



Notice of Regular Meeting
Cherry Creek Basin Water Quality Authority
Board of Directors Meeting
Thursday, April 18, 2024 at 8:30 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
CCBWQA Board of Directors

Virtual: Zoom
[Join Zoom Meeting](#) **Passcode: CCBWQA**
Phone (646)931-3860 Mtg ID 874 2577 5963# Passcode: #815374
[Meeting Documents](#)

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 March 21, 2024 Minutes (enclosed)
 - b. Acceptance of the Schedule of Cash Position Dated April, 2024 (enclosed)
 - c. Acceptance of the Paid Claims for March, 2024 (enclosed)
 - d. Approval of Unpaid Claims as of April, 2024 (enclosed)
3. Direction and/or Action (motions enclosed, 10 minutes)
 - a. Authorization to Execute the Happy Canyon Creek at Jordan IGA Amendment (Loewen, enclosed)
 - b. Acceptance of [Appendix H](#) of the March 2024 Cherry Creek Southwest Tributaries Major Drainageway Plan: Cottonwood, Lone Tree, Windmill, and Dove Creeks (Clary, enclosed)
4. Discussion (none)
5. Presentations (none)
6. Board Member Items (As Needed)
7. Updates (10 minutes)
 - a. Technical Manager (Clary)
 - i. [Runoff Reduction Report](#) and [Supporting Documents](#) (Integration of Review Comments in Progress)
 - ii. Cherry Creek Reach 1 Alternatives Analysis (progress update)
 - iii. Congressionally Directed Spending Application Submitted for Cherry Creek Reach 1 (enclosed)
 - b. Cherry Creek Stewardship Partners (Davenhill)
 - i. [Upcoming Events](#)
 - ii. Dam Safety Event- Be Dam Aware- May 18, 2024 (enclosed)
 - 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)
 1. RDS start-up week of April 15
 - iii. [Water Quality Update](#) (Stewart)
 - iv. Regulatory (DiToro)
 - v. [Land Use Referral Tracking](#) (Endyk)
 - e. Executive Committee
 - f. Legal
 - g. Other
8. Adjournment

Watershed Plan Workshop [Agenda](#) (9:00 a.m. to 11:30 a.m. following Board meeting)
[Board Binder](#) and [2024 Timeline](#)



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

Board Members Present

Aditi Bhaskar, Governor's Appointee
Bill Ruzzo, Assistant Secretary, Governor's Appointee
Christopher Lewis, Vice Chair, Governor's Appointee
Geoff Blue, City of Castle Pines - Alternate (zoom)
Jacob James, City of Lone Tree - Alternate
Jessica LaPierre, City of Aurora - Alternate (zoom)
John McCarty, Secretary/Treasurer, Governor's Appointee
John Woodling, Governor's Appointee
Joshua Rivero, Chair, Town of Parker
Luis Tovar, Special District Representative
Margaret Medellin, Governor's Appointee (zoom)
Max Brooks, Town of Castle Rock
Mike Sutherland, City of Centennial (zoom)
Ryan Adrian, Douglas County - Alternate
Stephanie Piko, City of Centennial - Alternate
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)
Caitlin Gappa, Board Appointee, Douglas County Health Department (zoom)
Casey Davenhill, Board Appointee, Cherry Creek Stewardship Partners
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)
Jon Erickson, TAC Chair, Board Appointee, Colorado Parks and Wildlife (zoom)
Lisa Knerr, TAC Vice Chair, Arapahoe County (zoom)
Rick Goncalves, Board Appointee

Others Present

Alan Leak, RESPEC
Elysa Loewen, Loewen Engineering
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

Director Rivero called the meeting to order at 9:00 am and led the pledge of allegiance.

2. Consent Agenda

- a. Approval of the February 15, 2024 Minutes
- b. Acceptance of the Schedule of Cash Position Dated March, 2024
- c. Acceptance of the Paid Claims for February, 2024
- d. Approval of Unpaid Claims as of March, 2024

Director Sundberg moved to approve the consent agenda. Seconded by Director McCarty. The motion carried.

3. Direction and/or Action

a. Authorization to Execute the Piney Creek Reach 1 & 2 IGA Amendment (Loewen, enclosed)

Elysa Loewen provided the Board with an [Action Item Memo](#) detailing the Piney Creek Reaches 1&2 project. The project is located on Piney Creek between the confluence of Cherry Creek and Parker Road and the downstream limit of this project is the confluence with Cherry Creek within the State Park. This is a partner project with SEMSWA, the project lead. It is estimated that this 0.55 mile-long project will immobilize 49 pounds of phosphorus annually. Further project details including a review of past workshops, studies, and field trips involving this project can be found in the memo. Additionally, the memo includes a project vicinity map. Project funding was included in CCBWQA's 2024 Budget.

A draft of the [IGA Amendment](#) with CCBWQA comments was included in the Board packet.

Director McCarty moved 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. Seconded by Director Ruzzo. The motion carried.

b. Acceptance of the [2023 CCBWQA Annual Report on Activities](#)

i. Letter to WQCC

ii. [Executive Summary](#)

Jane Clary provided the Board with a [letter](#) to the Water Quality Control Commission and Water Quality Control Division dated March 22, 2024 which included a link to the CCBWQA 2023 Annual Report and an attached executive summary of the report highlighting the key activities and successes from 2023.

Director McCarty moved 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. Seconded by Director Downing. The motion carried.

c. Acceptance of the [WY 2023 Monitoring Report](#)

Erin Stewart provided the Board with a link to the WY 2023 Monitoring Report.

Director Lewis moved to accept the Water Year 2023 Monitoring Report. Seconded by Director Bhaskar. The motion carried.

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)

Jane Clary provided the Board with a status [update](#) from Muller Engineering on the Alternatives Analysis Progress. Muller will present on the Alternatives Analysis at the April 4, 2024 TAC meeting.

Additionally, Jane Clary requested Board direction on coordinating and submitting applications for Congressionally-Directed Spending.

Discussion included:

- The importance of letters of support from Centennial and other local agencies.
- Highlighting the beneficial uses of CC State Park in the grant application.
- Noting that CC State Park is Colorado's most visited state park in the grant application.
- Coordination with USACE prior to submittal of the grant application.
- Understanding that Federal funding comes with a lot of paperwork.

- Recognition that some of CCBWQA’s capital projects on the 5- and 10-year CIP may need to be re-evaluated due to the importance of the Cherry Creek Reach 1 project.
- CPW and USACE may have interest in bringing additional funds to the project as Reach 1 is within the State Park.

Director Lewis moved to authorize the technical manager to coordinate the application for congressionally-directed spending for water quality improvements within Cherry Creek State Park with input from the Executive Committee. Seconded by Director Downing. The motion passed.

4. Discussion

a. WQCD 10-Year Water Quality Roadmap Update

Jessica DiToro provided an update [memo](#) from her participation in the February 22, 2024 10-year Water Quality WQCD Roadmap meeting and requested the Board provide feedback on 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.

Jessica will continue to provide updates to the Board and TAC on these topics, and no changes were made to her proposed recommendations as a result of Board discussion.

b. Land Use Referral Process Update

Jane Clary provided an update to the Board that based on further internal discussion among contract staff and feedback from the TAC, no formal change to the LUR process is planned at this time. However, CCBWQA will look for opportunities to provide early input on projects including utilities that cross Cherry Creek and projects within the State Park. CCBWQA will continue to provide a technical review on all CDOT projects as requested.

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

Director Bhaskar [presented](#) on Landscape Transformations: Effects on Heat, Equity, and Streamflow. The study is starting in the fall in the Denver area and information regarding future stakeholder workshops will be communicated to the Board. CCBWQA provided a letter of support for this project prior to Director Bhaskar’s appointment to the Board.

7. Updates

a. Technical Manager

i. Project Updates

a. [Runoff Reduction Report](#) and [Supporting Documents](#)

Wright Water Engineers’ has completed the Runoff Reduction Report and provided it to the TAC and Board. Comments are requested ASAP.

b. Lone Tree Windmill Master Drainage Plan

Draft provided to the TAC with a final report planned for submittal at the April TAC and Board meetings.

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)

[Upgrades](#) are being made to monitoring equipment in the reservoir. Equipment replacement was necessary due to stolen equipment.

Erin Stewart will present information on new capabilities of this equipment in more detail at a future meeting.

b. Cherry Creek Stewardship Partners (Davenhill)

i. [Upcoming Events](#)

Casey Davenhill recognized the Science Fair award recipient and updated the Board that the annual Watershed Conference planning efforts are underway.

Metro roundtable positions are open and accepting applications.

May 18, 2024 Dam Safety Event at CC State Park is planned.

c. TAC (Knerr)

i. CIP Subcommittee with Draft Charter (enclosed)

Lisa Knerr and Jane Clary provided the Board with a [draft charter](#) for the TAC CIP Subcommittee

Discussion included:

- The CIP Subcommittee may want to highlight beneficial uses when considering projects on the CIP.
- External expertise should be considered to provide guidance on significant decisions when appropriate.
- The CIP Subcommittee will provide regular updates to the Board and provide opportunity for Board review before action is requested.

Board members should contact Val Endyk if interested in participating in the TAC CIP Subcommittee. Bill Ruzzo plans to participate on the CIP TAC Subcommittee, but no other Board members expressed interest in participating during the meeting.

d. Contract Staff (As Needed)

i. Pollution Abatement Projects - [CIP Status Report](#)

ii. In-Park PRF and RDS Maintenance and Operations

Working on collaborating with the State Park on maintenance.

RDS startup scheduled for April.

iii. [Water Quality Update](#)

iv. Regulatory (DiToro)

a. [Colorado Water Quality Rulemaking Hearing Information](#)

v. [Land Use Referral Tracking](#)

e. Executive Committee

f. Legal

ADA Accessibility Policy will be posted on the CCBWQA website.

g. Other

8. Adjournment

There being no further business to come before the Board, Director Rivero adjourned the meeting at 10:54 am.

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

Cherry Creek Basin Water Quality Authority
Schedule of Cash Position
March 31, 2024
as of April 11, 2024

	<u>General Fund</u>	<u>Pollution Abatement Fund</u>	<u>Enterprise Fund</u>	<u>Total</u>
<u>1st Bank - Checking Account</u>				
Balance as of 03/31/24	\$ 25,534.77	\$ 25,652.90	\$ 7,740.10	\$ 58,927.77
Subsequent activities:				
04/09/24 VISA Charges	(334.49)	-	-	(334.49)
<i>Anticipated Activities</i>				
<i>Transfer from ColoTrust for bills</i>	33,000.00	140,000.00	8,000.00	181,000.00
<i>Bill.com open claims</i>	(30,566.91)	(138,436.22)	(10,442.71)	(179,445.84)
<i>Anticipated balance</i>	<u>\$ 27,633.37</u>	<u>\$ 27,216.68</u>	<u>\$ 5,297.39</u>	<u>\$ 60,147.44</u>
<u>ColoTrust General - (8001)</u>				
Balance as of 03/31/24	\$ 1,351,670.91	\$ 2,327,232.25	\$ 1,577,779.73	\$ 5,256,682.89
Subsequent activities:				
04/01/24 CSD P&L Insurance Deposit	4,693.08	-	-	4,693.08
04/10/24 Ptax Arapahoe Cty (Mar)	136,804.01	-	-	136,804.01
04/10/24 Ptax Douglas Cty (Mar)	98,528.85	-	-	98,528.85
04/10/24 Deposits Dev Checks	-	-	22,244.87	22,244.87
<i>Anticipated Activities</i>				
<i>Monthly Transfer for AP</i>	(33,000.00)	(140,000.00)	(8,000.00)	(181,000.00)
<i>Anticipated balance</i>	<u>\$ 1,558,696.85</u>	<u>\$ 2,187,232.25</u>	<u>\$ 1,592,024.60</u>	<u>\$ 5,518,953.70</u>
<u>ColoTrust Pollution Abatement - (8002)</u>				
Balance as of 03/31/24	\$ -	\$ 58,096.96	\$ -	\$ 58,096.96
<i>Anticipated balance</i>	<u>\$ -</u>	<u>\$ 58,096.96</u>	<u>\$ -</u>	<u>\$ 58,096.96</u>
<u>CSAFE - Savings Account</u>				
Balance as of 03/31/24	\$ 859,161.30	\$ 42,246.04	\$ 440,259.09	\$ 1,341,666.43
<i>Anticipated balance</i>	<u>\$ 859,161.30</u>	<u>\$ 42,246.04</u>	<u>\$ 440,259.09</u>	<u>\$ 1,341,666.43</u>
<i>Total funds available as of date above</i>	<u><u>\$ 2,445,491.52</u></u>	<u><u>\$ 2,314,791.93</u></u>	<u><u>\$ 2,037,581.08</u></u>	<u><u>\$ 6,978,864.53</u></u>

Effective monthly yield (as of 3/31/2024)

1st Bank - 0.100%* if Balance >\$20,000
ColoTrust Plus - 5.4521%
CSAFE - 5.39%

**Cherry Creek Basin Water Quality Authority
Paid Claims March 21, 2024 through April 18, 2024**

Process Date	Vendor	Invoice Number	Payment Reference	Amount
3/25/2024	CliftonLarsonAllen LLP	L241069606	P24031801 - 7984886	\$ 5,052.67
3/25/2024	Collins Cole Flynn Winn & Ulmer, PLLC	Multiple	P24032201 - 9063134	8,456.08
3/25/2024	Hydros Consulting Inc.	Multiple	P24032201 - 9063137	15,116.02
3/25/2024	Loewen Engineering, INC	786	P24032201 - 9063153	10,620.69
3/25/2024	LRE Water	Multiple	P24032201 - 9063148	38,741.85
3/25/2024	Muller Engineering Company	38078	P24032201 - 9063151	24,080.00
3/25/2024	Pinpoint Systems Inc.	10250	P24032201 - 9063155	262.50
3/25/2024	RESPEC	Multiple	P24032201 - 9063140	5,992.50
3/25/2024	RG and Associates LLC	153772	P24032201 - 9063158	2,320.00
3/25/2024	Valerie Endyk	202402	P24032201 - 9063160	3,041.50
3/25/2024	Wright Water Engineers, Inc.	Multiple	P24032201 - 9063143	21,887.00
			Subtotal	\$ 135,570.81
Other Payments				
3/26/2024	Verizon	MAR	ACH	\$ 51.46
3/28/2024	XCEL Energy	867866131	ACH	555.22
3/28/2024	Amazon - Signs		Visa	102.98
4/1/2024	Amazon - Stickers		Visa	32.49
4/2/2024	Streamline		Visa	249.00
4/4/2024	USPS		Visa	8.00
4/9/2024	Special District Association		Visa	45.00
			Subtotal	\$ 1,044.15
			Total Payments	\$ 136,614.96

Cherry Creek Basin Water Quality Authority
Unpaid Claims as of 4/18/24

Invoice date	Invoice	Vendor*	Fund	Chart of account	Invoice amount
2/29/2024	L241190721	CliftonLarsonAllen LLP	10	7000 - Accounting	\$ 11,226.10
3/31/2024	6044	Collins Cole Flynn Winn & Ulmer, PLLC	10	7460 - Legal	7,556.00
3/27/2024	INV-240271	Hydrologik LLC	40	7618 - Equipment	8,022.46
3/31/2024	547-013	Hydros Consulting Inc.	11	7440 - Management/Administration	18,695.35
4/5/2024	INV106495	In-Situ, Inc	11	7618 - Equipment	13,843.00
3/25/2024	800	Loewen Engineering, INC	10	7440 - Management/Administration	5,440.00
3/25/2024	800	Loewen Engineering, INC	11	7440 - Management/Administration	5,928.94
3/20/2024	38281	Muller Engineering Company	11	7762 - SR - Reservoir to LV Road	33,626.40
3/31/2024	10262	Pinpoint Systems Inc.	10	7480 - Office/Miscellaneous	210.00
3/31/2024	2024-02	R2R Engineers, Inc.	11	7440 - Management/Administration	945.00
2/29/2024	INV-0224-813	RESPEC	11	7511 - RSS East Shade Shelter	1,679.25
2/29/2024	INV-0224-814	RESPEC	11	7440 - Management/Administration	3,235.00
3/31/2024	153859	RG and Associates LLC	10	Various Budget Codes for General Fund	1,600.00
3/31/2024	153859	RG and Associates LLC	11	Various Budget Codes for PA Fund	1,520.00
4/4/2024	45372	Southeast Metro Stormwater Authority	11	7761 - SR - Piney Creek (Reach 1-2)	39,000.00
3/31/2024	202403	Valerie Endyk	10	7201 - Administrative assistant	4,483.25
2/29/2024	69197	Wright Water Engineers, Inc.	40	7677 - CCBWQA Planning	510.25
3/31/2024	69341	Wright Water Engineers, Inc.	40	7685 - SSP BMP Effectiveness	1,910.00
3/31/2024	69346	Wright Water Engineers, Inc.	11	7440 - Management/Administration	19,250.00
					\$ 178,681.00

Bills paid via autopay ACH

3/30/2024	MAR	Verizon (Estimate)	10	7480 - Miscellaneous	51.56
3/31/2024	872052911	Xcel Energy	11	7818 - Utilities - Reservoir Destratification	713.28
					\$ 764.84

General Fund - 10	\$	30,566.91
Pollution Abatement Fund - 11		138,436.22
Enterprise Fund - 40		10,442.71
Total Claims by Funding Source	\$	179,445.84

* by vendor



ACTION ITEM MEMORANDUM

To: CCBWQA Board of Directors
From: Elysa Loewen, Pollution Abatement Project Manager
Date: April 18, 2024
Subject: Happy Canyon Creek at Jordan IGA Amendment

Request: *Move that the Board authorize the execution of the IGA Amendment for Stream Improvements at Happy Canyon Creek with an expenditure not to exceed \$50,000 for 2024*

Project/Issue: Happy Canyon Creek at Jordan

The Project is along Happy Canyon Creek near Jordan Road beginning downstream at the Confluence with Cherry Creek to the upstream limits of the project at the Douglas County line (upstream of Jordan Road), located in the City of Centennial and Arapahoe County (Project) see figure in the **Enclosure**. It is a partner project with the Mile High Flood District (MHFD) and Southeast Metro Stormwater Authority (SEMSWA) with MHFD as the project lead. The proposed stream reclamation benefits the water quality in Happy Canyon Creek, Cherry Creek, and the Cherry Creek Reservoir by reducing bed and bank erosion which immobilizes phosphorus in the adjacent soils. It is estimated that this 0.85-mile-long project will immobilize 77 pounds of phosphorus annually. The sediment deposition within the channel, especially from Jordan Road to the Cherry Creek confluence has increased annually and more significantly after Spring 2023 events (see photos below) A site walk was completed by the project stake holders in January 2024 to observe the conditions and discuss the assessment/study completed by Jacobs (the consultant); the project is moving forward with preparing alternative analysis for conceptual design.



Figure 1: Photo Downstream of Jordan Road at Drop Structure (Photo courtesy of SEMSWA, 2023)



Figure 2: Photo Upstream of Jordan Road at Drop Structure (Photo courtesy of SEMSWA, 2023)

Funding:

The IGA Amendment for Happy Canyon Creek at Jordan would include additional funding of \$500,000 (\$50,000 CCBWQA which is in the 2024 approved budget, \$200,000 SEMSWA, and \$250,000 MHFD). The table below provides a breakdown of funding by sponsors and shows CCBWQA’s participation is approximately 13%. Additional IGA Amendments are anticipated to bring in future funding from the sponsors’ capital improvement programs which currently include funding through 2032.

Funding Source	2022	2023	2024		
	Initial Funding	Additional Annual Funding	Additional Annual Funding	Cumulative Project Funding	Project Sponsor %
MHFD	\$350,000	\$290,000	\$250,000	\$890,000	49%
SEMSWA	\$300,000	\$202,000	\$200,000	\$702,000	38%
CCBWQA	\$93,000	\$88,000	\$50,000	\$231,000	13%
Total	\$743,000	\$580,000	\$500,000	\$1,823,000	100 %

Budget: The Project was included in CCBWQA’s 2024 Budget of \$50,000 (Happy Canyon Creek at Jordan)

TAC Review: This action item was presented at the April 4, 2024, TAC meeting. The TAC unanimously recommended that the Board authorize the execution of the IGA Amendment for Stream Improvements at Happy Canyon Creek with an expenditure not to exceed \$50,000 for 2024.

Motion: *Move that the Board authorize the execution of the IGA Amendment for Stream Improvements at Happy Canyon Creek with an expenditure not to exceed \$50,000 for 2024*

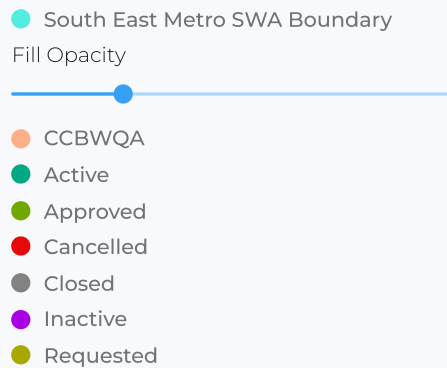
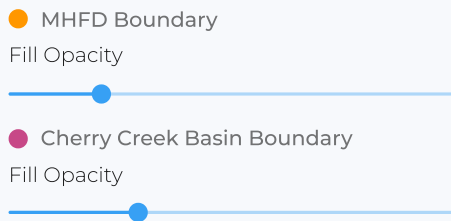
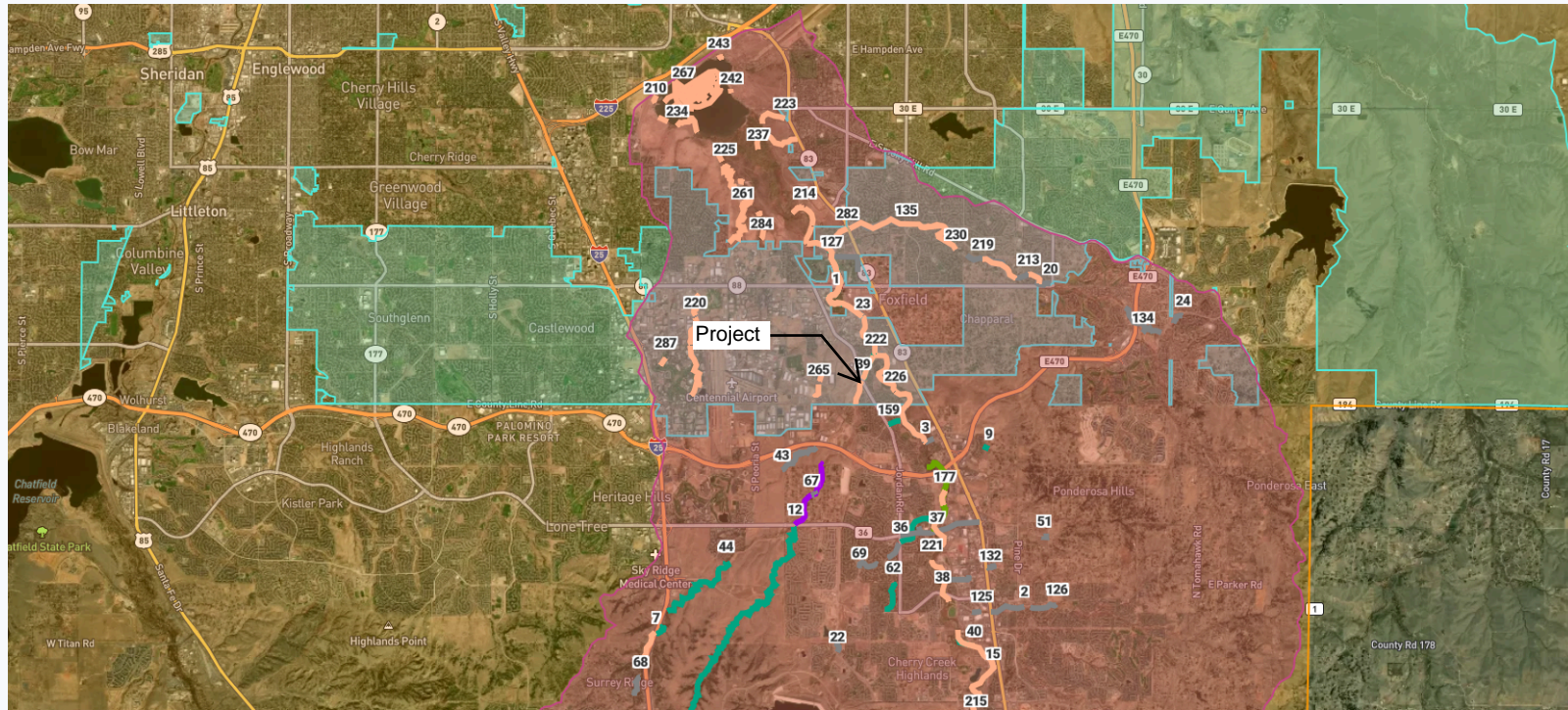
Enclosures: Project Location Exhibit



Cherry Creek Basin Water Quality Authority Map

Happy Canyon Creek at Jordan

Created: March 27th 2024, 3:53pm



3 mi



THIRD AMENDMENT TO
AGREEMENT REGARDING
DESIGN AND CONSTRUCTION
OF DRAINAGE AND FLOOD CONTROL IMPROVEMENTS FOR
HAPPY CANYON CREEK FROM JORDAN ROAD TO BRONCOS PARKWAY

Agreement No. 21-05.24C
Project No. 108514

THIS THIRD AMENDMENT TO AGREEMENT (hereinafter called "THIRD AMENDMENT"), by and between URBAN DRAINAGE AND FLOOD CONTROL DISTRICT D/B/A MILE HIGH FLOOD DISTRICT (hereinafter called "DISTRICT") and SOUTHEAST METRO STORMWATER AUTHORITY (hereinafter called "SEMSWA") and CHERRY CREEK BASIN WATER QUALITY AUTHORITY (hereinafter called "CCBWQA") and collectively known as "PARTIES";

WITNESSETH:

WHEREAS, PARTIES have entered into "Agreement Regarding Design and Construction of Drainage and Flood Control Improvements for Happy Canyon Creek from Jordan Road to Broncos Parkway" (Agreement No. 21-05.24) dated June 30, 2021, as amended by First Amendment (Amendment No. 21-05.24A), dated May 22, 2022, as amended by the Second Amendment (Amendment No. 21-05.24B), dated May 21, 2023 (collectively called "AGREEMENT"); and

WHEREAS, PARTIES now desire to proceed with design and construction of drainage and flood control improvements for Happy Canyon Creek from Jordan Road to Broncos Parkway (hereinafter called "PROJECT"); and

WHEREAS, PARTIES desire to increase the level of funding by \$500,000; and

WHEREAS, DISTRICT's Board of Directors has authorized additional DISTRICT financial participation for PROJECT (Resolution No. 44, Series of 2024); and

WHEREAS, the PARTIES Boards of Directors, have authorized, by appropriation or resolution, each PARTY's share costs of PROJECT costs.

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

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

4. PROJECT COSTS AND ALLOCATION OF COSTS

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

1. Final design services;
2. Construction of improvements;
3. Contingencies mutually agreeable to PARTIES.

B. It is understood that PROJECT costs as defined above are not to exceed \$1,823,000 without amendment to this AGREEMENT.

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

<u>ITEM</u>	<u>AS AMENDED</u>		<u>PREVIOUSLY AMENDED</u>
1. Final Design	\$	700,000	\$ 700,000
2. Construction	\$	1,123,000	\$ 623,000
3. Contingency*	\$	-0-	\$ -0-
Grand Total	\$	1,823,000	\$ 1,323,000

* It is anticipated that funds for Contingency shall be added to this Agreement at a future date, by amendment of this Agreement.

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

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

	<u>Percentage Share</u>	<u>Previously Contributed</u>	<u>Additional Contribution</u>	<u>Maximum Contribution</u>
DISTRICT	48.8%	\$640,000	\$250,000	\$890,000
SEMSWA	38.5%	\$502,000	\$200,000	\$702,000
CCBWQA	12.7%	\$181,000	\$50,000	\$231,000
TOTAL	100.00%	\$1,323,000	\$500,000	\$1,823,000

D. DISTRICT and SEMSWA acknowledge that (i) CCBWQA does not by this Agreement irrevocably pledge present cash reserves for payments in future fiscal years, and (ii) It is understood and agreed that notwithstanding any other provision contained herein to the contrary, any additional contribution obligation of CCBWQA hereunder, whether direct or contingent, shall extend only to funds duly and lawfully appropriated and encumbered by the Board of Directors of CCBWQA for the purposes of the Agreement, and paid into the Treasury of CCBWQA, and shall under no circumstances exceed \$231,000 without CCBWQA's prior express written consent.

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

5. MANAGEMENT OF FINANCES

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

Payment of each PARTY's full share (SEMSWA - \$702,000; CCBWQA - \$231,000; DISTRICT - \$890,000) to extent not previously paid, shall be paid to DISTRICT subsequent to execution of this

AGREEMENT and within 30 days of request for payment by DISTRICT. The payments by PARTIES shall be held by DISTRICT in a special fund to pay for increments of PROJECT as authorized by PARTIES, and as defined herein. DISTRICT shall provide a periodic accounting of PROJECT funds as well as a periodic notification to SEMSWA and CCBWQA of any unpaid obligations. Any interest earned by the monies contributed by PARTIES shall be accrued to the special fund established by DISTRICT for PROJECT and such interest shall be used only for PROJECT upon approval by the contracting officers (Paragraph 13).

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

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

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

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

By _____

Name Laura A. Kroeger

Title Executive Director

Date _____

Checked By

SOUTHEAST METRO STORMWATER
AUTHORITY

By _____

Name _____

Title _____

Date _____

CHERRY CREEK BASIN
WATER QUALITY AUTHORITY

CCBWQA Checked by

By _____

Name _____

Title CCBWQA Chairman

Date _____

Attest:

APPROVED AS TO FORM:

Timothy J. Flynn, General Counsel for
CCBWQA



ACTION ITEM MEMORANDUM

To: CCBWQA Board of Directors

From: Jane Clary, Technical Manager

Date: April 11, 2024

Subject: Cherry Creek Southwest Tributaries Major Drainageway Plan:
Cottonwood, Lone Tree, Windmill, and Dove Creeks

Request: That the CCBWQA Board accept “Appendix H Cherry Creek State Park” of the March 2024 Cherry Creek Southwest Tributaries Major Drainageway Plan: Cottonwood, Lone Tree, Windmill, and Dove Creeks.

Issue: The Mile High Flood District (MHFD) and Southeast Metro Stormwater Authority (SEMSWA) co-sponsored the Cherry Creek Southwest Tributaries Major Drainageway Plan: Cottonwood, Lone Tree, Windmill, and Dove Creeks, which originally extended to the Cherry Creek State Park Boundary. The CCBWQA Board authorized CCBWQA funding to extend the master plan from the Park Boundary to the Reservoir, including updated hydrology and alternatives evaluation for projects within Cherry Creek State Park for the subject drainageways. Wright Water Engineers, Inc., provide a final report (Appendix H to the Master Plan) to the TAC that incorporated comments received on the draft report at the April 4 TAC meeting. The TAC recommended that the Board accept Appendix H.

Motion: I move that the Board accept “Appendix H Cherry Creek State Park” of the March 2024 Cherry Creek Southwest Tributaries Major Drainageway Plan: Cottonwood, Lone Tree, Windmill, and Dove Creeks.

Enclosure: Link to [Appendix H](#)



SUMMARY MEMORANDUM

To: CCBWQA TAC
From: Jane Clary, Technical Manager
Date: March 29, 2024
Subject: Application for FY25 Congressionally Directed Spending

On March 28, 2024, CCBWQA submitted an application for FY25 Congressionally Directed Spending to Senators Bennet and Hickenlooper, with a copy provided to Congressman Jason Crow's office. The "receipt" for the on-line Google Form is attached, along with supplemental cost information and an outreach summary. Letters of support were provided by Mayor Stephanie Piko of the City of Centennial, Chairperson Carrie Warren Gully of the Arapahoe County Commissioners, and Joe Maxwell with the U.S. Army Corps of Engineers. CCBWQA staff and Executive Committee members coordinated with the USACE Tri Lakes Office prior to submittal of the application to confirm that the project had a reasonable nexus to the USACE Operations and Maintenance funding category in the grant application. (The grant application required selection of a federal program for funding.)

Prior to the submittal of the application, CCBWQA staff and Mayor Piko also coordinated with staff in Senator Bennet's who are aware of CCBWQA's application. Representative Crow's office confirmed receipt of a copy of the application and will let CCBWQA know when Congressman Crow's funding application is available.

Enclosure

Note: Google Form Receipt does not include original formatting or show which yes/no answers were selected in the application; therefore, this "receipt" is for general information only.

From: [Manager](#)
To: [Jane Clary](#)
Subject: FW: FY25 Congressionally Directed Spending Official Request Form for U.S. Senators Michael Bennet and John Hickenlooper
Date: Thursday, March 28, 2024 2:51:30 PM

From: Google Forms <forms-receipts-noreply@google.com>
Sent: Thursday, March 28, 2024 2:23 PM
To: Manager <manager@ccbwqa.org>
Subject: FY25 Congressionally Directed Spending Official Request Form for U.S. Senators Michael Bennet and John Hickenlooper

Google Forms



Thanks for filling out [FY25 Congressionally Directed Spending Official Request Form for U.S. Senators Michael Bennet and John Hickenlooper](#)

Here's what was received.

FY25 Congressionally Directed Spending Official Request Form for U.S. Senators Michael Bennet and John Hickenlooper

Please submit your Congressionally Directed Spending (CDS) request for fiscal year 2025 (FY25) by **11:59 PM MT on Friday, March 29th.**

As our offices work to secure important federal funding for Colorado, we welcome CDS requests for the upcoming FY25. The CDS process is an opportunity for state and local government entities and nonprofits to request funding from members of Congress for specific projects in their home states.

Funding for projects, if selected by the Senate Committee on Appropriations and ultimately passed into law by Congress, would be distributed as part of the federal appropriations process during FY25.

Senators Bennet and Hickenlooper are providing a joint application process for FY25 CDS projects. Applicants will be able to complete *one* application form which will be received by both offices. **Each Senator will then review project requests and submit to the Senate Committee on Appropriations individually.**

Please ensure your submission is consistent with the guidelines set by the Senate Committee on Appropriations. Our staff will carefully review all requests. Please note the submission of requests **does not** guarantee funding. If you have any questions, please contact one of our regional offices. You can find office locations and contact information for Senator Bennet [here](#) and Senator Hickenlooper [here](#).

All requests for CDS must include one letter of support from either state, local, or tribal governments or community leaders that details the community benefits and support for the project. Please email your letter of support to both cds@hickenlooper.senate.gov and directedspending@bennet.senate.gov.

Please provide your email address below to receive a copy of your request responses. If you would like to review the full form, please view [this PDF](#).

If you are looking for the FY25 programmatic request form, please visit our websites: [Senator Michael Bennet Programmatic Request Form](#) and [Senator John Hickenlooper Programmatic Request Form](#). Note: the senators have separate programmatic request forms.

Email *

manager@ccbwqa.org

Primary Contact Information

Please provide information for the primary point of contact from the requesting organization or government entity. This individual is the person who will be contacted by the agency for dispersal of funds. Their personal contact information will not be publicized.

First and Last Name *

Jane Clary

Organization *

Cherry Creek Basin Water Quality Authority

Title *

Technical Manager

Phone *

303-803-5187

Email *

manager@ccbwwa.org

Street Address *

P.O. Box 3166

City *

Centennial

State *

CO

Zip Code *

80161

Is this form being filled out by the point of contact listed above? *

Yes

No

Project Information

If your request is submitted by either Senator, it will be listed the project on their website as an official fiscal year 2025 (FY25) request.

Project Title *

Cherry Creek Reservoir Basin Stream Restoration

Statement of Project Purpose: Please provide a brief description of the project, including the specific activities that will be funded and its benefit to the community. *

The purpose of this project is restoration of Cherry Creek in Cherry Creek State Park between the Cherry Creek Reservoir and Lakeview Drive. This stream reach (Reach 1) is experiencing severe and progressive erosion that adversely impacts water quality in Cherry Creek Reservoir, impacts Cherry Creek State Park trails and infrastructure, places Aurora Water's water pipeline at risk, and may impact the U.S. Army Corps of Engineers' operation of the reservoir for flood control. The Basin 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 Reach 1 being the highest priority. (Studies are accessible at <https://www.cherrycreekbasin.org/projects-prf-pap> under Cherry Creek, Reach 1 folder.) Alternative engineering solutions have been identified with cost estimates to restore the stream channel and surrounding riparian area. This request for funding focuses on construction of

the most urgent phase of the project (Phase 1 of Reach 1), with project tasks and costs provided in #39 of this application. As additional background, the Colorado legislature established the Cherry Creek Basin Water Quality Authority to protect and improve water quality in the reservoir and in Cherry Creek, particularly from nutrient pollution that leads to algal blooms. Despite very stringent total phosphorus limits for wastewater treatment plants in the basin and other projects, phosphorus loading to the reservoir remains high and the reservoir does not meet its chlorophyll-a water quality standard, with occasional harmful algal blooms occurring. Erosion of the stream channel in Reach 1 is an ongoing significant source of sediment and phosphorus loading (>1,680 pounds/year) to the reservoir. Stabilization of this channel is a high priority for the Basin Authority, with concerns increasing following the damaging summer floods of 2023; however, the Basin Authority's near-term funds are insufficient to complete the project without outside funding. 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 2025), and construction beginning in the early fall of 2025 (during low flow conditions). The project will provide these benefits to the citizens of Colorado:

- 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.
- Supports U.S. Army Corps of Engineers' operation and maintenance objectives for flood control functions of the reservoir.
- Protection of Aurora Water's major water supply line through the State Park.
- Increased channel stability for Cherry Creek during flood conditions, reducing damage to trails and Colorado Parks and Wildlife's only road crossing the State Park (Lakeview Drive).
- Improved stream function for aquatic life, floodplain reconnection and riparian vegetation.
- Improved experience of a natural amenity for over 1.5 million annual visitors to Cherry Creek State Park.

Exact Project Address *

Cherry Creek State Park, 4201 S. Parker Rd., Aurora, CO 80014 (Cherry Creek downstream of Lakeview Dr.)

County where the project is located *

Arapahoe

Proposed project start date: *

MM DD YYYY

09 / 01 / 2025

Proposed project completion date: *

MM DD YYYY

12 / 31 / 2027

Describe how the proposed project purpose is consistent with the activities and mission of the federal agency which would fund the project. If you are unsure of which agency you are requesting funding from, please identify which agencies best oversee the project's purpose. *

The project is located on property owned by the U.S. Army Corps of Engineers and within the flood pool of the Cherry Creek Reservoir, which was constructed and is operated for flood control. The project is consistent with Operations and Maintenance of the reservoir because it will reduce sediment loading to the reservoir, reduce algal blooms, and reduce large woody debris hazards in the reservoir under flood conditions. The incised and eroding channel is surrounded by dying and dead trees that can be transported into the reservoir under flood events.

Why is this project a good use of taxpayer funds and how will it benefit the state of Colorado? *

This project is a good use of taxpayer funds because it protects and restores a public resource that experiences over 1.5 million park visitors per year. It is an urban oasis that is easily accessible within the metro-Denver area. Families of diverse ethnic and socioeconomic backgrounds access the park to enjoy the trail system, birds and other wildlife, fishing, camping, water recreation, picnicking and other activities. On an annual basis, Colorado Parks and Wildlife harvests over 100 million walleye eggs from the reservoir to support other fisheries throughout Colorado. The cost of the project exceeds the near-term available funds of the Basin Authority and its partners, with more erosion occurring and costs increasing the longer the project is delayed. Additionally, Cherry Creek Reservoir is considered "impaired" for elevated chlorophyll-a and this project helps to reduce over 1,600 pounds of annual phosphorus loading that "feed" algal blooms, which can be harmful and result in beach closures to the public and a diminished experience.

What is the total cost of the project? *

\$11.74 million for Phase 1 of Cherry Creek Reach 1

What amount is being requested for Congressionally Directed Spending? *

\$3 million

Is this a one-time request for Congressionally Directed Spending? *

Yes

No

If additional federal support is necessary, when will the project be self-sustaining? *

Not applicable

What are the sources of the remaining non-federal funding (private or other governmental funding) and when will that funding be secured? *

Cherry Creek Basin Water Quality Authority, Mile High Flood District, and Aurora Water are primary non-grant-related funding partners. Grant applications in progress to Colorado Water Conservation

Board and Great Outdoors Colorado. Funding request made to Colorado Parks and Wildlife. Funding expected to be secured for use within a 5-year window from partners.

Please list all organizations that have committed funds or are expected to commit funds for this project

Cherry Creek Basin Water Quality Authority, Mile High Flood District, and Aurora Water are primary non-grant-related funding partners. Grant applications in progress to Colorado Water Conservation Board and Great Outdoors Colorado. Funding request made to Colorado Parks and Wildlife.

Does the request include a request for construction, the acquisition of property, or renovation of buildings? *

Yes

No

Other:

If the request includes a request for new construction, has this construction already begun? *

Yes

No

Not Applicable

If the request includes construction, have you begun the process of any necessary environmental review? *

Yes

No

Unsure

N/A

Is this project, or a portion of this project, contingent on receiving CDS funding?

*

Yes, the entire project is contingent on receiving CDS funding

Yes, a portion of this project is contingent on receiving CDS funding

No

Please explain any necessary funding or timing contingencies for this project. If there are none, you may leave this answer blank.

The Basin Authority's timeline for the project includes: 1) completion of a selected alternative for channel restoration (stakeholder meeting on April 4, 2024, with report completion in the spring 2024); 2) conceptual design (fall 2024); 3) engineering design, permitting and contractor selection (spring-summer 2025); and 4) construction targeted to begin in the early fall of 2025 (during low flow conditions). Depending on the timing of environmental permits and funding, construction timelines could be extended. The Basin Authority is concurrently applying for other grants and aligning funding timelines with partners. Funds are available for Steps 1-3 of the timeline; the focus of this CDS funding request is Step 4 focused on construction. The project timeline is targeted to be completed within a five-year period; however, this planned timeline is not a requirement by other funding partners. The Basin Authority desires to construct the project as soon as feasible because damages and costs are likely to increase the longer the project is delayed.

Does this project have multiple phases or phase out options? If so, please explain them; include funding amounts required for each phase. If there are none, you may leave this

answer blank.

Yes; however, this funding request is limited to the most urgent minimum phase of the project referred to as "Phase 1 of Cherry Creek Reach 1 channel and overbank stabilization" as described in the engineer's planning level opinion of probable project costs, also provided separately by email. The project scope is the minimum phase/scope that is practical for the project, based on current information. The overall cost for Reach 1 is \$18-24 million, with an additional \$10 million or more upstream of Lakeview Drive.

Provide an itemized budget outlining how the requested funding will be used. Please provide as much detail as possible for each individual expense.

For reference, [here](#) is an example itemized budget template used by many federal agencies.

*

Summary provided below. Engineer's planning level opinion of probable project costs also provided separately by email. Additional project information posted here:

<https://www.cherrycreekbasin.org/projects-prf-pap> under folder Cherry Creek Reach 1. PROJECT COST CHERRY CREEK REACH 1, PHASE 1 Primary Channel Stabilization = \$5,500,000 Fill/Reclaim Existing Channel = \$1,020,000 Selective Tertiary Overflow Path Enhancement = \$ 500,000 Construction Subtotal = \$7,020,000 Construction Contingency (25%) = \$1,755,000 Engineering Final Design Services (12%) = \$1,053,000 Environmental Permitting Services (3%) = \$ 263,250 Construction Services (10%) = \$ 877,500 Total (2024) Project Dollars = \$10,970,000 Total (2025) Project Dollars (w/inflation) = \$11,740,000 TOTAL FUNDING REQUEST BREAKDOWN CDS Funds Requested = \$3,000,000 Estimated Cost Share by Applicant = \$3,000,000 Estimated Cost Share Provided by Others = \$5,740,000

Has funding for this project been included in any prior Presidential Budget Request? If so, please detail years, accounts, and requested amounts. *

No

Has this project previously received federal funding? If so, please details amounts, dates, and sources. *

No

Have you previously requested this project for Congressionally Directed Spending? If yes, please list the Member(s) of Congress from whom you requested CDS funding. *

No (but we plan to reach out to Jason Crow)

Has this project previously received CDS funding? If so, please also list the members credited with the request and the fiscal year it was requested. *

No

Please select the topic/appropriations subcommittee that best aligns with your project. *

Energy and Water

Energy and Water

Please note that Department of Energy projects have up to a 50% federal cost share. For U.S. Army Corps of Engineers projects, please contact your local district (Albuquerque or Omaha) to confirm specific project cost shares and eligibility.

Please select the account you would like your request to receive funding from: *

U.S. Army Corps of Engineers; Investigations

U.S. Army Corps of Engineers; Construction

U.S. Army Corps of Engineers; Operations & Maintenance

U.S. Army Corps of Engineers; Mississippi River & Tributaries: Investigations

U.S. Army Corps of Engineers; Mississippi River & Tributaries: Construction

U.S. Army Corps of Engineers; Mississippi River & Tributaries: Operation & Maintenance

Bureau of Reclamation; Water and Related Resources

Department of Energy; Renewable and Clean Energy Projects

Department of Energy; Electricity and Energy Resiliency Projects

Department of Energy; Cybersecurity and Energy Security Projects

Department of Energy; Nuclear Energy Projects

Department of Energy; Fossil Energy or Carbon Management Projects

Many of the Department of Energy accounts have cost-share or match requirements (up to 50%), depending on the scope and technological maturity of the project. Is your organization prepared to provide match funding if your request is funded under one of these accounts? *

Yes

No

Not Applicable

Requesting Organization Information

Is the requesting organization a public or 501(c)3 non-profit organization? *

Yes

No

Please provide the organization's Employer Identification Number (EIN) *

84-1116288

Is the proposed recipient currently in material non-compliance of a prior grant award made by the proposed Federal funding agency? *

Yes

No

Has the organization or any potential sub-grantees been subject to sanction or litigation by State, Local, or Federal governments in the past five years? *

Yes

No

If your organization or any potential sub-grantees been subject to sanction or litigation by State, Local, or Federal governments in the past five years, please provide additional details here:

Not Applicable

Community Support

All requests for CDS must include one letter of support from either the state, local, or tribal governments, or community leaders that details the community benefits and support for the project. Please email a PDF version of the letter of support to directedspending@bennet.senate.gov and cds@hickenlooper.senate.gov.

What individual or entity wrote/will write a letter of support for your project? *

Jane Clary, Technical Manager, Cherry Creek Basin Water Quality Authority

Have you emailed your letter of support? *

Yes

No

Are you submitting this request to other Members of Congress?

If you plan to submit your Congressionally Directed Spending request to multiple members of Colorado's federal delegation for consideration, we ask that you submit identical applications.

Have you submmitted this request to another Member of Congress from Colorado? *

Representative Diana DeGette

Representative Joe Neguse

Representative Lauren Boebert

Representative Ken Buck

Representative Doug Lamborn

Representative Jason Crow

Representative Brittany Pettersen

Representative Yadira Caraveo

None

Have you submitted, or will you submit any different CDS requests (including separate phases of this same request or requests for this project that are not identical to the request you are currently submitting) to Senators Bennet and Hickenlooper or any other Member of Congress this fiscal year?

If yes, please list the following information for each other request:

- 1) Project name and a general outline of the request
- 2) Amount requested
- 3) How, if at all, the projects relate to each other (for example, some projects may be separate phases of a larger project, or construction projects on the same site); please explain the extent of any overlap between any of these projects and the project you are currently requesting from us
- 4) Which Members of Congress have received or will receive these requests

If you are not submitting any other requests to Members of Congress this fiscal year, you

may leave this section blank.

We intend to submit a substantively similar application to Jason Crow's office.

Additional Information

Please share any information that is relevant for consideration of your application, which may not be reflected elsewhere on this form

Basin Authority staff have coordinated with the U.S. Army Corps of Engineers Tri-Lakes office in advance of this application, with local staff providing a letter of support for this application. Coordination between the Tri Lakes and Omaha USACE offices was in progress at the time this application was submitted. A PDF containing key figures and a more detailed cost estimate are being emailed separately to support this application, if needed by reviewers.

Does your project have a website? If so, please provide a link here. Note that this is optional, and submissions lacking websites will not be penalized.

<https://www.cherrycreekbasin.org/projects-prf-pap>

[Create your own Google Form](#)

[Report Abuse](#)

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.

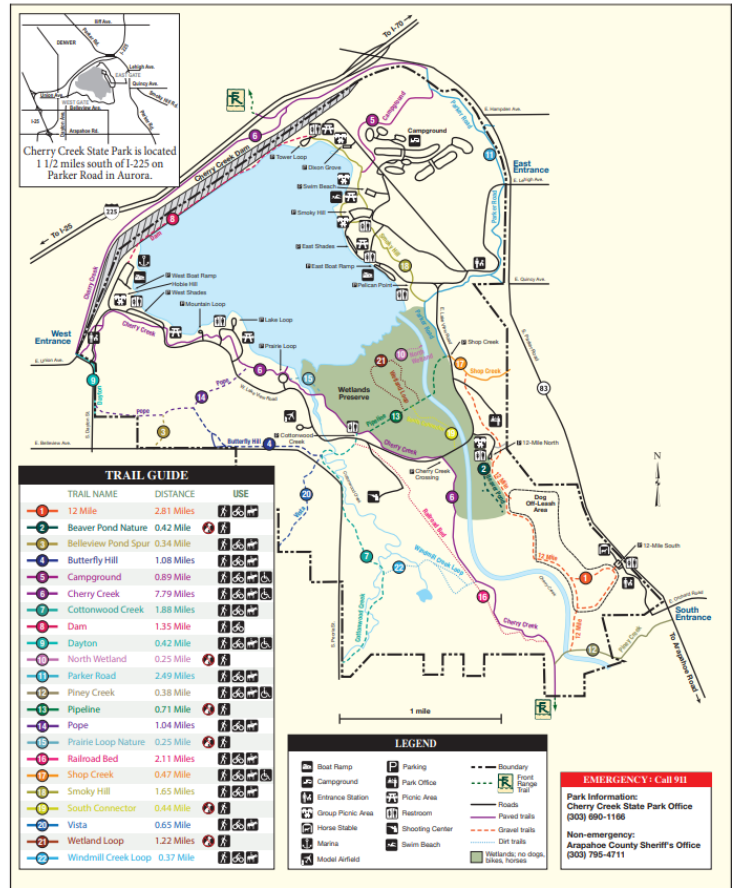


Figure 1 - Cherry Creek State Park



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.

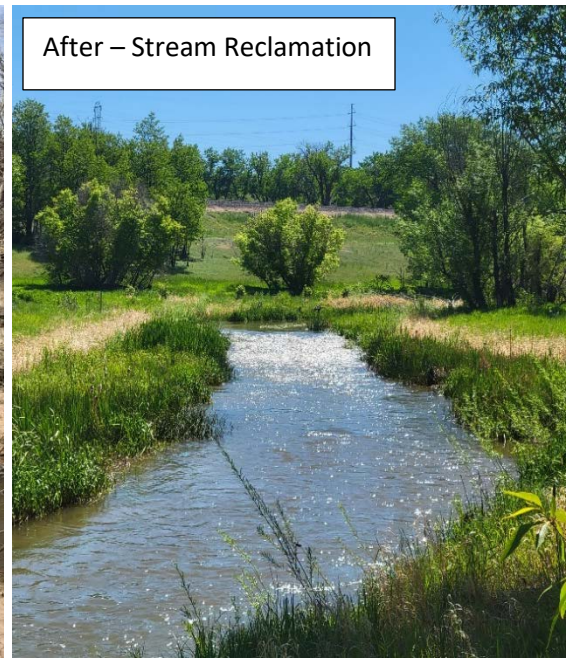
Our Request:

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.



Before – Eroded Stream

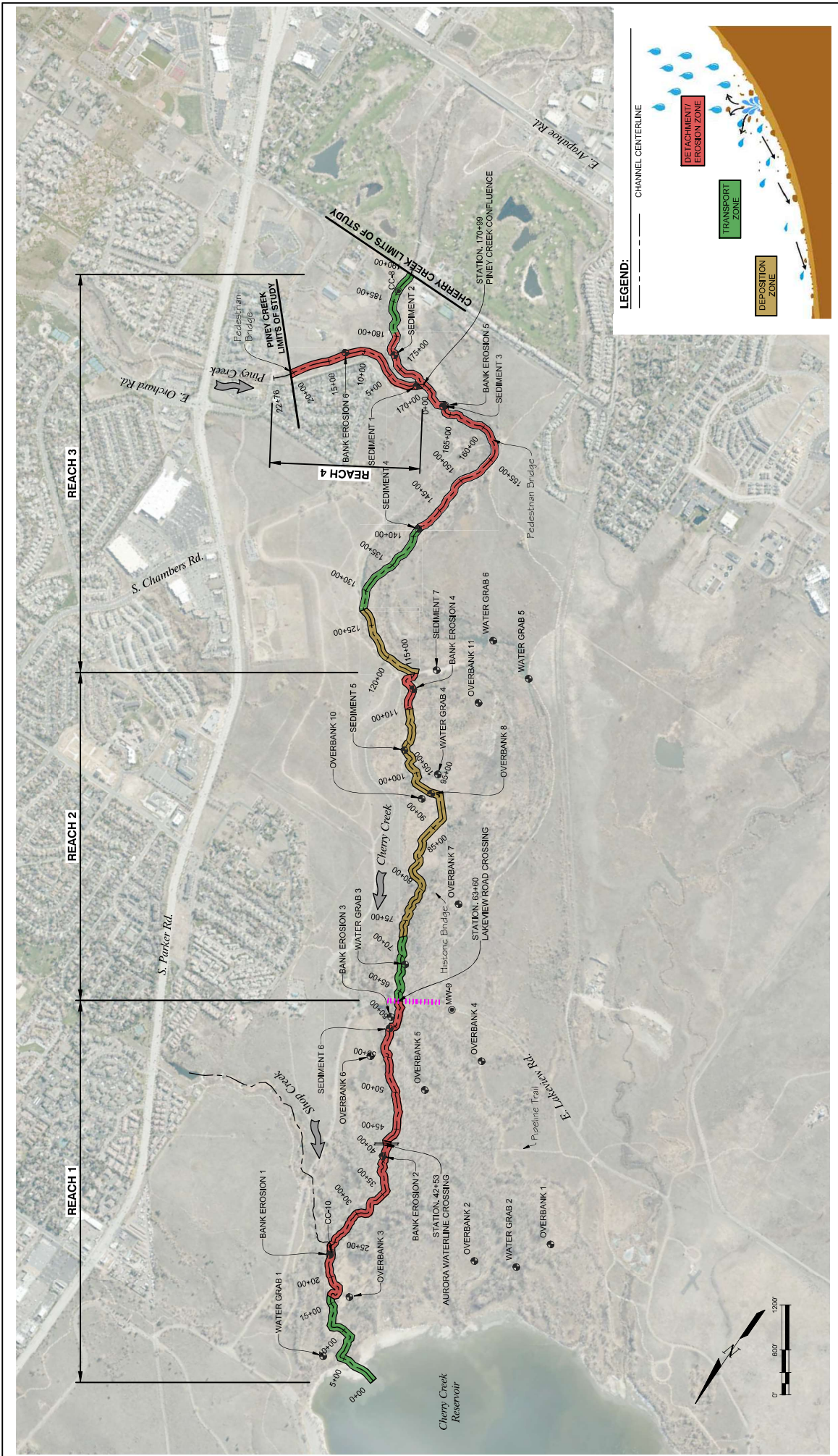
Photo 3 – Example of Similar Degraded in Plum Creek in Chatfield State Park Prior to Stabilization



After – Stream Reclamation

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**



PLotted: 8/12/2022 11:54:26 AM P:\2020 PROJ\CTS002202\02 SITE SEGMENT EXHIBIT 2.DWG

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
Channel and Overbank Stabilization						
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	
Channel and Overbank Stabilization Subtotal					\$ 11,500,000	
Lakeview Drive Improvements						
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
Lakeview Drive Improvements Subtotal					\$ 2,097,288	
Subtotal Construction					\$ 13,597,288	
Contingency (25%)					\$ 3,399,322	
Total Construction					\$ 16,996,609	
Engineering Final Design Services (12%)					\$ 2,039,593	
Environmental Permitting Services (3%)					\$ 509,898	
Construction Services (10%)					\$ 1,699,661	
Total Project (2024 Dollars)					\$ 21,245,762	
Total Project (2025 Dollars)					\$ 22,730,000	
Total Project (2026 Dollars)					\$ 24,320,000	

Cost Estimate - Lower Range						
BID ITEM #	DESCRIPTION OF BID ITEM	QUANTITY	PAY UNIT	UNIT PRICE	TOTAL COST OF BID ITEM	COMMENTS
Channel and Overbank Stabilization						
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	
Channel and Overbank Stabilization Subtotal					\$ 9,500,000	
Lakeview Drive Improvements						
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
Lakeview Drive Improvements Subtotal					\$ 1,472,288	
Subtotal Construction					\$ 10,972,288	
Contingency (25%)					\$ 2,743,072	
Total Construction					\$ 13,715,359	
Engineering Final Design Services (12%)					\$ 1,645,843	
Environmental Permitting Services (3%)					\$ 411,461	
Construction Services (10%)					\$ 1,371,536	
Total Project (2024 Dollars)					\$ 17,144,199	
Total Project (2025 Dollars)					\$ 18,340,000	
Total Project (2026 Dollars)					\$ 19,620,000	

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

Cost Estimate - Phase 1						
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	
Phase 1 Subtotal					\$ 7,020,000	
Contingency (25%)					\$ 1,755,000	
Total Construction					\$ 8,775,000	
Engineering Final Design Services (12%)					\$ 1,053,000	
Environmental Permitting Services (3%)					\$ 263,250	
Construction Services (10%)					\$ 877,500	
Total Project (2024 Dollars)					\$ 10,970,000	
Total Project (2025 Dollars)					\$ 11,740,000	
Total Project (2026 Dollars)					\$ 12,560,000	

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 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
Phase 2 Subtotal					\$ 1,026,788	
Contingency (25%)					\$ 256,697	
Total Construction					\$ 1,283,484	
Engineering Final Design Services (12%)					\$ 154,018	
Environmental Permitting Services (3%)					\$ 38,505	
Construction Services (10%)					\$ 128,348	
Total Project (2024 Dollars)					\$ 1,610,000	
Total Project (2025 Dollars)					\$ 1,730,000	
Total Project (2026 Dollars)					\$ 1,860,000	

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
Phase 3 Subtotal					\$ 6,029,113	
Contingency (25%)					\$ 1,507,278	
Total Construction					\$ 7,536,391	
Engineering Final Design Services (12%)					\$ 904,367	
Environmental Permitting Services (3%)					\$ 226,092	
Construction Services (10%)					\$ 753,639	
Total Project (2024 Dollars)					\$ 9,430,000	
Total Project (2025 Dollars)					\$ 10,090,000	
Total Project (2026 Dollars)					\$ 10,800,000	

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%



Administration Building
5334 South Prince Street
Littleton, Colorado 80120
303-795-4630
arapahoeco.gov

March 25, 2024

Senator John Hickenlooper
Byron Rogers Federal Building
1961 Stout Street
Suite 12-300
Denver CO 80294

Senator Michael Bennet
Cesar E. Chavez Memorial Building
1244 Speer Boulevard
Denver, CO 80204

Dear Senator Hickenlooper and Senator Bennet,

We are writing to express our support for the Cherry Creek Basin Water Quality Authority’s application for FY25 Congressionally Direct Spending regarding restoration of Cherry Creek in Cherry Creek State Park. This critical project would improve flood control and capacity within the park and adjacent areas as well as preserve the City of Aurora’s main water line, and improve stream function for aquatic life, floodplain reconnection and riparian vegetation.

Cherry Creek State Park is an urban oasis visited by over 1.5 million Colorado and national visitors each year. IT directly borders four cities within the metropolitan area (Denver, Aurora, Centennial and Greenwood Village) and is within a 10-mile radius of the Town of Parker, City of Lone Tree, and Foxfield. Families of diverse ethnic and socioeconomic backgrounds access the park to enjoy the trail system, wildlife, fishing, water recreation, picnicking and other activities. The park is accessible and connected by 42 miles of a multi-use trail system spanning from Castlewood Canyon to Downtown Denver. On an annual basis, Colorado Parks and Wildlife harvests over 100 million walleye eggs from the reservoir to support fisheries throughout Colorado.

The Cherry Creek Basin Water Quality Authority (Basin Authority) was established by the Colorado legislature to protect and improve water quality in the reservoir and in Cherry Creek, particularly from nutrient pollution that leads to algal blooms. Despite very stringent total phosphorus limits for wastewater treatment plants and other projects in the basin, phosphorus loading to the reservoir remains high and the reservoir does not meet its chlorophyll-a water quality standard, resulting in harmful algal blooms. Through recent engineering studies, the Basin Authority identified a severely eroding channel condition for Cherry Creek in the park between the reservoir and Lakeview Drive (“Reach 1”) that is not only contributing ongoing significant sediment and phosphorus loading (>1,680 pounds/year) to the reservoir, but it is

also impacting trails and vegetation (loss of trees), placing Aurora Water's major water pipeline at risk and causing other environmental impacts. Based on an engineering alternatives analysis, the Phase 1 cost to stabilize and restore Reach 1 is estimated at nearly \$12 million of an overall \$18 to \$24 million effort for the stream reach, far exceeding near-term resources available from the Basin Authority, local governments, Colorado Parks and Wildlife, and The Mile High Flood District, who are supportive of this project.

Your prioritization of Cherry Creek restoration as a Congressionally Directed Spending project will yield the following benefits to Colorado residents and the 1.5 million park visitors alike:

- Reduce phosphorus loading to Cherry Creek Reservoir, which would help reduce routine closures of the reservoir to recreational uses.
- Reduce sediment loading to Cherry Creek Reservoir, which would help maintain the U.S. Army Corps of Engineers flood control capacity and function within the park and adjacent areas.
- Increase channel stability for Cherry Creek during flood conditions, reducing damage to 2.25-miles of trails and the only road crossing the State Park (Lakeview Drive).
- Protect the City Aurora's water supply line through the State Park.
- Improve stream function for aquatic life, floodplain reconnection, over 40 mammal species, and riparian vegetation.

Thank you for your consideration of this critical project.

Sincerely,

ARAPAHOE COUNTY BOARD OF COMMISSIONERS

A handwritten signature in cursive script that reads "Carrie Warren-Gully". The signature is written in black ink on a light-colored background.

Commissioner Carrie Warren-Gully
Chair of the Board

CITY COUNCIL

District 1
Robyn Carnes
Amy Tharp

District 2
Tammy Maurer
Christine Sweetland

District 3
Richard Holt
Mike Sutherland

District 4
Marlo Alston
Don Sheehan

Dear Senators Bennet and Hickenlooper,

I am writing on behalf of the City of Centennial in support of Cherry Creek Basin Water Quality Authority's FY25 Congressionally Directed Spending application for the restoration of Cherry Creek in Cherry Creek State Park.

The initial estimate of channel reclamation cost is over \$23 million within Cherry Creek State Park and an additional \$10 million upstream of the park, exceeding the combined resources of Cherry Creek Basin Water Quality Authority and Cherry Creek State Park, which makes federal funding for this project imperative. The Authority's request is focused on Phase 1 of the highest priority portion of the stream reach, with an estimated cost of \$12 million. The erosion is threatening the surrounding environment, wildlife corridors, critical infrastructure, and water quality.

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 from flooding.

We support this project to protect the tremendous asset that is Cherry Creek Reservoir. It is important to not only improve and protect the water quality in Cherry Creek and the Reservoir, but to provide access to nature in our urban landscape, protect the species that reside within the basin and ensure continued access for the health of our community.

Thank you for your consideration of this request.

Sincerely,



Mayor Stephanie Piko
City of Centennial
spiko@centennialco.gov
303-754-3374

CC: Centennial City Council
Representative Jason Crow



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
TRI-LAKES PROJECT
9307 S. WADSWORTH BLVD
LITTLETON, CO 80128

27 MAR 2024

Jane Clary
Technical Manager,
Cherry Creek Basin Water Quality Authority
Cherry Creek Lake State Park
Aurora, CO

Jane,

Thank you for the discussion on 26 MAR 2024 regarding the proposed Reach 1 of the Cherry Creek erosion control/repair/mitigation project. We appreciate you sharing information about the need for the project, the proposal, and the upcoming deadline for submitting Congressionally Directed Spending applications.

The Tri-Lakes Project supports the work of the Cherry Creek Basin Water Quality Authority in general, and the proposed Reach 1 project specifically.

We have been in contact with our Omaha District subject matter expert on this type of proposal and look forward to connecting the CCBWQA with the District to explore funding opportunities for this important work.

Joseph R Maxwell
Joseph Maxwell,
Operations Project Manager
Tri-Lakes Project Office

BE DAM AWARE COMMUNITY EVENT



DATE

Saturday,
May 18, 2024



LOCATION

Tower Loop
Cherry Creek State Park



TIME

10:00 AM - 1:00 PM

LEARN ABOUT

- Roles and Goals of Cherry Creek Dam
- Dam Safety
- Reducing Flood Risk
- Boating and Water Safety

HANDS-ON ACTIVITIES

- Interactive and kid-friendly
- Be a Water Quality Scientist
- Become an Agent of Discovery
- Free fishing poles and other giveaways

HOSTED BY

US Army Corps of Engineers • Mile High Flood District • Southeast Metro Stormwater Authority
City and County of Denver • Cherry Creek Basin Water Quality Authority • Cherry Creek State Park
Arapahoe County Open Spaces • Colorado Department of Transportation • Splash Colorado

FREE PARK ENTRY

CHERRY CREEK BASIN WATER QUALITY AUTHORITY
2024 Capital Project Status Report
April 12, 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 1st quarter. A consultant selection committee will be set in February (1/29/21). At the February TAC meeting Jason Trujillo, Jon Erickson, Lanae Raymond, Bill Ruzzo were interested in serving on the consultant selection committee (2/11/21). This selection committee was discussed at the 3/18/21 Board Meeting, and no further members were added. The Request for Proposals (RFP) has been posted on BidNet and Proposals are due 04/21/21 (3/25/21). The pre-proposal meeting was held on 4/7/21. 5 proposals were received on 4/28/21; the selection committee is reviewing them. Interviews were held and a selection is being brought to the May Board meeting (5/14/21). Board authorized negotiations with RESPEC (5/27/21). Agreement has been executed with RESPEC (10/15/21). Field Survey of project areas and topographic mapping is underway (12/30/21). A design kickoff meeting was held on 4/22/22. A design sprint workshop was held on 7/12/22 which included a site visit and evaluation of alternatives. RESPEC is developing a recommended alternative (9/8/22). RESPEC provided updated project costs for budgeting (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 for 408 permitting. *The project team is moving forward with preparation of 90% Design completion. Per discussion with CPW (Michelle), there will be shared funding available in July 2024 for the project.*

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. *Muller provided a scope and fee, a meeting with the project stakeholders is scheduled for April 3rd to discuss.*

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. *Muller presented their alternatives analysis at the April TAC meeting (04/04/2024).*

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 16th 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). *The construction kickoff meeting was held on 03/18/2024. CEI mobilized onsite the week of 04/08/2024; the first onsite progress meeting was held on 04/11/2024.*

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 2nd Amendment was authorized by the Board on 03/21/2024 for funding of \$39,000 for 2024. *A coordination meeting was held on 04/04/2024 with the Muller team working on Cherry Creek (Reaches 1-3 in the Park) to ensure the coordination for the Piney Creek /Cherry Creek confluence was occurring and teams were working together.*

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 MHFD and includes 2,500 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$325,000. The total project cost is estimated at \$1,300,000.
- b. Status: IGA is scheduled for June TAC and Board meetings (5/27/21). IGA has been approved and executed by all parties (7/29/21). Jacobs has been selected as design consultant and project scoping is underway; limits have been extended upstream to the County Line and sediment capture area and transport will be included with the project (10/15/21). Jacobs has submitted their scope of work and fee for design which is under review by project sponsors (11/11/21). Project sponsors have completed a review of Jacobs' fee and scope of work and the agreement is being routed for signatures (1/28/22). IGA Amendment to bring in 2022 funding is in process (3/10/22). A project kickoff meeting was held on 3/28/2022. A site visit was performed on 4/12/22 to

document existing conditions and identify sediment source/transport/deposition areas. Project Team is preparing a sampling plan for bank and bed materials to determine 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. *The IGA 3rd Amendment for additional \$50,000 funding is scheduled for the April 2024 TAC/Board.*

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 16th 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). Post construction services for wetland monitoring, permitting closeout and revegetation has been submitted by ERO resources, an agreement has been sent to project partners by MHFD and reviewed.

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). *A warranty walk for Phase 1 improvements was held on (04/09/2024) with CEI, SEMSWA, RESPEC and Corvus.*

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 01/23/204 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). Channel riffle – pool features have been completed in the channel as off week ending 03/22/2024. *Western States mobilized to the site the week of 04/08/2024 to begin revegetation of the channel starting upstream.*

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. *Soil samples have been collected at the project site (03/7/2024) for further analysis of the project benefits.*