



**Cherry Creek Basin Water Quality Authority
Technical Advisory Committee Meeting Agenda
Thursday, July 6, 2023, 9:00 a.m.**

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

**Virtual: Zoom¹
<https://us06web.zoom.us/j/87425775963> Passcode: CCBWQA
Phone (646)931-3860 Mtg ID: 874 2577 5963# Passcode: 815374**

TAC Meeting Documents can be found online at the link below.

<https://drive.google.com/drive/folders/12BoEhmFbnnMCxivnpjY2l7T5TzP8Azlq?usp=sharing>

1. Call to Order (9:00) (5 minutes)
2. Meeting Minutes from June 1, 2023 (enclosed)
3. Highlights from the June 15, 2023 Board Meeting (Clary) (9:05) (5 minutes)
4. Discussion Items (9:10) (35 minutes)
 - a. Initial Progress Update on Site Specific Standards (Christine Hawley, Hydros Consulting)
 - b. Lone Tree, Windmill, and Cottonwood Creek Progress Update (Clary)
 - c. General Approach to Watershed Plan Update (Clary)
5. Presentations (9:45) (10 minutes)
 - a. June Storm Damage (Stewart)
6. Updates (9:55) (10 minutes)
 - a. Cherry Creek Stewardship Partners (Davenhill)
 - b. TAC Members
 - c. TAC Subcommittees
 - i. Modeling Subcommittee (Leak/Clary)
 - ii. Watershed Plan Subcommittee (see above)
 - d. Contractors
 - i. [Water Quality Update](#) (Stewart)
 - ii. Pollution Abatement Projects - CIP Status Report (Borchardt, enclosed)
 - iii. In-Park PRF and RDS Maintenance and Operations Report (Goncalves)
 - iv. Regulatory (DiToro)
 - v. [Land Use Referral Tracking](#) (Endyk)
 - e. Manager (Clary)
7. Upcoming Events
 - a. 25th Annual Cherry Creek Watershed Conference - August 24, 2023 - PACE Center, Parker
 - b. Watershed Plan Process Workshop - September 21, 2023 - 8:30-11:30 am
8. Adjournment

¹ If you are unable to participate on the CCBWQA's Zoom platform, please email val.endyk@ccbwwqa.org



**Cherry Creek Basin Water Quality Authority
Minutes of the Technical Advisory Committee Meeting
Thursday, June 1, 2023, 9:00 a.m.**

TAC Members Present

Alex Mestdagh, Town of Parker (zoom)
Ashley Byerley, SEMSWA
Casey Davenport, Board Appointee, Cherry Creek Stewardship Partners
David Van Dellen, Town of Castle Rock
Gene Seagle, US Army Corps of Engineers (zoom)
Jacob James, City of Lone Tree
Jason Trujillo, Board Appointee, Cherry Creek State Park
Jeremiah Unger, CDOT
Jessica La Pierre, City of Aurora (zoom)
Jim Watt, Board Appointee, Mile High Flood District
Joseph Marencik, City of Castle Pines
Jon Erickson, TAC Chair, Board Appointee, Colorado Parks and Wildlife
Lily Montesano, Wright Water Engineers, Representing City of Greenwood Village
Lisa Knerr, TAC Vice Chair, Arapahoe County
Rick Goncalves, Board Appointee (zoom)
Ryan Adrian, Douglas County (zoom)
Steve Chevalier, Arapahoe County Public Health

Board Members Present

Bill Ruzzo, Assistant Secretary, Governor's Appointee
Tom Downing, Governor's Appointee (zoom)

Others Present

Alan Leak, RESPEC
Erin Stewart, LRE Water
Jane Clary, Wright Water Engineers, CCBWQA Technical Manager
Jessica DiToro, LRE Water (zoom)
Larry Butterfield, CPW (zoom)
Richard Borchartdt, R2R Engineers
Val Endyk, CCBWQA

1. Call to Order and Introductions

a. Lily Montesano, Wright Water Engineers, Representing the City of Greenwood Village

Jon Erickson called the meeting to order at 9:00 am and introduced Lily Montesano.
Jason Trujillo is retiring from CPW. The TAC thanked Jason for his service and many years of partnering with CCBWQA.

2. Meeting Minutes from May 4, 2023

David VanDellen moved to approve the May 4, 2023 meeting minutes. Seconded by Jeremiah Unger. The motion carried.

3. Highlights from May 18, 2023 Board Meeting

Jane Clary provided an update on actions taken at the May 18, 2023 Board meeting. Minutes from the meeting can be found [here](#).

4. Action Items

a. Approval of Monitoring Report Timeline

Erin Stewart provided a [memo](#) to the TAC summarizing the suggested amendments to the monitoring report timeline as discussed at the May 4, 2023 TAC meeting.

David VanDellan moved to accept the monitoring report timeline as proposed, seconded by Jacob James. The motion carried.

b. Recommendation for Board Authorization of IGA Amendment for Cherry Creek at Arapahoe Rd

Rich Borchardt presented background information on the Cherry Creek at Arapahoe Rd project. Project details can be found in the action item [memo](#) and the [draft IGA Amendment](#) provided to the TAC. The project is located between the Valley Country Club (north side of Arapahoe Road) and the Aurora Soccer Fields (south side of Arapahoe Road) in Arapahoe County and the Cities of Aurora and Centennial. It is a partner project with the City of Aurora, Southeast Metro Stormwater Authority (SEMSWA), and Mile High Flood District (MHFD) who is the project lead. CCBWQA had a workshop on March 16, 2023 which included the Project and reinforced its priority and importance to the whole system. It is estimated that this 0.98-mile-long project will immobilize 88 pounds of phosphorus annually.

The IGA Amendment is being reviewed by CCBWQA's legal counsel and includes additional funding of \$1,200,000 (\$300,000 CCBWQA, \$300,000 MHFD, \$500,000 City, and \$100,000 SEMSWA). The IGA Amendment brings the total funding for the project to about \$2,204,000. CCBWQA's participation is 25%, which is consistent with the limit historically used on partner projects. Additional IGA Amendments are anticipated to bring in future funding from the sponsors' capital improvement programs, which currently include funding through 2024.

Ashley Byerley moved to recommend the Board authorize the execution of the IGA Amendment for Stream Reclamation on Cherry Creek at Arapahoe Road that increases the Authority's contribution by an amount not to exceed \$300,000, pending satisfactory resolution of CCBWQA's comments, and to authorize a member of the executive committee to execute the IGA Amendment. Seconded by Jason Trujillo. The motion carried.

Alan Leak requested that clarification be added as the design costs seem to be a large percentage of the total project cost in the IGA Amendment. Rich explained that there are still multiple years of funding expected with future funding going towards construction and it is anticipated this funding will bring the design costs in line with similar projects.

5. Updates

a. Cherry Creek Stewardship Partners

- Casey Davenhill thanked Jason Trujillo for his collaboration with the Stewardship Partners during his time at Cherry Creek State Park and highlighted that Jason has been a champion for the Park and will be greatly missed.
- The Stewardship Partners upcoming events are detailed on their [website](#).
- The Stewardship Partners will be helping with lake appreciation day at the Park.
- The Stewardship Partners will be hosting a couple of campfire talks and noted that one of the talks will focus on the indigenous population within the watershed and understanding the cultural history.

i. Watershed Conference Update - August 24, 2023

The planning committee is working to finalize the conference agenda and will meet after the June Board meeting. A Save the Date has been sent out to all CCBWQA contacts, and the meeting location this year will be at the PACE Center in Parker.

b. TAC Members

- Jon Erickson, CPW - CPW has a new division director Jeff Davis with a background in conservation. Jon noted that equity, diversity, and inclusivity is one of the Department of Natural Resource's goals that he will continue to bring before the TAC on behalf of CPW.
- Ashley Byerley, SEMSWA - SEMSWA provided comments to CDPHE related to the state's gap waters policy as a result of the Supreme Court's Sackett case ruling. Jane Clary noted that the two week comment period offered by CDPHE was too short to enable CCBWQA to review and comment as an organization.
- Jason Trujillo, Cherry Creek State Park - Despite the May flood event, visitors are still eager to visit the Park. CPW is working on post-flood restoration throughout the park, but Lakeview Drive reopening will likely take until the fall. The reservoir is still above normal levels and the USACE is continuing to release and has increased releases to 100 cfs so it should drop more rapidly now. Ideally the reservoir level would stabilize at 5550' to allow for evaporation loss throughout the year.
- Lisa Knerr, Arapahoe County - The COR 80000 Permittees (Not the MS4 Subcommittee) are circulating a draft presentation regarding their MS4 permit renewal. Arapahoe County will be hosting another rain barrel workshop on June 29th.
- Jeremiah Unger, CDOT - Tripp Minges, the CDPHE/CDOT liaison, has taken over the backorder construction program for CDOT and is currently doing double duty which is why he hasn't been in attendance at the TAC meetings recently. Josh Giovannetti is CDOT's Region 1 representative. Region 1 has a new Environmental Manager, Lisa Streisfeld. Jeremiah noted that because part of the basin falls within Region 2, he also represents headquarters. CDOT received new funding from the State.
- Steve Chevalier, Arapahoe County Public Health - Steve noted that a water quality bill passed for mobile home parks.
- Several TAC members expressed that their communities were impacted by the May flood event.
- Jacob James, City of Lone Tree - Lone Tree is kicking off another reach of Happy Canyon Creek project.
- Jim Watt, MHFD - MHFD office location has changed.
- David VanDellen, Town of Castle Rock - Reg 72 first stakeholder meeting coming up on June 6th at 9:30 am. Jessica DiToro will attend on behalf of CCBWQA.
- Alex Mestadgh, Town of Parker - The Town of Parker is kicking off the Cherry Creek at Dransfeldt project.

c. TAC Subcommittees

- i. Modeling Subcommittee**
- ii. Watershed Plan Subcommittee**

Jane Clary provided an update to the TAC that the Modeling Subcommittee is meeting today and the Watershed Plan Subcommittee will hold its first meeting later this year.

d. Contractors

- [Water Quality Update](#)**

Erin Stewart provided an update that the March and April data are available on the data portal. LRE used a small boat to complete the second May monitoring event. During that event, a mild cyanobacteria bloom was noted

(appeared to be Dolichospermum and possibly Microcystis), but Jason Trujillo said that the wind and rain helped keep things under control for the holiday weekend.

ii. [May Flood Event](#)

Erin Stewart presented a Powerpoint describing the May 10-12, 2023 flood event including precipitation totals, reservoir elevation, stream flows, and pictures throughout the Cherry Creek watershed during and after the flood.

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

Rich Borchardt provided an update to the TAC as noted in his CIP Status Report and thanked Jason Trujillo for facilitating the park tour for the partners site visit last week. Rich and Jane will continue conversations with CWCB and other partners in attendance on the site visit regarding funding opportunities for future restoration efforts on Cherry and Piney Creeks.

iv. In-Park PRF and RDS Maintenance and Operations Report

Rick Goncalves provided an update to the TAC that the RDS is operating well and was not impacted by the flood. PRF in-park maintenance storm damage review is planned for next week.

v. Regulatory

Jessica DiToro will be attending the first stakeholder meeting for Reg 72 Dewatering issue meeting on June 6th.

vi. [Land Use Referral Tracking](#)

e. Manager

i. Lone Tree Creek Master Plan

ii. BMP Effectiveness Study

iii. Site Specific Standards

iv. USACE Flood Control Releases

Jane Clary deferred her updates to a future meeting.

6. Upcoming Events

- a. 25th Annual Cherry Creek Watershed Conference - August 24, 2023 - PACE Center, Parker**
- b. Watershed Plan Process Workshop - September 21, 2023 - 8:30-11:30 am**

7. Adjournment

Jon Erickson adjourned the meeting at 10:05 am.

CHERRY CREEK BASIN WATER QUALITY AUTHORITY
2023 Capital Project Status Report
June 29, 2023

RESERVOIR PROJECTS

1. East Shade Shelters Phase III and Tower Loop Phase II Shoreline Stabilization (CCB-17.5 and CCB-17.7)
 - a. Description: These projects were identified in 2014 through the annual inspection. The Tower Loop Phase II connects to the Phase I project and extends shoreline protection 570 feet to the southeast towards Dixon Grove. The East Shade Shelters Phase III starts on the north end of the Shade Structure and goes 400-feet to the south.
 - b. Status: Consultant selection is scheduled for the 1st quarter. A consultant selection committee will be set in February (1/29/21). At the February TAC meeting Jason Trujillo, Jon Erickson, Lanae Raymond, Bill Ruzzo were interested in serving on the consultant selection committee (2/11/21). This selection committee was discussed at the 3/18/21 Board Meeting, and no further members were added. The Request for Proposals (RFP) has been posted on BidNet and Proposals are due 04/21/21 (3/25/21). The pre-proposal meeting was held on 4/7/21. 5 proposals were received on 4/28/21; the selection committee is reviewing them. Interviews were held and a selection is being brought to the May Board meeting (5/14/21). Board authorized negotiations with RESPEC (5/27/21). Agreement has been executed with RESPEC (10/15/21). Field Survey of project areas and topographic mapping is underway (12/30/21). A design kickoff meeting was held on 4/22/22. A design sprint workshop was held on 7/12/22 which included a site visit and evaluation of alternatives. RESPEC is developing a recommended alternative (9/8/22). RESPEC provided updated project costs for budgeting (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).

STREAM RECLAMATION PROJECTS

1. Cherry Creek Stream Reclamation at Arapahoe Road aka Reaches 3 and 4 (CCB-5.14C)
 - a. Description: This project continues the work on Cherry Creek by CCBWQA, MHFD, and local partners. It ties into the previous stream reclamation projects of Cherry Creek Eco Park to Soccer Fields (CCB-5.14A) and Cherry Creek at Valley Country Club (CCB-5.14B). The 5,167 Linear Feet of stream reclamation reduces bed and bank erosion immobilizing approximately 88 pounds of phosphorus annually. The project is anticipated to be funded over several years and likely be broken into phases.
 - b. Status: In 2021, 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).*
2. 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.
3. Cherry Creek Stream Reclamation at Dransfeldt (CCB-5.17.1B)
 - a. Description: Design and construction of stream reclamation is in partnership with Town of Parker and MHFD. It improves 2,400 feet of Cherry Creek near the future location of Dransfeldt bridge which is just downstream of the Cherry Creek at KOA project.
 - b. Status: Initial scoping has begun, and a partners meeting was held on 1/30/21. IGA is scheduled for CCBWQA's May TAC and Board meetings (4/30/21). IGA was approved by all parties and has been executed (6/25/21). Muller Engineering has submitted their Draft Scope of Work for Design Services, and the project sponsors have reviewed it (7/8/21). Design kickoff meeting was held on 10/14/21. Alternatives are being evaluated (12/9/21). Pre-submittal meeting for the 404 permit is being scheduled (12/30/21). CLOMR is being prepared for project (3/10/22) and was submitted to FEMA on 3/31/22. CEI was selected for as project partner to provide contractor input during the design (5/27/22). CLOMR is under review by FEMA (8/12/22). 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).
 4. McMurdo Gulch Priority 3 Stream Reclamation (CCB-7.2)
 - a. Description: The design and construction of stream reclamation is in partnership with Castle Rock. Castle Rock is the lead agency. This phase continues the work from the previous 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.
 5. Lone Tree Creek in Cherry Creek State Park (CCB-21.1)
 - a. Description: This project includes a trail connection to Cherry Creek State Park and includes 570 linear feet of stream reclamation on Lone Tree Creek from the State Park Boundary to the Windmill Creek Loop Trail. The City of Centennial is the project lead. CCBWQA participation is for 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.

6. Happy Canyon Creek – County Line to Confluence with Cherry Creek (aka Jordan Road, CCB-22.1)
 - a. Description: The design and construction are in partnership with Southeast Metro Stormwater Authority and MHFD and includes 2,500 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$325,000. The total project cost is estimated at \$1,300,000.
 - b. Status: IGA is scheduled for June TAC and Board meetings (5/27/21). IGA has been approved and executed by all parties (7/29/21). Jacobs has been selected as design consultant and project scoping is underway; limits have been extended upstream to the County Line and sediment capture area and transport will be included with the project (10/15/21). Jacobs has submitted their scope of work and fee for design which is under review by project sponsors (11/11/21). Project sponsors have completed a review of Jacobs' fee and scope of work and the agreement is being routed for signatures (1/28/22). IGA Amendment to bring in 2022 funding is in process (3/10/22). A project kickoff meeting was held on 3/28/2022. A site visit was performed on 4/12/22 to document existing conditions and identify sediment source/transport/deposition areas. Project Team is preparing a sampling plan for bank and bed materials to determine phosphorous content (5/13/22). The project team met on 5/24/22 to discuss project goals and Jacobs is progressing through the study. Jacobs and ERC are working on sediment transport analysis and model (6/30/22). The results from the sediment transport model were presented at the 8/23/22 progress meeting and an upstream sediment capture area just south of the JWPP was included in the alternatives analysis (8/26/22). The alternative analysis report is expected to be completed before the end of 2022 (10/13/22). 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).
7. Happy Canyon Creek - Upstream of I-25 (CCB-22.2)
 - a. Description: The design and construction are in partnership with Douglas County, City of Lone Tree, and MHFD and includes 2,500 feet of stream reclamation. The Authority's water quality component share for design and construction is estimated to be \$500,000. The total project cost is estimated at \$2,000,000.
 - b. Status: Douglas County, City of Lone Tree, and MHFD have initially funded and selected Muller Engineering as the design engineer. Design has started and a progress meeting was held on 1/27/21. Design is progressing (2/11/21). Muller has submitted 60% Design Deliverables (5/27/21). IGA for 2021 Funding is being brought to Board in September (9/9/21). 2021 IGA Amendment has been executed (11/11/21). Coordination with CDOT and easement acquisitions are on-going (1/13/22). Board authorized 2022 funding and IGA Amendment at their June 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 Naranja 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).

8. 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)*.
 - c.
9. Piney Creek from Fraser Street to Confluence with Cherry Creek aka Reaches 1 and 2 (CCB-21.1)
 - a. Description: This project includes 2900 liner feet of stream reclamation on Piney Creek. The project partners are SEMSWA and CCBWQA.
 - b. Status: Project coordination meeting was held with SEMSWA on 6/29/22. IGA drafted and is being reviewed by SEMSWA (8/12/22). IGA was approved by CCBWQA at the 9/15/22 Board meeting. IGA Amendment to bring in 2023 funding was recommended by the TAC and authorized by the Board in May (5/25/23).
10. Mountain and Lake Loop Shoreline Stabilization Phase II (OM 4.6)

- a. Description: This project was identified in through the 2020 annual inspection and design and permitting started in 2021. It adds about 40 feet of shoreline protection where it has eroded leaving a 1-2 foot tall vertical bank.
 - b. Status: Construction Plans have been prepared and the GESC was submitted to Arapahoe County for review (1/13/22). Plans are being reviewed by US Army Corps of Engineers for 408 clearance (5/13/22).
11. Cherry Creek from Reservoir to Lake View Drive (OM 4.6)
- 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.*