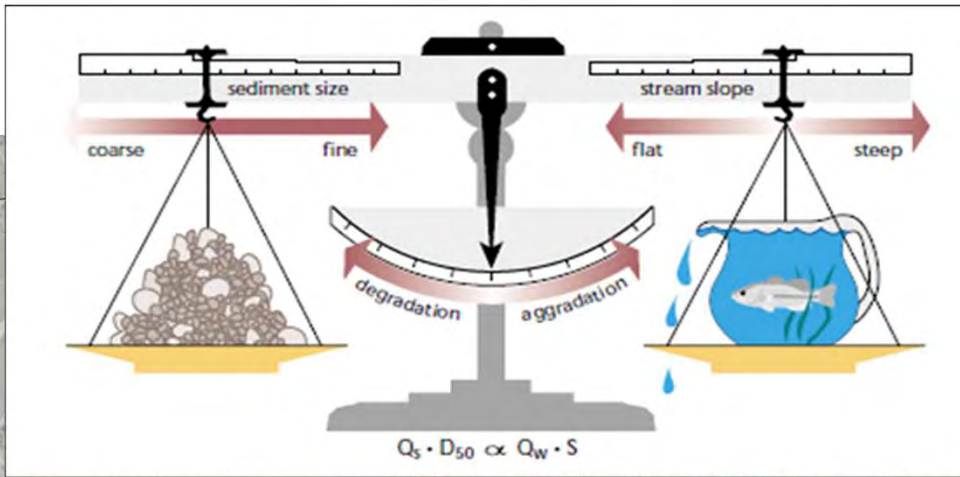
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- CCBWQA
- Active
- Approved
- Cancelled
- Closed
- Inactive
- Requested







**SECOND AMENDMENT TO  
INTERGOVERNMENTAL AGREEMENT  
FOR FUNDING THE DESIGN OF PINEY CREEK STREAM RECLAMATION  
IMPROVEMENTS – REACHES 1 AND 2**

**THIS SECOND AMENDMENT TO INTERGOVERNMENTAL AGREEMENT FOR FUNDING THE DESIGN OF PINEY CREEK STREAM RECLAMATION IMPROVEMENTS – REACHES 1 AND 2** (“Second Amendment”) is made and entered into this day \_\_\_\_\_ to be effective as of **March 1, 2024** (“Effective Date”) by and between the **SOUTHEAST METRO STORMWATER AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado (“SEMSWA”) and the **CHERRY CREEK BASIN WATER QUALITY AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado (“Authority”), individually (“Party”) and collectively (“Parties”).

**RECITALS**

**WHEREAS**, SEMSWA was formed to plan, design, construct, acquire, operate, and maintain various drainage and flood control facilities and manage the storm water quality within its boundaries which are located partly within Arapahoe County (“County”) and partly within the City of Centennial (“City”); and

**WHEREAS**, on or about September 21, 2022, the Parties entered into that certain Intergovernmental Agreement for Funding the Design of Piney Creek Stream Improvements – Reaches 1 and 2 (“Original Agreement”), as which was amended by the Parties by a First Amendment dated to be effective May 18, 2023 (“First Amendment”); and

**WHEREAS**, the Original Agreement as amended by the First Amendment is hereinafter referred to as the “Agreement”; and

**WHEREAS**, pursuant to the Agreement the Parties agreed to cooperate in funding the design and ultimate construction of stream reclamation improvements planned within Piney Creek Reaches 1 and 2 (“Project”); and

**WHEREAS**, the Parties desire to amend the Agreement a second time to increase funding for the Project by \$156,000; and

**WHEREAS**, the additional \$156,000 will be funded \$39,000 by the Authority and \$117,000 by SEMSWA; and

**WHEREAS**, in accordance with the Agreement, the Authority’s contribution to the total cost of the Project will not exceed twenty-five percent (25%).

**NOW, THEREFORE**, in consideration of the covenants and mutual agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:



1. **Additional Funding for Design.** The Parties hereby agree to increase their funding for the design of the Project by the additional funding amounts set forth below:

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PARTY	PREVIOUS FUNDING	ADDITIONAL FUNDING	% OF FUNDING	CUMULATIVE PROJECT FUNDING
SEMSWA	\$303,000	\$117,000	75%	\$420,000
Authority	\$101,000	\$39,000	25%	\$140,000
<b>TOTAL:</b>	\$404,000	\$156,000	100%	\$560,000

2. **Payment of Authority's Share.** No later than sixty (60) days after this Second Amendment is fully executed by the Parties and receipt of an invoice from SEMSWA in the amount of \$39,000, the Authority will issue payment to SEMSWA for the Authority's additional contribution toward the Project as set forth above. Notwithstanding any other provision contained in this Second Amendment to the contrary, the Authority's cumulative share of the design cost shall under no circumstances exceed \$140,000 unless specifically agreed to in advance in writing by the Authority.

3. **Financial Obligations Subject to Annual Appropriation.** To the extent ~~any~~the financial ~~obligations~~obligation of ~~either~~a Party to this Second Amendment will be performed in a future calendar year, such financial ~~obligations are~~obligation is expressly contingent upon the annual budgeting and appropriation by ~~each~~the Party of the funds necessary to pay said ~~obligations~~obligation, as more particularly set forth in the Agreement.

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

5. **Reaffirmation of Agreement.** Upon execution of this Second Amendment by both Parties, the Agreement shall remain in full force and effect in accordance with its terms and provisions as amended by this Second Amendment. In the event of a conflict between the terms and provisions of this Second Amendment and the Agreement, this Second Amendment shall control.

6. **Binding Effect.** This Second 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 anyone or more of the provisions of this Second Amendment shall, for any reason, be held to be invalid or unenforceable, the remaining provisions of this Second Amendment shall be unimpaired and shall remain in full force and effect and binding upon the Parties hereto.

8. **Governing Law.** This Second 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 Second Amendment to be effective as the date set forth above.

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

By: \_\_\_\_\_  
William P. Ruzzo, Authorized Executive Committee Member

Approved as to Form:

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

Checked by:

\_\_\_\_\_  
Val Endyk

**SOUTHEAST METRO STORMWATER AUTHORITY**, a quasi-municipal corporation and political subdivision of the State of Colorado

By: \_\_\_\_\_  
Dan Olsen, Executive Director

Attest:

\_\_\_\_\_  
Nicole Harwell, SEMSWA CIP Project Manager



## Cherry Creek Basin Water Quality Authority

cherrycreekbasin.org  
303.968.9098  
manager@ccbwwqa.org

March 22, 2024

Abe Laydon  
Douglas County

Adivi Bhaskar  
Governor's Appointee

Bill Ruzzo  
Governor's Appointee

Christopher Lewis  
Governor's Appointee

John McCarty  
Governor's Appointee

John Woodling  
Governor's Appointee

Joshua Rivero  
Town of Parker

Leslie Summey  
Arapahoe County

Luis Tovar  
Special Districts

Margaret Medellin  
Governor's Appointee

Max Brooks  
Town of Castle Rock

Mike Anderson  
City of Lone Tree

Mike Sutherland  
Arapahoe County

Roger Hudson  
City of Castle Pines

Steve Sundberg  
City of Aurora

Tom Downing  
Governor's Appointee

Tom Stahl  
City of Greenwood Village

Water Quality Control Commission  
Colorado Department of Public Health and Environment  
% Jojo La, Director, Environmental Boards and Commissions  
4300 Cherry Creek Drive South, A-5, Denver, CO 80246  
Delivered by email: [Jojo.La@state.co.us](mailto:Jojo.La@state.co.us)

Water Quality Control Division  
Colorado Department of Public Health and Environment  
% Joni Nuttle, Physical Science Researcher Restoration & Protection Unit  
4300 Cherry Creek Drive South, WQCD-B-2 Denver, CO 80246  
Delivered by email: [Joni.Nuttle@state.co.us](mailto:Joni.Nuttle@state.co.us)

Dear Ms. La and Ms. Nuttle:

Regulation No. 72, Cherry Creek Reservoir Control Regulation (5 CCR 1002-72), requires the following:

*72.9 Reporting:*

- 1. The Authority shall submit an annual report on the activities under this regulation to the Commission and Division by March 31 of each year.*

To meet this requirement, the link to the Cherry Creek Basin Water Quality Authority 2023 Annual Report is below. The entire report is online, in a user-friendly format, with interactive data graphics.

<https://ccbwwportal.org/annual-report/2023/key-takeaways>.

Additionally, we have attached an executive summary of the report highlighting the key activities and successes from 2023.

Due to unforeseen circumstances, including the significant flooding events in the spring of 2023, some of the information normally linked in the online Annual Report from the CCBWQA's Water Quality Monitoring Report is delayed this year. The linked monitoring report includes the assessment of the seasonal chlorophyll-a concentration and attainment of the Regulation 38 Class 1 Warm Water Aquatic Life classification standards. The chapters that include the water balance, nutrient balance, and plankton dynamics will be added to an amended report and linked in the CCBWQA's online Annual Report as soon as they are available and prior to CCBWQA's annual presentation to the Water Quality Control Commission later this year.

Sincerely,

Jane Clary, CCBWQA Technical Manager

## Memorandum

**Project:** Cherry Creek Reach 1 Alternatives Analysis

**To:** Elysa Loewen, CCBWQA and Jane Clary, CCBWQA

**From:** John Yager, Muller Engineering Company

**Date:** March 1, 2024

**Subject:** Alternatives Analysis Progress Update

---

The purpose of this memorandum is to provide a brief progress update on the Cherry Creek Reach 1 Alternatives Analysis. Muller Engineering Company recently met with representatives from the Cherry Creek Basin Water Quality Authority (CCBWQA) including Elysa Loewen, Jane Clary, and Bill Ruzzo and with Michelle Suebert, the Colorado Parks and Wildlife (CPW) Cherry Creek Park Manager, to present three preliminary alternatives for the channel improvements through Reach 1 and for the Lakeview Drive crossing improvements. The intent of this meeting was to receive initial feedback on the alternatives before moving forward to refine the alternatives and prepare a cost-benefit analysis.

Below is a list of tasks completed to date:

1. Preliminary 2D hydraulic modeling and relative elevation modeling to assist with the identification of existing overbank flow paths through Reach 1.
2. A site visit was performed by the design team to walk the existing overbank flow paths, investigate existing channel and overbank conditions, identify the potential to shift the main channel east to the valley low-point, and to assess health of the vegetation within the reach.
3. Three preliminary alternatives have been developed for Reach 1 channel improvements including stabilization of the existing channel in place, relocating the main channel east to the valley low-point, and increasing flow spread to secondary and tertiary channels to promote a higher level of infiltration and water quality treatment throughout the valley.
4. Three preliminary alternatives have been developed for the Lakeview Drive Crossing including installation of a larger box culvert at the east side of the valley for the main channel, adding a second larger box culvert for the secondary channel at the west side of the valley, and upgrading the remaining culverts from corrugated metal pipes to

reinforced concrete pipes to increase the lifespan of these structures under Lakeview Drive.

The three exhibits prepared for the meeting with CCBWQA can be downloaded using the links below or accessed via CCBWQA's Google Drive March 7, 2024 TAC Folder.

[FIG1 - Cherry Creek Reach 1 Plan.pdf](#) -

[FIG2 - Cherry Creek Reach 1 Valley Sections.pdf](#)

[FIG3 - Cherry Creek Reach 1 Lakeview Drive P&P.pdf](#)

*Note: In the Figure 1: Cherry Creek Reach 1 Plan PDF, you are able to toggle on/off layers for various alternatives, 2D hydraulic model water depth results, etc. The layers with different alternatives are called “-ALT #”, the layers with 2D hydraulic model results are called “SMS Results...”.*

Below are descriptions of the three exhibits that were discussed at our meeting with the CCBWQA:

1. The first exhibit is a plan view of Reach 1 showing the re-located main channel east to the valley low-point, secondary channel on the west side of the valley, and the tertiary overflow paths.
2. The second is of valley cross sections highlighting the valley shape including a ridge near the middle of the valley and prominent east and west low points. This exhibit also shows how the existing main channel is located on the valley ridge and the proposed channel shift to the east low point in the valley.
3. The third exhibit is a plan and profile of Lakeview Drive showing how larger box culverts could be placed under the road to increase capacity. Utility conflicts are anticipated and would require the lowering of the water and sanitary force main in the vicinity of the new culverts or locally raising Lakeview Drive if the utilities cannot be relocated.

The next steps for Muller Engineering will include refining the preliminary alternatives based on feedback received during our meeting with the CCBWQA and preparing formal exhibits for each alternative along with a cost-benefit analysis. We plan to present the draft alternatives to the Technical Advisory Committee (TAC) at the April 4<sup>th</sup> meeting.



## FY25 Congressionally Directed Spending Request

**Applicant:** Cherry Creek Basin Water Quality Authority (EIN 84-1116288)

**About Applicant:** Cherry Creek Basin Water Quality Authority is a quasi-governmental organization tasked by Colorado’s Legislature with preserving, protecting and enhancing the water quality of Cherry Creek and Cherry Creek Reservoir, and achieving and maintaining water quality standards for the reservoir and watershed. The Colorado Water Quality Control Commission established Regulation 72, the Cherry Creek Reservoir Control Regulation, to control nutrient loading to the reservoir, with the Authority implementing and managing many of the requirements under Regulation 72, with particular focus on pollution reduction facilities, stream reclamation, monitoring and public outreach. (<https://www.cherrycreekbasin.org/about-us>)

**Project Location:** Cherry Creek in Cherry Creek State Park, Arapahoe County, CO

**Project Description:** Cherry Creek in Cherry Creek State Park between the Cherry Creek Reservoir and Lakeview Drive is experiencing severe and progressive erosion that adversely impacts water quality in Cherry Creek Reservoir, impacts Cherry Creek State Park trails and infrastructure, and places Aurora Water’s water pipeline at risk. The Authority has completed a series of engineering studies on Cherry Creek to quantify the impacts of the erosion problem, dividing the channel into three reaches of concern, with concerns increasing following the damaging summer floods of 2023. Alternative engineering solutions have been identified with cost estimates to address the problem. This request for funding focuses on Phase 1 of Reach 1, with project tasks and costs attached.

The timeline for the project includes completion of a selected alternative for channel restoration (spring 2024), conceptual design (fall 2024), engineering design, permitting and contractor selection (spring-summer 2024), and construction beginning in the early fall of 2025 (during low flow conditions).

### Benefits of the Project:

- Reduced phosphorus loading to Cherry Creek Reservoir, which is experiencing summer algal blooms, including some harmful algal blooms requiring closure of parts of the reservoir to recreation.
- Reduced sediment loading to Cherry Creek Reservoir, which helps maintain flood control capacity and function for the U.S. Army Corps of Engineers.
- Protection of City Aurora’s water supply line through the State Park.
- Increased channel stability for Cherry Creek during flood conditions, reducing damage to trails and the only road crossing the State Park (Lakeview Drive).
- Improved stream function for aquatic life, floodplain reconnection and riparian vegetation.
- Improved natural amenity for over 1.5 million annual visitors to Cherry Creek State Park.

**Project Cost:** Cherry Creek Reach 1, Phase 1 Primary Channel Restoration \$11,740,000 (p. 2 of Attachment 2); estimated total cost for Reach 1 is \$18.3 to \$24.3 million

**Funds Requested:** \$3,000,000

**Potential Federal Program:** U.S. Army Corps of Engineers, Operation and Maintenance

**Other Potential Funding Partners:** Mile High Flood District, City of Aurora (Aurora Water), Colorado Parks and Wildlife, Colorado Department of Natural Resources. (in addition to funding by the Authority)

**Letters of Support/Support:** Mayor Stephanie Piko, City of Centennial; other letters to follow. Project support from Board including these local governments: Aurora, Castle Rock, Parker, Greenwood Village, Castle Pines, Centennial, Lone Tree, Foxfield, Douglas County, Arapahoe County.

**Attachments:** Project Description (2 pages) and Project Cost Estimate (Muller Engineering Company)

# We Need Your Help to Protect Cherry Creek and the Reservoir!

## Where:

Cherry Creek State Park (CCSP, see Figure 1) and Cherry Creek Reservoir serve as an oasis for the Denver metro area and Colorado Front Range. CCSP is in Arapahoe County, surrounded by Denver, Greenwood Village, Aurora, and Centennial. CCSP sees over 2 million park visitors annually that enjoy the natural resources and recreation provided by Cherry Creek and the Reservoir.

## Who:

The Cherry Creek Basin Water Quality Authority (CCBWQA) and Colorado Parks and Wildlife (CPW) are working to protect the water quality in Cherry Creek and the Reservoir. For more, see <https://www.cherrycreekbasin.org/>.

## Issue:

Severe erosion (see photos 1 and 2) is occurring in Cherry Creek in CCSP and in Piney Creek immediately upstream. The erosion is threatening the surrounding environment, wildlife corridors, critical infrastructure, and water quality. Additionally, downed trees could become debris in a large flood event potentially impacting the flood control purpose of the Reservoir.

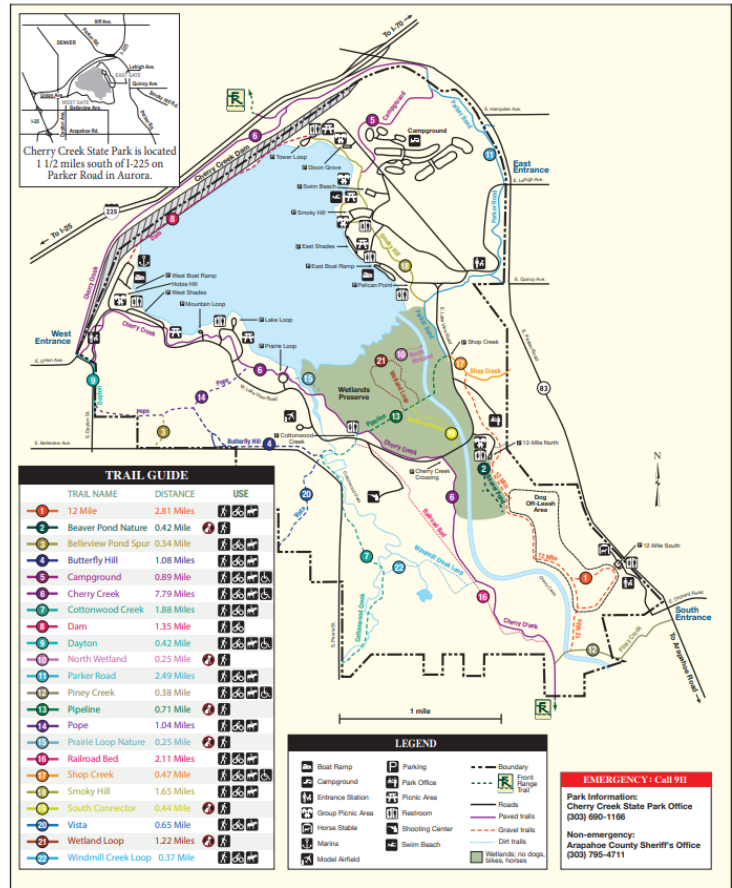


Figure 1 - Cherry Creek State Park



Photo 1 – Cherry Creek in CCSP



Photo 2 – Cherry Creek upstream of CCSP



# We Need Your Help to Protect Cherry Creek and the Reservoir!

## Background:

Muller Engineering Company recently completed a stream channel and water quality assessment on Cherry and Piney Creeks (see Figure 2) for CCBWQA that identified serious issues requiring a major capital investment to repair. Key findings include:

- erosion in the lower reach of Cherry Creek is estimated to contribute over 1,700 pounds of phosphorus per year, which can contribute to harmful algal blooms in the reservoir,
- initial estimate of channel reclamation cost is over \$23 million within the park and an additional \$10 million upstream of the park, which exceeds the combined resources of CCBWQA and Cherry Creek State Park. A more detailed alternatives evaluation is being completed to identify a phased approach to the project and to refine project costs, and
- risks of inaction include continued erosion, environmental impacts, loss of wildlife habitat and natural resources, risk to infrastructure including a water supply pipeline and roads, significant on-going phosphorus and sediment loading to the Reservoir, and increased damages when flooding occurs.

## Our Request:

Because of the high capital cost needed to complete these repairs in a timely manner, CCBWQA and CPW are seeking funding partners to support stream reclamation similar to the example shown in Photos 3 and 4 in Chatfield State Park. In 2023, CCBWQA is preparing an alternatives analysis that will result in a refined plan for reclamation and a refined cost estimate. We are currently identifying partners who may be able to help fund this high priority project.



Photo 3 – Example of Similar Degraded in Plum Creek in Chatfield State Park Prior to Stabilization

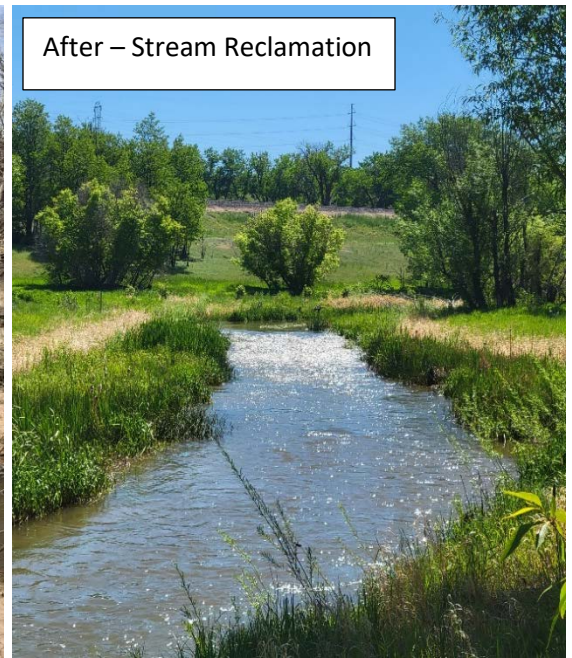
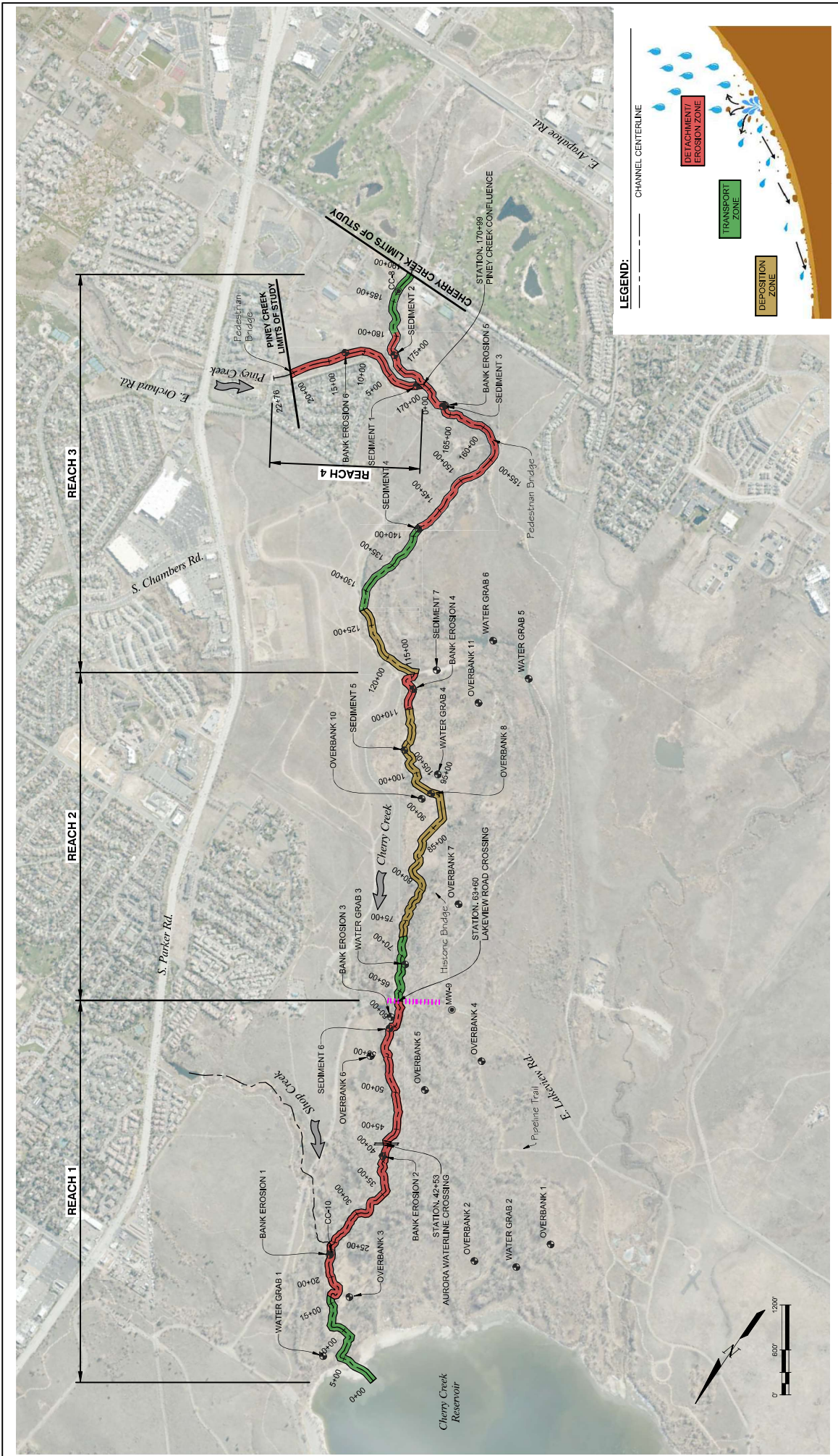


Photo 4 – Example Reclaimed Channel of Plum Creek in Chatfield State Park







DATE	5/20/2021
DRAWING NO.	
SHEET NO.	1 OF 1

**FIGURE 2**

**CHERRY CREEK RESERVOIR TO 12 MILE  
GEOMORPHIC SUMMARY**



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Cherry Creek Reach 1  
 Planning Level Opinion of Probable Project Costs

5-Mar-24

Cost Estimate - Upper Range						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
<b>Channel and Overbank Stabilization</b>						
1	Primary Channel Stabilization	5500	LF	\$ 1,000	\$ 5,500,000	
2	Secondary Channel Stabilization	5000	LF	\$ 800	\$ 4,000,000	
3	Tertiary Overflow Path Enhancement	1	LS	\$ 2,000,000	\$ 2,000,000	
<b>Channel and Overbank Stabilization Subtotal</b>					<b>\$ 11,500,000</b>	
<b>Lakeview Drive Improvements</b>						
4	36" Reinforced Concrete Pipe	770	LF	\$ 320	\$ 246,400	
5	36" Flared End Section	22	EA	\$ 5,000	\$ 110,000	
6	20' Span x 3' Rise Concrete Box Culvert	2	EA	\$ 500,000	\$ 1,000,000	
7	Asphalt Removal	290	SY	\$ 27	\$ 7,830	
8	Asphalt Replacement	160	TON	\$ 220	\$ 35,200	
9	Embankment Protection, Type M Soil Riprap	2400	CY	\$ 116	\$ 278,400	
10	Misc. Roadway Costs	1	LS	\$ 419,458	\$ 419,458	25% of culvert and asphalt costs
<b>Lakeview Drive Improvements Subtotal</b>					<b>\$ 2,097,288</b>	
<b>Subtotal Construction</b>					<b>\$ 13,597,288</b>	
Contingency (25%)					\$ 3,399,322	
<b>Total Construction</b>					<b>\$ 16,996,609</b>	
Engineering Final Design Services (12%)					\$ 2,039,593	
Environmental Permitting Services (3%)					\$ 509,898	
Construction Services (10%)					\$ 1,699,661	
<b>Total Project (2024 Dollars)</b>					<b>\$ 21,245,762</b>	
<b>Total Project (2025 Dollars)</b>					<b>\$ 22,730,000</b>	
<b>Total Project (2026 Dollars)</b>					<b>\$ 24,320,000</b>	

Cost Estimate - Lower Range						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
<b>Channel and Overbank Stabilization</b>						
1	Primary Channel Stabilization	5500	LF	\$ 1,000	\$ 5,500,000	
2	Secondary Channel Enhancement	5000	LF	\$ 500	\$ 2,500,000	
3	Tertiary Overflow Path Enhancement	1	LS	\$ 1,500,000	\$ 1,500,000	
<b>Channel and Overbank Stabilization Subtotal</b>					<b>\$ 9,500,000</b>	
<b>Lakeview Drive Improvements</b>						
4	36" Reinforced Concrete Pipe	770	LF	\$ 320	\$ 246,400	
5	36" Flared End Section	22	EA	\$ 5,000	\$ 110,000	
6	20' Span x 3' Rise Concrete Box Culvert	1	EA	\$ 500,000	\$ 500,000	
7	Asphalt Removal	290	SY	\$ 27	\$ 7,830	
8	Asphalt Replacement	160	TON	\$ 220	\$ 35,200	
9	Embankment Protection, Type M Soil Riprap	2400	CY	\$ 116	\$ 278,400	
10	Misc. Roadway Costs	1	LS	\$ 294,458	\$ 294,458	25% of culvert and asphalt costs
<b>Lakeview Drive Improvements Subtotal</b>					<b>\$ 1,472,288</b>	
<b>Subtotal Construction</b>					<b>\$ 10,972,288</b>	
Contingency (25%)					\$ 2,743,072	
<b>Total Construction</b>					<b>\$ 13,715,359</b>	
Engineering Final Design Services (12%)					\$ 1,645,843	
Environmental Permitting Services (3%)					\$ 411,461	
Construction Services (10%)					\$ 1,371,536	
<b>Total Project (2024 Dollars)</b>					<b>\$ 17,144,199</b>	
<b>Total Project (2025 Dollars)</b>					<b>\$ 18,340,000</b>	
<b>Total Project (2026 Dollars)</b>					<b>\$ 19,620,000</b>	

Note: This is a planning level opinion of probable project costs. Engineering, permitting, and construction services will be refined as the scope becomes further defined.

CDOT CPI - Inflation		
2023 Q1	1.87	7.0%
2023 Q4	2.00	

Note: average annual inflation 2012-2023 is 7.8%

**Cherry Creek Reach 1**

**Planning Level Opinion of Probable Project Costs - Phase 1**

5-Mar-24

<b>Cost Estimate - Phase 1</b>						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
1	Primary Channel Stabilization	5500	LF	\$ 1,000	\$ 5,500,000	
2	Fill/Reclaim Existing Channel	3400	LF	\$ 300	\$ 1,020,000	
3	Selective Tertiary Overflow Path Enhancement	1	LS	\$ 500,000	\$ 500,000	
<b>Phase 1 Subtotal</b>					<b>\$ 7,020,000</b>	
Contingency (25%)					\$ 1,755,000	
<b>Total Construction</b>					<b>\$ 8,775,000</b>	
Engineering Final Design Services (12%)					\$ 1,053,000	
Environmental Permitting Services (3%)					\$ 263,250	
Construction Services (10%)					\$ 877,500	
<b>Total Project (2024 Dollars)</b>					<b>\$ 10,970,000</b>	
<b>Total Project (2025 Dollars)</b>					<b>\$ 11,740,000</b>	
<b>Total Project (2026 Dollars)</b>					<b>\$ 12,560,000</b>	

*Note: This is a planning level opinion of probable project costs. Engineering, permitting, and construction services will be refined as the scope becomes further defined.*

<b>CDOT CPI - Inflation</b>		
2023 Q1	1.87	7.0%
2023 Q4	2.00	

*Note: average annual inflation 2012-2023 is 7.8%*

Cherry Creek Reach 1  
 Planning Level Opinion of Probable Project Costs - Phase 2

5-Mar-24

Cost Estimate - Phase 2						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
1	20' Span x 3' Rise Concrete Box Culvert	1	EA	\$ 500,000	\$ 500,000	East Culvert Only
2	Asphalt Removal (only over new culvert)	290	SY	\$ 27	\$ 7,830	
3	Asphalt Replacement (only over new culvert)	160	TON	\$ 220	\$ 35,200	
4	Embankment Protection, Type M Soil Riprap	2400	CY	\$ 116	\$ 278,400	
5	Misc. Roadway Costs	1	LS	\$ 205,358	\$ 205,358	25% of culvert and asphalt costs
<b>Phase 2 Subtotal</b>					<b>\$ 1,026,788</b>	
Contingency (25%)					\$ 256,697	
<b>Total Construction</b>					<b>\$ 1,283,484</b>	
Engineering Final Design Services (12%)					\$ 154,018	
Environmental Permitting Services (3%)					\$ 38,505	
Construction Services (10%)					\$ 128,348	
<b>Total Project (2024 Dollars)</b>					<b>\$ 1,610,000</b>	
<b>Total Project (2025 Dollars)</b>					<b>\$ 1,730,000</b>	
<b>Total Project (2026 Dollars)</b>					<b>\$ 1,860,000</b>	

*Note: This is a planning level opinion of probable project costs. Engineering, permitting, and construction services will be refined as the scope becomes further defined.*

CDOT CPI - Inflation		
2023 Q1	1.87	7.0%
2023 Q4	2.00	

*Note: average annual inflation 2012-2023 is 7.8%*

Cherry Creek Reach 1  
 Planning Level Opinion of Probable Project Costs - Phase 3

5-Mar-24

Cost Estimate - Phase 3						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
1	Secondary Channel Enhancement	5000	LF	\$ 800	\$ 4,000,000	
2	Tertiary Overflow Path Enhancement	1	LS	\$ 500,000	\$ 500,000	
3	36" Reinforced Concrete Pipe	770	LF	\$ 320	\$ 246,400	
4	36" Flared End Section	22	EA	\$ 5,000	\$ 110,000	
5	20' Span x 3' Rise Concrete Box Culvert	1	EA	\$ 500,000	\$ 500,000	West Culvert Only
6	Asphalt Removal (assume entire length of crossing)	2670	SY	\$ 27	\$ 72,090	
7	Asphalt Replacement (assume entire length of crossing)	1340	TON	\$ 220	\$ 294,800	
8	Misc. Roadway Costs	1	LS	\$ 305,823	\$ 305,823	25% of culvert and asphalt costs
<b>Phase 3 Subtotal</b>					<b>\$ 6,029,113</b>	
Contingency (25%)					\$ 1,507,278	
<b>Total Construction</b>					<b>\$ 7,536,391</b>	
Engineering Final Design Services (12%)					\$ 904,367	
Environmental Permitting Services (3%)					\$ 226,092	
Construction Services (10%)					\$ 753,639	
<b>Total Project (2024 Dollars)</b>					<b>\$ 9,430,000</b>	
<b>Total Project (2025 Dollars)</b>					<b>\$ 10,090,000</b>	
<b>Total Project (2026 Dollars)</b>					<b>\$ 10,800,000</b>	

*Note: This is a planning level opinion of probable project costs. Engineering, permitting, and construction services will be refined as the scope becomes further defined.*

CDOT CPI - Inflation		
2023 Q1	1.87	7.0%
2023 Q4	2.00	

*Note: average annual inflation 2012-2023 is 7.8%*

## Memorandum

**To:** CCBWQA Board of Directors  
**From:** Jessica DiToro, PE, LRE Water  
**Reviewed by:** Jane Clary, Wright Water Engineers  
**Date:** March 21, 2024  
**Subject:** WQCD 10-Year Water Quality Roadmap February Meeting Update

**Background:** The Water Quality Control Division (WQCD) established the [10-Year Water Quality Roadmap](#) in 2017 to outline strategies for developing nutrient criteria and other water quality priorities over a ten year period. [Clean Water Policy 8 \(CW-8\)](#) was also developed to help guide these efforts. The WQCD hosts [quarterly stakeholder Roadmap meetings](#).

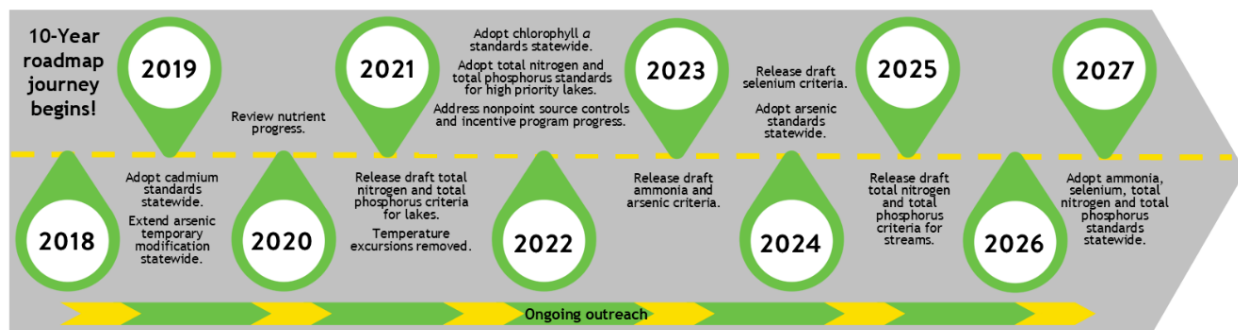


Figure 1. WQCD 10-Year Water Quality Roadmap - Please note this Roadmap graphic does not reflect recent changes made to the roadmap (i.e., delaying the implementation of lake nutrients standards statewide to 2027)

**Issue Update:** Jessica DiToro participated in the February 22, 2024 Roadmap meeting on behalf of CCBWQA. Several topics were discussed that are directly relevant to CCBWQA interests and activities:

- Total Maximum Daily Load (TMDL) [Prioritization](#):** The WQCD is working to identify candidate waters for TMDL development between 2029 and 2032. Up to four lakes with nutrient-related nonattainment will be identified as candidate waters. The WQCD will identify these potential waterbodies by June 2024. Stakeholders will have two years to engage with the WQCD regarding these identified waterbodies before final candidate waters are committed in or after September 2026. It is unclear if the WQCD is considering Cherry Creek Reservoir (303(d) listed for Chlorophyll *a*) to be one of these candidate lakes.
- [Rescheduling of Regulation 38 Rulemaking Hearing \(RMH\)](#):** The WQCD is recommending that the Regulation 38 triennial review RMH be rescheduled from June 2025 to June 2026. At the March 11, 2024 Water Quality Control Commission (WQCC) meeting, the WQCD presented this potential scheduling change to the WQCC, but it was not confirmed. If the WQCC approves the rescheduling of the RMH, this will change the timing of CCBWQA's

site-specific standards proposal. It is anticipated that the WQCD will return to the WQCC with an update on this proposed change in May and for a final decision in September. CCBWQA has been working with Hydros Consulting to develop site-specific nutrients standards for Cherry Creek Reservoir to propose at the 2025 Regulation 38 RMH.

- **Feasibility and Implementation Subgroup:** An outcome of the [April 2024 Lake Nutrients Criteria RMH](#) was the formation of the Roadmap's [Feasibility and Implementation Subgroup](#). The subgroup kicked off during the February 22, 2024 Roadmap meeting. One objective of this subgroup will be to assess the current site-specific standards process.

**Recommended Next Steps:**

- **TMDL Prioritization:** Review the WQCD's recommended candidate lakes list when made public in June 2024. Report back findings to CCBWQA TAC and Board and discuss next steps in summer 2024.
- **Rescheduling of Regulation 38 RMH:** Consider how rescheduling this RMH from 2025 to 2026 changes the timing of CCBWQA's site-specific standards proposal.
- **Feasibility and Implementation Subgroup:** CCBWQA Staff should participate in the Feasibility and Implementation Subgroup meetings for site-specific standard process discussions and proposed changes to the process to see how this could impact the CCBWQA's future site-specific standards proposal.

## MEMORANDUM

<b>Date:</b>	March 8, 2024
<b>To:</b>	Cherry Creek Basin Water Quality Authority Board of Directors Jane Clary, CCBWQA Technical Manager
<b>From:</b>	Erin Stewart, LRE Water
<b>Subject:</b>	Real-Time Water Quality Monitoring Options for Cherry Creek Reservoir

### Information

At the end of 2023, the dissolved oxygen (DO) and temperature monitoring equipment installed in Cherry Creek Reservoir disappeared from the marina after removal from the Reservoir (likely stolen). The CCBWQA has filed an insurance claim to replace this equipment and will be reimbursed. However, this may be a good opportunity for the CCBWQA to evaluate alternative options for upgrading this equipment with improved functionality and possibly use the replacement cost to offset the higher cost of the upgraded equipment.

The equipment installed previously included nine (9) thermistors (temperature loggers) installed at ~ 1-meter intervals and two oxygen loggers just below the surface (0.5 m) and at the bottom (7 m).

### Replacement DO logger Cost - \$4,369.60 (w/discount)

- DO logger only with anti-fouling wiper
- Manual download required
- Multi-parameter water quality sonde with anti-fouling wiper
- Data formatting is required for upload to the portal
- Installed on CCR Sailing Club or CPW buoy which limits seasonal collection (late April- late October)

### Upgraded Equipment \$14,449.00 (plus ~\$20 month)

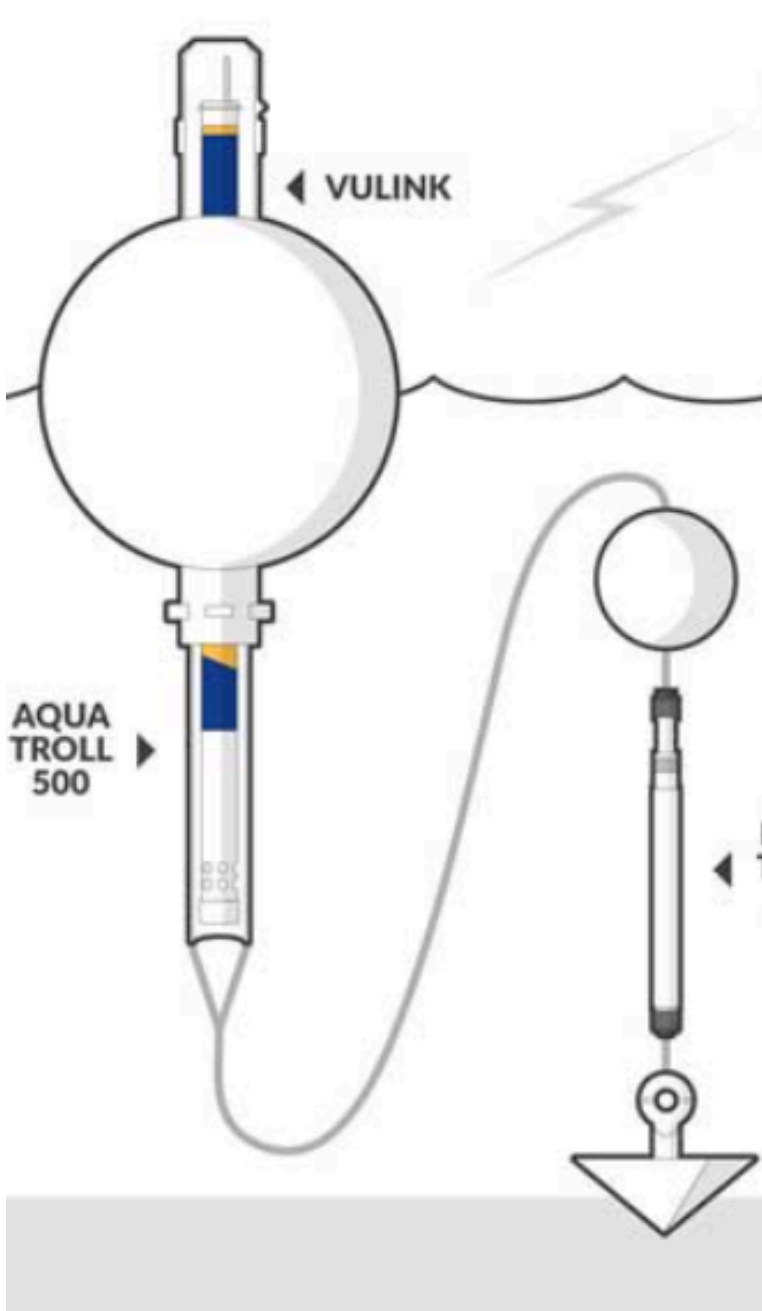
- Real-time data availability
- Cellular telemetry
- Multi-parameter water quality sonde with anti-fouling wiper
- Independent buoy set up
- Additional chlorophyll – a probes (\$1,995 included)
- No manual data downloads required (no risk of data loss, reduced labor costs)
- Extended season (ice off - November/December)

**Thermistor Replacement Cost** - In addition to the DO loggers, the cost to replace the thermistor chain is \$1,700. Since we had some backup loggers we only need to purchase four (4) additional at \$175 each + deployment materials (chain, anchor, connectors, etc).

### Benefits of Upgraded Equipment

- Extended deployment - additional data on shoulder months)
- Real-time data transmission - no risk of data loss, reduced labor associated with manual downloads
- A helpful tool for potential reservoir management
- Active tracking of bloom conditions and algal responses to changes in water quality vs lab analysis 1-2x/month
- Inform on stratification/ hypoxic (low oxygen) conditions for potential beneficial timing the USACE release<sub>2</sub>





**Figure 1.** Representation of buoy configuration and equipment of proposed upgraded equipment.

**Charter for CCBWQA Capital Improvement Projects Subcommittee**  
**Working Charter (3/14/24—may be revised as needed by Subcommittee)**

**Purpose:** Provide review of capital improvement projects (CIP) proposed for inclusion on CCBWQA’s annual and long-term CIP Plan and provide input on procedures for project evaluation and inclusion on the CIP.

**Scope:** The scope of the subcommittee’s work will include review of procedural, technical and economic components of CCBWQA’s CIP. Specific tasks envisioned for this subcommittee, subject to revision by the subcommittee, include:

1. Review “Procedures for Requesting Capital Funding from CCBWQA” (Attachment 1) and recommend revisions, if any. The recommended procedures identified by the subcommittee would be submitted to the TAC for recommendation to the Board and then the Board for review, approval and adoption.
2. Review existing annual and 10-year CIP program for consistency with CCBWQA’s water quality protection objectives, prioritization/project phasing, economic reasonableness, funding partner plan, and other applicable documents. This could include recommendations for removing some projects from the CIP, reprioritizing phasing of projects, adjusting budgets due to inflation, considering timing of partner funding, and other considerations. Information to support this review will be provided by CCBWQA’s Pollution Abatement Project Manager (PAPM) and Technical Manager.
3. Review procedure for quantifying nutrient reduction benefits of proposed projects and make recommendations for improvements, if needed. For example, what role should the watershed/reservoir models play in quantifying benefits and prioritizing projects? This task will be conducted periodically, with recommendation for frequency of review based on recommendation of the subcommittee and the TAC.
4. Review annual draft budget prior to submittal to the TAC and Board. This task will be conducted annually (typically in August).
5. Provide recommendations on other aspects of the CIP program as identified by the subcommittee, if needed. The subcommittee may choose to add additional questions or items to be addressed.

**Committee Duration:** This initial charter for the subcommittee will be for the 2024 calendar year; however, the subcommittee may make recommendations for future annual subcommittees or recommend that this subcommittee be a standing committee. Frequency of meetings will be decided by the subcommittee but is estimated to meet one to two times per year in the late summer prior to development of the annual CCBWQA budget and on an as-needed basis for additional tasks. In addition, emails may be used to gather information from subcommittee members if a meeting is not warranted.

**2024 Members (DRAFT):** The TAC welcomes participation from Board members on this subcommittee. If three or more Board members choose to participate, then the subcommittee meetings will be posted for public notice on the CCBWQA website.

Name and Organization	Email
Jane Clary – CCBWQA Technical Manager, Wright Water Engineers	clary@wrightwater.com
Elysa Loewen – CCBWQA PAPM Loewen Engineering	eloewen@loeweneng.com
Jacob James - Lone Tree	jacob.james@cityoflonetree.com
Ashley Byerley - SEMSWA	abyerley@semswa.org
Rick Goncalves - RG Engineers	rickg@rgengineers.com
Lisa Knerr - Arapahoe County	lknerr@arapahogov.com
Ryan Adrian - Douglas County	radrian@douglas.co.us
Alex Mestdagh - Parker	amestdagh@parkeronline.org
Joseph Marencik - Castle Pines	joseph.marencik@castlepinesco.gov

## Attachment 1.

### **Procedures for Requesting Capital Improvement Project Funds from the Cherry Creek Basin Water Quality Authority** Draft 12-07-2012 (with minor updates 03-01-2024)

The procedures for requesting funding assistance from the Cherry Creek Basin Water Quality Authority (CCBWQA) for qualified capital projects are described herein as a guideline for local governments when preparing their capital budgets. The intent is to establish a protocol and process that allows the Authority to achieve its mission to protect and enhance water quality in the Cherry Creek watershed by allocating its funds in an efficient and effective manner. CCBWQA will review requests from local governments using the process and guidelines, taking into consideration the Authority's budget constraints and water quality goals and objectives.

The Authority may deviate from these procedures and guidelines at its discretion.

1. **Local Government Submits Written Request for Authority Financial Assistance.**  
CCBWQA recommends that the local government contact CCBWQA's Pollution Abatement Project Manager (PAPM) to discuss the proposed project before submitting a written request. Whereas the written request will be dependent on the nature of the capital project, the letter would typically include but is not limited to:
  - a. Address the letter to CCBWQA's Technical Manager with a copy to the PAPM. Identify a contact for the local government and related to the request.
  - b. A description of the project including a general location map and more detailed project area map. Typically, this information can be obtained from local storm drainage master plans such as those prepared under the jurisdiction of the Mile High Flood District or the local government but can also be a project not identified in a master plan.
  - c. An estimation of project costs including preliminary and final engineering, construction oversight, construction, administration, right-of-way, and operation/maintenance costs. Project costs not related to water quality enhancements, such as improvements solely related to recreation and education must be itemized separately if they are included in the cost estimate.
  - d. An explanation of how the project fits into CCBWQA's goals and objectives as described in CCBWQA's watershed plan.<sup>1</sup>
  - e. Discussion of the long-term maintenance agreements and/or responsibilities, including temporary/permanent construction and maintenance easement requirements and ownership.
  - f. Discussion of existing and proposed future projects that the local government has sponsored within the watershed or political boundary of the local government that provide water quality benefits including those co-sponsored by CCBWQA, but not including those required under stormwater discharge permits.

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<sup>1</sup> Cherry Creek Basin Water Quality Authority October 18, 2012. *Cherry Creek Basin Water Quality Authority Watershed Plan 2012. (Under Revision 2024)*

- g. Other information deemed appropriate by the local government or specifically requested by the Authority.
2. **Preliminary Review by the Technical Advisory Committee (TAC).** CCBWQA's Technical Manager will schedule the funding request on the agenda for initial review at the next available TAC meeting. The local government representative will be requested to make a brief presentation and to address TAC questions. The TAC will consider one or more of the following actions:
- a. Make a motion to accept the application for further processing.
  - b. Identify the project as a potential pollution reduction facility (PRF) and include the project on CCBWQA's Master List of potential PRFs.
  - c. Make a motion to decline the request for funding assistance, providing reasons for the denial. The local government may appeal the decision to the Board.
  - d. Have the Authority's PAMP review the project:
    - i. For consistency with CCBWQA's Watershed Plan.
    - ii. To provide an opinion on the water quality benefits of the project.
    - iii. Recommend factors for the TAC and Board to consider to decide a level of funding participation such as:
      - 1. Water quality benefits and costs as compared to past projects.
      - 2. Consistency with past CIP funding levels.
    - iv. Recommend factors for the TAC and Board to consider regarding project prioritization, taking into account the appropriate factors identified in the CCBWQA's guidance document.<sup>2</sup>

When the analysis is complete, the Technical Manager will schedule the request for the next available TAC meeting.
  - e. Request additional information from the local government.
  - f. Postpone the decision on the application and schedule the request for a subsequent TAC meeting.
3. **Second Review by the Technical Advisory Committee (if needed).** The TAC will review the additional information by the applicant and the water quality analysis by the PAMP and consider one or more of the following actions:
- a. Make a motion to accept the application for further processing. The basis for the funding level and prioritization of the project shall consider:
    - i. Recommendations of the PAMP.
    - ii. Funding levels of past projects.
    - iii. Available Authority CIP funds.
  - b. Make a motion to decline the request for funding assistance, providing reasons for the denial. The local government may appeal the decision to the Board.
  - c. Request the Technical Manager to prepare an Action Item Memo with the TAC recommendation for Board consideration at the next available Board meeting.

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<sup>2</sup> Cherry Creek Basin Water Quality Authority Technical Advisory Committee, June 16, 2011. *Stream Reclamation, Water Quality Benefit Evaluation – Interim Status Report*. See Chapter 4. *Considerations for Prioritizing Projects*.

- 4. Board Review.** CCBWQA's Technical Manager will schedule the funding request on the agenda for review at the next available Board meeting. The local government representative will be requested to make a brief presentation and to address Board questions. The Board may consider one or more of the following actions:
- a. A motion to approve the project request for funding that includes a funding level and prioritization.
  - b. A motion to deny the application for funding assistance by the Authority.
  - c. A motion to refer the application for funding assistance back to the TAC for further consideration.

Subject to available funds and if approved for funding by the Board, CCBWQA will include the project and funding level on its next capital improvement program budget or may elect to include the project in its current year budget.

**CHERRY CREEK BASIN WATER QUALITY AUTHORITY**  
**2024 Capital Project Status Report**  
March 15, 2024

**RESERVOIR PROJECTS**

**1. East Shade Shelters Phase III and Tower Loop Phase II Shoreline Stabilization (CCB-17.5.1 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 1<sup>st</sup> 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 (10/13/22). The 30% submittal was received on 11/16/22 and is under review. CCBWQA provided comments on 30% review on 1/17/23; a value engineering effort is recommended as the project costs exceed the budget. The value engineering meeting was held on 2/24/23. RESPEC's request for additional services was approved by TAC and Board in May (5/25/23). The reservoir water level has come down since the May and June storms and additional erosion was observed on 7/14/23; a site visit was made with RESPEC on 8/1/23 and the erosion areas at East Shade Shelters were measured. It has been estimated that roughly 14 cubic yards of soil was eroded from the 2023 storms (9/15/23). A progress meeting was held on 9/15/23, RESPEC will refine the breakout of components between recreational (CPW responsibility), water quality (CCBWQA responsibility), and shared (both CPW and CCBWQA responsibilities) costs and work on 408 review submittal to US Army Corps of Engineers. RESPEC was provided by the US Army Corps of Engineers' guidance on cut and fill and asked to prioritize the 408 application and review; they are coordinating with Gene Seagle in preparation for this submittal. RESPEC has provided a draft plan of action for the 408 permit submittal to be discussed with Gene (1/15). A meeting was held with Gene on (01/25/2024) to discuss the 408 requirements, subsequently RESPEC followed up with a submittal package PDF of the summary of impact for the project via email to Gene and Joe with USACE on (02/02/2024). Per email from Joe at USACE the proposed bank stabilization proposal is approved under routine operations and maintenance.

**Tower Loop Phase II –**

2. Final design and construction are currently scheduled for 2032 and 2033.

## STREAM RECLAMATION PROJECTS

### 1. Cherry Creek Stream Reclamation at Arapahoe Rd. - Valley Country Club to Soccer Fields, Reaches 3 to 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, an 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). Board authorized the IGA Amendment for 2022 funding at their 10/22/22 meeting. It appears that CCBWQA's 2023 participation will be reduced as a result of less partner funding available for this project (2/24/23). The IGA Amendment that brings in 2023 funding was recommended by the TAC and authorized by the Board at their June meetings (6/29/23). MHFD is starting consultant selection process (10/13/23). Jacobs, Olsson, and Muller were shortlisted for interviews which are scheduled for mid-December (11/10/23). Muller was selected as the consultant (12/28/23). A scoping meeting for the project was held on (01/30/2024), a design scope is anticipated in the next month.

### 2. Cherry Creek - Reservoir to Lake View Drive Alternatives Analysis and Development of Preferred Alternative (CCB-5.16A)

- a. Description: This project is in follow up to CCBWQA's study of Cherry and Piney Creeks in Cherry Creek State Park (CCSP). Muller completed two reports on Cherry Creek from Reservoir to State Park Boundary, Stream and Water Quality Assessment and Baseline Channel Monitoring Report, in 2022. These reports highlight the need for this project.
- b. Status: A workshop is scheduled for the 3/16/23, to seek CCBWQA Board and TAC input on this project and Cherry and Piney Creeks in CCSP (3/10/23). *The follow up from workshop is underway – project overview and funding flyer has been created*, Muller is scoping the next step of design for Reach 1 and providing a fee, and multi-pronged approach is in development for workshop priority reaches that prioritizes Reach 1 and reduces risk from upstream reaches; these items will be brought to TAC and Board for discussion, direction, and/or action at upcoming meetings (3/30/23). A site visit for partner outreach and funding was held on 5/25/23 at 1-4 pm (6/8/23). A coordination meeting was held with Aurora on 6/23/23 and they showed interest in partnering on the project to protect their water lines. The Mile High Flood District has provided their budget/CIP schedule and Arapahoe County Open Space has been contacted to investigate potential partnering opportunities (7/13/23). The TAC created a subcommittee for this project on 8/3/23; which will attend progress meetings, provide timely feedback to Muller, and to coordinate with TAC as needed. The alternatives analysis kickoff meeting was held on 8/29/23. A site visit was held on 9/22/23 to look at multiple flow paths and potential risks for consideration in alternatives analysis. It was verbally reported at the 11/16/23 Board meeting that Colorado Parks and Wildlife's repair of Lake View Drive is



underway which includes the alternatives of concrete pipe and trash racks, cleaning out of culverts 1-9 and the beaver debris, and it is scheduled for completion by mid-December. Muller was provided US Army Corps of Engineers' guidance on cut and fill for consideration in their alternatives analysis (12/1/23). Muller is working through the Alternative Analysis and is coordinating a meeting (02/02/2024) to discuss alternatives in late February with the team. *Muller presented a design alternatives overview in a meeting held on (02/28/2024) and is working to compile the alternatives analysis with costs to present at the April TAC meeting.*

### **3. 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). Muller is working on Final Design and held a progress meeting on 4/14/23, a site visit is being scheduled to support the 90% design submittal. The 90% site visit was held on 5/22/23. Muller submitted their 90% design submission on 9/14/23; the engineer's estimate confirms that additional funding is needed for construction. IGA Amendment for additional funding is scheduled for TAC and Board consideration at October meetings and 90% review meeting was held on 10/13/23. Comments were provided for 90% submittal and discussed at the review meeting (11/10/23).

### **4. 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 as project partner to provide contractor input during the design (5/27/22). CLOMR is under review by FEMA (8/12/22). Muller has received comments on CLOMR and is preparing responses; 90% Submittal is scheduled for early February (1/27/23). Comments on 90% Submittal were provided on 2/22/23; project is experiencing substantive cost increases due to current market conditions (2/24/23). TAC at their 3/2/23 meeting recommended that the Board authorized the IGA Amendment to bring in 2023 funding along with an increase in CCBWQA's 2023 funding from \$170,000 to \$570,000. The Board authorized the IGA Amendment with the increased 2023 funding

of \$570,000 at their 3/16/23 meeting. The Conditional Letter of Map Revision (CLOMR) was issued by the Federal Emergency Management Agency (FEMA) on April 28, 2023 (5/12/23). The sanitary sewer relocation will be contracted to start with, in order to avoid a pipe material cost increase, and to get it out of the way for the forthcoming stream reclamation (7/13/23). The sanitary sewer relocation has been contracted for with Concrete Express Inc. or CEI (8/11/23). Construction of stream reclamation will start once Individual Permit Authorization has been received (11/10/23). CEI has sent final contract pricing to MHFD via email (01/26/2024) updated from pricing in October 2023. *The Individual Permit authorization under section 404 of the Clean Water Act for the project was received on (02/29/2024).*

**5. Piney Creek - Cherry Creek to Parker Road, Reaches 1 to 2 (SEMSWA) (CCB-6.5)**

- 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. IGA Amendment to bring in 2023 funding was recommended by the TAC and authorized by the Board in May (5/25/23). CCBWQA sent the Draft IGA Amendment to SEMSWA for review on 6/29/23. SEMSWA has no comments on the IGA Amendment and plans to take it to their Board in October (8/11/23). The project site was walked w/ith SEMSWA and Olsson and Associates on 8/30/23, Olsson is preparing their scope of work and fee for design. Comments on Olsson's scope of work and fee were provided to and coordinated with SEMSWA (11/10/23). Olsson's scope of work and fee have been finalized and SEMSWA is planning on contracting for the initial design phase in early 2024 (12/1/23). The design contract with Olsson was completed on (01/19/2024). A site visit is set with Nicole with SEMSWA for 02/12/2024 to observe and discuss the project. The project design kickoff meeting was held on 02/29/2024. *IGA Amendment to bring in 2024 funding was recommended by the TAC and May (03/07/2024)*

**6. Piney Creek south of Orchard Rd., Reaches 4 to 5 (SEMSWA) (CCB-6.6)**

- a. Description: This project includes approximately 3,800 liner feet of stream reclamation on Piney Creek. The project partners are MHFD, SEMSWA and CCBWQA.
- b. Status: A site visit is set with Nicole with SEMSWA for 02/12/2024 to observe and discuss the project. *A meeting was held with SEMSWA and MHFD to discuss IGA and potential consultants for design (03/07/2024)*

**7. McMurdo Gulch Priority 3 Stream Reclamation (CCB-7.4)**

- 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 phase. Muller Engineering is the design consultant.
- b. Status: Board authorized IGA for Priority 3 at their May 19,2022 meeting. Muller submitted their 30% deliverable on 10/31/22, review comments were returned on 11/8/22. Easements needed for projects have been identified (1/23/22). The 60% Submittal was received on 1/30/23 and comments have been provided on 2/7/23. Muller is working on updating their construction cost estimate (2/8/23). On 2/23/23, Castle Rock requested that CCBWQA's 2023 funding be deferred to 2024 to match their schedule. A meeting was held on 01/24/2024 to help determine the approach for obtaining 404 permitting (including Muller, ERO, Castle Rock and CCBWQA). Wetland mitigation under a nationwide permit was recommended by ERO and potential cost impacts for this approach were discussed. Muller's is working on updating estimated construction costs but anticipates being able to move forward with one complete project instead of phasing

into two (separating the work on the upstream reach). Muller provided a breakdown of the estimated construction cost versus budget in a meeting with Castle Rock on (02/08/2024) showing the potential to construct both projects in one phase.

**8. Lone Tree Creek in CCSP downstream of Pond (CCBWQA Only) (CCB-21.1)**

- a. Description: *New Project 2024 – Description TBD*
- b. Status:

**9. Lone Tree Creek in Cherry Creek State Park (CCB-21.3)**

- 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 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. A stakeholder meeting was held on 11/2/22 to discuss findings from CCBWQA's site visit and findings included in Wright Water Engineers report. The Board supports CCBWQA's partnering with Centennial at their 11/17/22 meeting. A Memo of Understanding is under review by Colorado Parks and Wildlife (CPW) affirming maintenance responsibilities for the stream reclamation fit under the current agreement between CCBWQA and CPW (3/30/23). CCBWQA sent the Draft IGA to Centennial for review on 5/23/23. The project is included in CCBWQA's 2024 Budget and 10-year CIP (11/10/23). UASCE is currently reviewing this project as of a letter requesting comments dated (12/15/2023). *100% Construction Documents were submitted (02/20/2024).*

**10. Happy Canyon Creek at Jordan Road (SEMSWA) (CCB-22.1)**

- a. Description: The design and construction are in partnership with Southeast Metro Stormwater Authority and MHPD 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 phosphorus 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). Lab results from stream soil samples were sent to Jacobs so that they include phosphorus

reduction in the alternatives analysis report; a groundwater investigation is needed to inform sediment capture facility and stream reclamation alternatives, scoping and negotiations are in progress (11/11/22). Groundwater scope of work has been reviewed and approved by project sponsors (1/13/23). The IGA Amendment bringing in the 2023 funding was recommended by TAC and authorized by the Board in April (5/12/23). A progress meeting was held on 10/30/23 where the groundwater information was reviewed and the impacts from the 2023 storms were discussed; MHFD is planning additional sediment removals accordingly. A project site walk with the project team is scheduled for 1/31/2024. A site walk was held on 01/31/2024 with SEMSWA, MHFD and the design team to discuss the study and observe the changes in the project since the 2023 storms. MHFD has performed sediment removals, and that quantity information was shared with the project team. (01/31/2024). A design progress meeting was held on (02/26/2024) to discuss the direction moving forward in the alternatives analysis from the assessment phase of the project.

#### **11. 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 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). Comments were provided on 90% submittal (11/11/22). Muller completed the 100% design submittal on 11/22/22. CDOT permit was issued, and pre-construction meeting was held on 1/10/23; construction start is scheduled for 1/30/23 pending execution of easement documents from Surrey Ridge which has agreed to terms and easement language. Notice to Proceed on construction is pending execution of easement documents (1/27/23). Easements have been signed by property owners and Notice to Proceed has been issued to Naranjo Civil Constructors (2/8/23). Construction is underway with initial construction BMPs/stormwater controls in place; water diversion and control is being set up for the downstream section of the project (3/10/23). Water control is in place and construction of stream reclamation is underway for downstream sections of the project (3/30/23). Riffle and Boulder Cascade drop structures on downstream third of project are nearing completion (4/13/23). Construction is underway in the middle third of the project; efforts consist of stream grading and installation of Riffle and Boulder Cascade drop structures (5/12/23). The storm damage from May 11 to 13, 2023 event is being identified and repaired (5/25/23). Construction on the middle third is substantially complete and work has begun on the upstream third (7/27/23). The construction is nearly complete with the punch list walk on 9/13/23; contractor is working on completing plantings and resolving punch list items. Asphalt repairs on the frontage road are being scheduled and some of the plantings will need to be done during the 2024 spring planting window to improve their chance for success (11/10/23). Asphalt repairs have been made and the project summary has been prepared (12/1/23). *Post construction LOMR services agreement amendment for Muller draft has been prepared by MHFD and sent to CCBWQA for review (03/06/2024).*

**12. 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). A progress meeting was held on 11/8/22, project will likely be done in 2 phases, IGA Amendment will be needed early in 2023 so that construction can start ahead of storm season. Dove Creek IGA for construction of Phase 1 is scheduled for TAC and Board in January 2023, construction is expected to start shortly afterwards (12/30/22). Construction is scheduled to start mid-February; construction agreement and engineering construction services amendment are currently being reviewed (1/27/23). Construction and engineering construction services have been finalized and a preconstruction meeting was held on 2/2/23. Notice to Proceed has been issued to Concrete Express; construction is underway with initial construction BMPs/stormwater controls in place (3/10/23). Water control is in place and construction of stream reclamation is on-going (3/30/23). Step pool drop structures have been constructed and work on soil wraps is underway (4/13/23). Low-flow or bank full channel work (soil wraps and erosion control blanket) and step-pool structures are complete, water diversion has been removed, and is active to storm flows; work continues in upland areas and higher elevations of stream reclamation (5/12/23). Storm damage from May 11 to 13, 2023 event is being repaired (5/25/23). Construction punch list is being completed (6/29/23). Construction of Phase 1 is complete (7/27/23). Project summary has been prepared (12/1/23).

**13. Dove Creek - Chambers Rd. to Pond D-1 (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. Construction was broken into 2 phases with Phase 2 scheduled for 2024.
- b. Status: CCBWQA acted at their October meeting to advance their funding for Phase 2 Construction to 2023 with SEMSWA's funding scheduled for 2024, IGA has been prepared and scheduled for signatures after SEMSWA's November Board meeting, phosphorus estimates for sediment capture areas for the project were provided to Technical Manager (11/10/23). A progress meeting was held on 01/23/2024 and construction is expected to start on 02/05/2024 completing 07/2024. GESC and State Stormwater Permitting was obtained week of the 02/05/2024 allowing the work to commence. Potholing for the project has been completed and results of waterline depths

in the project area, appear to reduce encasements required throughout the project reach as reported in the progress meeting (02/06/2024). Water diversion is in place as of (02/20/2024). *Forebay Slabs at Digicomm and Fairplay forebays have been poured as of (03/12/2024).*

**14. Mountain and Lake Loop Shoreline Stabilization Phase II (OM-)**

- a. Description: This project was identified 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). *Comments were received from the US Army Corps of Engineers on 8/29/23.* A meeting has been scheduled for 11/16/23 with USACOE's local staff and CPW staff to discuss the cut and fill balance requirements on this project and other planned projects in Cherry Creek State Park (11/10/23). A site meeting with CPW is being scheduled to determine the feasibility of the project after the 2023 storm damage (12/1/23). The 12/20/23 site meeting with Michelle Seubert identified 2 possible alternatives to address 2023 storm damage and meet USACOE cut and fill requirements while maintaining access to the swim beach. An updated project cost is about \$90,000 which is over the \$65,000 budgeted in 2024 (12/28/23). After discussion with Gene at USACE, further analysis to determine project feasibility is necessary and will be provided.

## Memorandum

**To:** CCBWQA Board of Directors  
**From:** Jessica DiToro, PE, LRE Water  
Jane Clary, CCBWQA Technical Manager, Wright Water Engineers  
**Date:** March 21, 2024  
**Subject:** Colorado Water Quality Rulemaking Hearing Information

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In the Colorado water quality world there are four types of hearings<sup>1</sup>:

1. Water Quality Control Commission (WQCC) Rulemaking Hearing (RMH) Proceedings:
  - RMH proceedings are where formal WQCC rules (e.g., Regulations 31-38<sup>2</sup>) are approved<sup>3</sup>.
  - Currently upcoming/ongoing WQCC RMHs can be found at the following webpage: <https://cdphe.colorado.gov/wqcc-rulemaking-proceedings>
  - Recently completed WQCC RMHs can be found at the following webpage: <https://cdphe.colorado.gov/completed-wqcc-hearings>
  - If you would like older RMHs that are no longer available on the Recently Completed Webpage, call me. These take some effort to dig up.
2. Administrative Action Hearings (AAH):
  - AAHs are where documents that are not formal rules (i.e., WQCC policies<sup>4</sup>, 208 water quality management plans, nonpoint source management programs, etc.) are approved.
  - Ongoing and recently completed AAHs can be found at the following webpage: <https://cdphe.colorado.gov/wqcc-administrative-action-hearings>
3. Public Informational Hearings (IH):
  - Public IHs are informal WQCC hearings that do not result in any formal action by the WQCC. Some examples of public IHs include issues scoping hearings<sup>5</sup> (ISH) and issues formulation hearings<sup>5</sup> (IFH).

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<sup>1</sup> WQCC Hearings: <https://cdphe.colorado.gov/wqcc-hearings>

<sup>2</sup> WQCC Regulations: <https://cdphe.colorado.gov/water-quality-control-commission-regulations>

<sup>3</sup> From Regulation 21, p. 3, a RMH may be conducted through written comments only: "The Commission may determine that receipt of only written comments on a published proposal, and any substantive written response(s) to such comments or issues raised in such comments, is sufficient public participation to establish an adequate record for Commission deliberation and decision-making. If the proponent of a proposal disagrees with any written comments submitted, the proponent shall submit a written response in accordance with the deadline established in the rulemaking proceeding notice. An opportunity shall be provided to other interested persons to submit written responses to comments in accordance with a deadline established in the rulemaking proceeding notice."

<sup>4</sup> WQCC Policies: <https://cdphe.colorado.gov/wqcc-policies>

<sup>5</sup> "For surface water quality classifications and standards which are organized by river basin and for the Basic Standards and Methodologies for Surface Water, the Commission has established a three-step triennial review process. The Issues Scoping Hearing is the first step in the process. In short, the Issues Scoping Hearing provides an opportunity for early identification of potential issues

- With respect to Control Regulations (i.e., Regulations 71-74 and 81-86<sup>2</sup>), the WQCC will first hold an IH to receive staff input and public comment. Depending on the outcome of the IH, the WQCC will decide if a formal RMH is needed.
- Upcoming and recently completed IHs can be found at the following webpages: <https://cdphe.colorado.gov/wqcc-public-informational-hearings>  
[https://drive.google.com/drive/folders/1vWZlpzixW4Y0\\_CJ2adoFY2ldcoZ7Wh3](https://drive.google.com/drive/folders/1vWZlpzixW4Y0_CJ2adoFY2ldcoZ7Wh3)

#### 4. Adjudicatory Hearings:

- Adjudicatory hearings are quasi-judicial proceedings by the WQCC or the Water Quality Control Division (WQCD) to review specific types of decisions by the WQCD with respect to individual regulated entities<sup>6</sup>. The procedures for these hearings are spelled out in WQCC Regulation 21<sup>7</sup> (Procedural Rules).
- Ongoing and recently completed WQCC adjudicatory hearings can be found at the following webpage: <https://cdphe.colorado.gov/wqcc-adjudicatory-hearings>

**Anyone can sign up to receive notice of any of the described upcoming hearings at the following WQCC webpage. The link below will send you to a google form where you can “pick your own adventure” and choose exactly what regulations, policies, etc. you would like to be notified about:**

**[https://docs.google.com/forms/d/e/1FAIpQLSeKpmSyDnGrMZFPGBqHxMmWvKEzp-xktDqpoAD\\_q0jX4Qrtnw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeKpmSyDnGrMZFPGBqHxMmWvKEzp-xktDqpoAD_q0jX4Qrtnw/viewform)**

**For additional information on the above hearings, please reference the WQCC’s Public Participation Website and Public Participation Handbook (February 2017):**

**Website: <https://cdphe.colorado.gov/wqcc-public-participation>**

**Handbook: [https://drive.google.com/file/d/166i2sWZ8c-59MLp7kDhQOWTDbCo\\_TQGS/view](https://drive.google.com/file/d/166i2sWZ8c-59MLp7kDhQOWTDbCo_TQGS/view)**

The following table lists the scheduled upcoming hearings through 2027, with hearings of interest to the Cherry Creek Basin Water Quality Authority (CCBWQA) highlighted in red and bolded. This information can also be found online in two places:

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*that may need to be addressed in the next major rulemaking hearing for particular regulations, and for identification of any issues that may need to be addressed in rulemaking prior to that time. The second step in the triennial review process – the Issues Formulation Hearing – results in the identification of the specific issues to be addressed in the next major rulemaking hearing. The third step is the Rulemaking Hearing, where any revisions to the water quality classifications and standards are formally adopted. The timing of the three steps is as follows: (1) the Issues Scoping Hearing is held in October of Year 1; (2) the Issues Formulation Hearing is held in November of Year 2; and (3) the Rulemaking Hearing is held in June of Year 3. More complete descriptions of these three steps in the triennial review process for surface water quality classifications and standards are posted on the Commission’s web site, under the section entitled ‘Water Quality Standards’.” Public Participation Handbook, p. 4-5.*

<sup>6</sup> This is not to be confused with a permit adjudication which is an administrative hearing requested by a Colorado Discharge Permit Systems (CDPS) permittee or other stakeholder, to challenge the terms and conditions of an issued permit, challenge permit denials, or challenge other permitting actions. These hearings are held by the Office of Administrative Courts, not the WQCC.

<sup>7</sup> Regulation 21: <https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=7100&fileName=5%20CCR%201002-21>



1. The WQCC Long-Range Schedule – Usually covers the upcoming two to three years of hearings in detail, and is updated regulatory. The Long-Range Schedule can be found at the following link<sup>8</sup>:

<https://drive.google.com/file/d/15GqG9bnNoJW-ChysL86oA8KaN59qiXsl/view><sup>9</sup>

2. The Index of WQCC Regulations and Policies – Usually covers the upcoming two to three years of Regulatory and Policy hearings. Also includes the date of last WQCC action. The Index of WQCC Regulations and Policies can be found at the following link<sup>10</sup>:

[https://drive.google.com/file/d/11cxHB5ce76Dp34UYaIWefvgqg9xq\\_wL1/view](https://drive.google.com/file/d/11cxHB5ce76Dp34UYaIWefvgqg9xq_wL1/view)<sup>9</sup>

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<sup>8</sup> Please note that as of the date of this memorandum, the WQCC Long-Range Schedule was last updated in January 2024.

<sup>9</sup> Main website for access: <https://cdphe.colorado.gov/wqcc-meetings>

<sup>10</sup> Please note that as of the date of this memorandum, the Index of WQCC Regulations and Policies was last updated January 2024.

Table 1. Water Quality Control Commission Regulation Hearing Timeline

Hearing Date	Rule	Event <sup>11</sup>	Potential Relevance to CCBWQA
August 2024	Regulation 64 – Biosolids Regulation	RMH	Relevance low, but applicable to Basin WWTFs
November 2024	Regulation 31 – Basic Standards for Surface Water	ISH	Relevance potentially high, CCBWQA should attend ISH to see what potential issues are planned for RMH in 2026, particularly changes to Lakes Nutrient Criteria (if any)
	Regulation 38 – South Platte Water Quality Standards	IFH <sup>A</sup>	Relevance high, CCBWQA will participate as next step in the lake nutrients site specific standards process for the 2025 RMH
December 2024	Regulations 32-38 - Temporary Modifications	RMH	Relevance low, unless temporary modifications applied to Cherry Creek Reservoir
March 2025	Regulation 22 – Site Location and Design Approval Regulation for Domestic Wastewater Treatment Works	RMH	Relevance potentially high, likely to address outstanding issues from March 2020 RMH such as historical lift stations. (Designated Mgmt. Agency roles revisited?)
	Regulation 43 – Onsite Wastewater Treatment System Regulations	RRIH	Relevance low, but should track to understand changes being proposed and if any changes are relevant to Regulation 72
May 2025	Regulation 93 – Colorado's Section 303(d) List and M&E List Focus: South Platte River Basin Segments	RMH	Relevance likely low, Cherry Creek Reservoir is currently on the 303(d) List for DO and Chlorophyll-a, Windmill Creek for selenium, and the Mainstem of Cherry Creek is

<sup>11</sup> “Event” Definitions:

TRIH – Triennial Review Informational Hearing; ISH – Issues Scoping Hearing; IFH – Issues Formulation Hearing; RMH – Rulemaking Hearing; AAH – Administrative Action Hearing; RRIH – Routine Review Informational Hearing

Hearing Date	Rule	Event <sup>11</sup>	Potential Relevance to CCBWQA
			<b>on the M&amp;E List for manganese</b>
	Regulation 84 – Reclaimed Water Control Regulation	TRIH	Relevance low, but should track to understand changes being proposed and if any changes are relevant to Regulation 72
June 2025 <sup>B</sup>	Regulation 38 – South Platte Water Quality Standards	RMH	<b>Relevance high, CCBWQA will file party status and propose site specific TP and TN standards for Cherry Creek Reservoir</b>
April 2026	Regulation 85 – Nutrients Management Control Regulation	TRIH	Relevance high, could revisit nonpoint source progress, and assess whether additional regulatory requirements are needed to replace current voluntary approach, focusing on agriculture (upper basin may be affected)
November 2025	Regulation 31 – Basic Standards for Surface Water	IFH	Relevance high, CCBWQA should attend IFH to see what will likely be proposed for RMH in 2026
	Regulations 85 – Nutrients Management Control Regulation	RMH	Relevance potentially high
June 2026	Regulation 31 – Basic Standards for Surface Water	RMH	Relevance high, CCBWQA should monitor and determine if party status is needed based on issues identified at 2025 IFH
TBD 2027	Regulations 31-38 – Lakes & Reservoirs Nutrients	RMH	Relevance high, TN and TP standards for Cherry Creek and Reuter-Hess Reservoirs to be set – Developing site-specific standards for this RMH
	Regulations 31-38 – Stream Nutrients	RMH	Relevance potentially high, TP and TN water quality standards applied to all

Hearing Date	Rule	Event <sup>11</sup>	Potential Relevance to CCBWQA
			streams and rivers in Colorado

**Footnotes**

<sup>A</sup> If the Regulation 38 RMH is rescheduled from June 2025 to June 2026, this will change from an IFH to an ISH, and an IFH will be scheduled for November 2025. Final decision on rescheduling the Regulation 38 RMH will be made by the WQCC in September 2024.

<sup>B</sup> Potential that this RMH will be moved to June 2026. Final decision on rescheduling the Regulation 38 RMH will be made by the WQCC in September 2024.

**For more information on the Water Quality 10-Year Roadmap follow the links below:**

[Roadmap Information](#)

[Roadmap Workgroup Meeting Materials](#)