

AGENDA

Denver Board of Water Commissioners

Video Conference: <http://zoom.us/join>, Meeting ID: 937 1553 3160 – Passcode: 410744 or

Dial in (669) 900-6833 - Meeting ID: 937 1553 3160 – Passcode: 410744

Wednesday, September 23, 2020 9:00 a.m.

I. INTRODUCTORY BUSINESS

A. Call to Order and Determination of Quorum

B. Public Comment and Communications

At this point in the agenda, the Board may allow members of the public to address the Board on any item of interest within the jurisdiction of the Board, and not on the agenda for action. Speakers wishing to address a specific Action Item will be invited to address the Board when the item is being considered. Three minutes are allowed for each person unless the President determines otherwise.

1. Distributor Communications
2. Citizen Advisory Committee Communications

C. Ceremonies, Awards and Introductions

II. ACTION ITEMS

A. Consent Items

Items listed below are considered routine and may be enacted by one motion and vote. If any Board member desires discussion beyond explanatory questions, or corrections to the Minutes, the President may order that item to be considered in a separate motion and vote.

1. Conduit Nos. 3 & 12 Valve Replacement Project – Contract 504335
2. IGA and Lease Agreements for Hydro Building at National Western Complex for the Water Quality Lab – Contracts 504612 and 504613
3. Interagency Agreement with Denver Parks and Recreation for Access to Denver Water's Upper Arapahoe Groundwater at Harvey Park – Contract 504579
4. First Amendment to Non-Potable Water Lease Agreement with DBS, LLC – Agreement 500828
5. First Amendment to the September 25, 2013 Settlement Agreement between Denver Water and Climax – Agreement 500899

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



B. Individual Approval Items

1. NTP Project Update
 - a. Construction Agreement with United Power for Northwater Treatment Plant – Contract 504577 Pete McCormick 15 minutes

III. POLICY MATTERS

- A. First Reading of Proposed 2021 Rates Fletcher Davis 15 minutes
- B. Lead Reduction Program Update Alexis Woodrow 20 minutes

IV. EXECUTIVE UPDATE

- A. CEO Update
- B. CFO Update – Monthly Financial Report
- C. Operations Update

V. BRIEFING PAPERS & REPORTS

- A. Briefing Paper
 1. Aquatic Invasive Species at Ralston Reservoir
- B. Report

VI. ADJOURNMENT

VII. TRUSTEE MATTERS

VIII. EXECUTIVE SESSION

The Board may adjourn the regular meeting and reconvene in executive session on topics authorized by D.R.M.C Sec. 2-34.

- A. Confidential Report

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-A-1

Conduit Nos. 3 & 12 Valve Replacement Project Contract 504335

Action by Consent

Individual Action

Purpose and Background:

The Water Distribution section has identified five gate valves on Conduit No. 3 and Conduit No. 12 that are no longer operable. These isolation valves vary in diameter between 36 and 42 inches and were installed between 1925 and 1966. To provide Operations & Maintenance with the flexibility they need to safely isolate conduits while also minimizing service interruptions, these valves will be replaced. This project will include the installation of adjacent appurtenances (e.g. air valves, blowoff drains, inspection hatches, etc.).

Budget and Schedule:

The total amount of this contract is \$2,233,900 and the term of the contract is September 23, 2020 through May 28, 2021. Funds for this contract will come from the 2020 budget for Conduit Nos. 3 & 12 Valve Replacements business unit, which has sufficient funds to pay the \$1,062,000 estimated to be needed in 2020. The remaining \$1,171,900 will be budgeted in year 2021.

Selection of Business Partner:

Denver Water solicited bids from five general contractors listed on the prequalified contractor list under the Civil Pipelines discipline. This contract was a restricted bid process using invitations to bid on the QuestCDN platform. On September 1, 2020 bids were received from four general contractors. Scott Contracting, Inc. of Colorado was selected based on the lowest cost bid.

S/MWBE Information:

The Minority and Women-owned Business Enterprise goal established for this project is 8% participation. Scott Contracting, Inc. has proposed 8.10% participation.

Recommendation:

It is recommended that the Board approve Contract 504335 with Scott Contracting, Inc. for the Conduit Nos. 3 & 12 Valve Replacements Project for the contract period September 23, 2020 through May 28, 2021 for a total contract amount not to exceed \$2,233,900.

Approvals:

- | | |
|---|--|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input type="checkbox"/> Jessica R. Brody, General Counsel | <input checked="" type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-A-2

IGA and Lease Agreements for Hydro Building at National Western Complex for the Water Quality Lab Contracts 504612 and 504613

Action by Consent

Individual Action

Purpose and Background:

The Board approved an Intergovernmental Agreement (IGA) with Colorado State University (CSU) on August 22, 2018 for the design and pre-construction services for the Hydro Building to be located on the redeveloped National Western Complex. Denver Water intends to locate its Water Quality Laboratory in the Hydro Building. The previous IGA established the scope of the project and a target total budget for Denver Water of \$24,061,854.

CSU has completed the design, and it meets the scope needs of Denver Water and is within the budget limits set by the original IGA. CSU has entered an agreement with a contractor under a Construction Manager/General Contractor agreement and is ready to proceed with construction. IGA 504612 commits Denver Water to funding a portion of the Hydro Building construction. This IGA defines the cost sharing arrangement between Denver Water and CSU and establishes the terms for managing through the construction, which is anticipated to be complete in July of 2022.

Upon completion of the Hydro Building, Denver Water staff will occupy a portion of the building to operate our Water Quality Laboratory functions. Lease Agreement 504613 establishes the annual rental amount, roles and responsibilities within the building and the basis for sharing of operations and maintenance costs. The initial term of the lease is 50 years, with the option of two additional 25-year terms.

Budget and Schedule:

The total amount of the IGA is \$24,061,854 and the term of the contract is September 23, 2020 through December 31, 2022. Funds for this agreement will come from the 2020 budget for Water Resources Center, which has sufficient funds to pay the \$300,000 estimated to be needed in 2020. The remaining \$23,761,854 will be budgeted in years 2021 and 2022.

The total annual amount of the Lease Agreement is \$10,000 per year (adjusted annually by the Consumer Price Index), plus Denver Water's proportional share of the operations and maintenance cost for the building and parking area as defined in the lease. Funds for this lease will be budgeted starting in 2022.

Selection of Business Partner:

This project is being implemented through agreement with CSU and CSU must utilize the State of Colorado procurement processes.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



Recommendation:

It is recommended that the Board approve IGA 504612 with CSU for construction of the Hydro Building for the contract period September 23, 2020 through December 31, 2022 for a total contract amount not to exceed \$24,061,854. It is also recommended that the Board approve Lease Agreement 504613 with CSU for use of the Hydro Building at the completion of construction in the amount of \$10,000 per year (adjusted annually by the Consumer Price Index), plus operations and maintenance cost to be determined at completion of the building construction.

Approvals:

- | | |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input type="checkbox"/> Jessica R. Brody, General Counsel | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input checked="" type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-A-3

Interagency Agreement with Denver Parks and Recreation for Access to Denver Water's Upper Arapahoe Groundwater at Harvey Park – Contract 504579

Action by Consent

Individual Action

Purpose and Background:

Harvey Park Lake is owned and operated by the City and County of Denver, acting by and through its Department of Parks and Recreation (DPR) and has historically been filled using DPR's shares in the agricultural ditch. In February 2017, DPR received a letter from the Colorado Division of Water Resources stating that DPR does not have a water right decreed for storage in Harvey Park Lake and that storage of agricultural ditch water would not be allowed. Irrigation of the park has been through a treated water connection. Pursuant to a 2015 Interagency Agreement, Denver Water has been providing water rights, legal and engineering support on this issue.

Denver Water and DPR have explored several alternatives for providing raw water to Harvey Park Lake and have agreed that the best solution for filling the lake and maintaining the lake level is construction of a non-tributary well at Harvey Park to access Denver Water's Upper Arapahoe groundwater decreed in Case No. 2003CW186. DPR is currently renovating their irrigation system at Harvey Park for raw water irrigation and plans to irrigate the park primarily with its shares in the agricultural ditch. In addition to maintaining the lake level, the non-tributary well is intended to serve as a supplemental irrigation supply if the agricultural ditch shares are insufficient or cannot be accessed.

Contract 504579 is a raw water contract granting DPR permission to access an annual maximum of 64 acre-feet of Denver Water's groundwater in the Upper Arapahoe aquifer. DPR will own and operate the well and pay standard City of Denver raw water rates. Additionally, DPR will allow Denver Water to use Harvey Park as an aquifer storage and recovery site in the future if desired. Reducing irrigation demands from the treated water system and meeting them from available raw water sources is consistent with Denver Water's goal to identify and implement system refinements and the One Water concept of utilizing the right water for the right purpose.

Budget and Schedule:

There is no budgetary impact for this item.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



Recommendation:

It is recommended that the Board approve Contract 504579 with the City and County of Denver, acting by and through its Department of Parks and Recreation which provides up to 64 acre-feet of water from Denver Water's Upper Arapahoe aquifer water right for the perpetual contract period starting September 23, 2020.

Approvals:

- | | |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input checked="" type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input type="checkbox"/> Jessica R. Brody, General Counsel | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-A-4

First Amendment to Non-Potable Water Lease Agreement with DBS, LLC Agreement 500828

Action by Consent

Individual Action

Purpose and Background:

On November 13, 2013, Denver Water entered into a Non-potable Water Lease Agreement, Contract 500828, with DBS, LLC (DBS) to provide three acre-feet of non-potable water to replace depletions from a well located in Littleton, Colorado. In 2020, DBS created well depletions exceeding three acre-feet. In recognition that it requires additional augmentation replacement water, DBS desires to lease an additional three acre-feet of non-potable water from Denver Water.

In the First Amendment to the Non-potable Water Lease Agreement, Denver Water will lease an additional three acre-feet of non-potable water to DBS for a combined total of six acre-feet. The water will be leased under the same terms of the November 13, 2013 Lease Agreement except as modified in the first amendment. DBS will be charged a total of \$69,570, the current System Development Charge (SDC) for non-potable water leased within the combined service area and outside of the City and County of Denver. In addition, the take or pay provision in the lease agreement will be increased from a minimum two acre-feet to three acre-feet.

With DBS's lease of an additional three acre-feet, Denver Water will be waiving surcharge penalties that were assessed in 2020 due to DBS's overuse of augmentation water in excess of leased contract supply.

Budget and Schedule:

The total amount of this First Amendment to the Lease Agreement is \$69,570.00, which will be a receivable for Denver Water.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

Recommendation:

It is recommended that the Board approve the first amendment to the Lease Agreement with DBS, LLC for a lease of an additional three acre-feet of water at an SDC charge of \$69,570.

Approvals:

- | | |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input checked="" type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input type="checkbox"/> Jessica R. Brody, General Counsel | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-A-5

First Amendment to the September 25, 2013 Settlement Agreement between Denver Water and Climax Agreement 500899

Action by Consent

Individual Action

Purpose and Background:

The First Amendment to the September 25, 2013 Settlement Agreement between Denver Water and Climax incorporates the June 22, 2020 Green Mountain Reservoir (GMR) Protocol Agreement that was recently approved by the Board at its July 22, 2020 Board meeting.

On September 25, 2013, Denver Water and Cyprus Climax and its subsidiary, Climax Molybdenum Company, entered into a settlement agreement to implement a process which would enable Climax to meet its obligations to provide substitution water in accordance with Article III.D. of the GMR Protocol and the GMR Protocol Agreement dated February 22, 2013. The 2013 GMR Administrative Protocol Agreement was incorporated into the 2013 Settlement Agreement as Exhibit B to that agreement.

The 2013 GMR Protocol Agreement required the filing of an application for determination of water right to determine that Sections I, II, and III of the GMR Protocol are consistent with the "Blue River Decree" entered by the U.S. District Court for the District of Colorado on October 12, 1955. However, on or about March 22, 2017, the U.S. District Court issued an opinion and order effectively remanding the Blue River Decree to the state water court for Water Division No. 5. As a result, the parties to the 2013 GMR Protocol Agreement modified the agreement and replaced the agreement with the June 22, 2020 GMR Protocol Agreement, which allows the parties to pursue relief in state court for a determination that Section I, II, and III of the GMR Protocol are consistent with the Blue River Decree.

In addition to incorporating the June 22, 2020 GMR Protocol Agreement, the amendment updates contact information for notices to be provided under the 2013 Settlement Agreement.

Budget and Schedule:

There is no budgetary impact for this item.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

Recommendation:

It is recommended that the Board approve the First Amendment to the September 25, 2013 Settlement Agreement between Denver Water and Climax.

Approvals:

- | | |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input checked="" type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input checked="" type="checkbox"/> Jessica R. Brody, General Counsel | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: II-B-1-a

Construction Agreement with United Power for Northwater Treatment Plant Contract 504577

Action by Consent

Individual Action

Purpose and Background:

The purpose of this Board Item is to execute a contract with United Power in support of the Northwater Treatment Plant (NTP) construction. The contract is necessary for United Power to design and construct electrical infrastructure to provide permanent electrical service to the NTP.

Xcel Energy and United Power have agreed upon a service area swap, in which United Power will provide permanent power to the NTP site and Xcel Energy will continue to be the service provider at Gross Reservoir. This territory swap benefits Denver Water in multiple ways, including:

- Future flexibility to expand renewable energy sources on-site, as United Power is willing to accept renewable energy in excess of 120% of NTP's power use. Xcel Energy, according to its service rules, will not reimburse for renewable energy in excess of 120% of the site's annual power demand.
- Ability to accept multiple meters on the Ralston Reservoir property with United Power maintaining ownership of the power lines and substation. Xcel Energy's service rules require that its service lines terminate at the property boundary, requiring Denver Water to construct, operate, and maintain miles of on-site distribution cable.
- Virtual net-metering for all meters on-site and other Denver Water properties within United Power's service area allows Denver Water to offset meters that are using power with meters that are generating power. Xcel Energy was unable to accommodate this flexibility.

United Power's previous service boundary was adjacent to the Ralston Reservoir property with the closest connection point one-quarter mile from Denver Water's property line. Additionally, United Power has already been in discussions with Denver Water about connecting to the open channel hydro generation sources on the Ralston Reservoir property. United Power is a not-for-profit co-op organization, yielding greater flexibility in rate structures and metering rules on a future service agreement as compared to Xcel Energy.

Budget and Schedule:

This agreement commits Denver Water to spending up to \$1,856,267 for installation of an on-site medium-voltage substation and distribution lines. Denver Water will pay a commitment fee of \$1,687,514.92 for estimated labor, material, administrative, and general expense required by United Power for extending electric service from the existing electric distribution line to Denver Water's Ralston Reservoir property including the NTP and other existing infrastructure. The team negotiated a cap on potential construction change orders of 10%, resulting in the potential maximum commitment.

To ensure permanent power is operational by December 31, 2021 to facilitate early commissioning activities at NTP, the team negotiated a clause requiring United Power to commence its design within 90 days of payment by Denver Water. In addition, United Power shall provide a sequencing schedule to Denver Water to facilitate coordination with NTP activities and to establish an anticipated completion date.

Funds for this contract will come from the 2020 budget for the NTP business unit, which has sufficient funds to pay the \$1,687,514.92 estimated to be paid in 2020, and the total \$1,856,267 if necessary.

In addition, the NTP team, with the assistance of the Office of General Counsel, will continue to work with United Power on a service agreement, which will require execution prior to NTP startup.

Denver Water aspires to be the best water utility in the nation.

Integrity :: Vision :: Passion :: Excellence :: Respect



S/MWBE Information:

Minority and Women-owned Business Enterprise goals are not applicable for this item.

Recommendation:

It is recommended that the Board approve Contract 504577 with United Power for design and construction of new electrical infrastructure to serve the NTP for a total contract amount not to exceed \$1,687,514.92.

Approvals:

- | | |
|---|--|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input checked="" type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input checked="" type="checkbox"/> Jessica R. Brody, General Counsel | <input checked="" type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input checked="" type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: September 23, 2020

Board Item: V-A-1

Briefing Paper for Aquatic Invasive Species at Ralston Reservoir

Strategic Plan Alignment

The Ralston Reservoir Aquatic Invasive Species Plan aligns with the Denver Water Strategic Plan on preventing aquatic invasive species from entering our waterways.

Lenses: Customer Centric Industry Leader Long-Term View

This strategy will allow us to assess the coating in an attempt to minimize Ralston Reservoir's maintenance and operating costs and avoid the need to remove Quagga and Zebra Mussels from infrastructure.

Summary

Ralston Reservoir will be under construction to renovate the intake infrastructure of the outlet works, which includes a new intake structure, new trash racks, and a new intake valve. This project will follow the current strategy implemented by Denver Water and Colorado Parks and Wildlife (CPW) to prevent aquatic invasive species (AIS) from entering Ralston Reservoir by performing aquatic nuisance species inspections of watercraft and equipment. In addition, this project allows for the opportunity to apply a coating to the trash rack that will prevent AIS from collecting. Even though mussels aren't currently present at Ralston Reservoir, we can monitor the coating's corrosion protection and longevity performance for future use at other Denver Water facilities.

Background

Quagga and Zebra Mussels are a hazardous aquatic species to waterway infrastructure. The mussels can attach themselves to dam features such as trash racks, valves, and piping, and interfere with the delivery of water. It is believed that Zebra Mussels were introduced to North America in the Great Lakes in 1988. They have spread across the United States by boats carrying live mussels or larva infested water, mud, or plants to another body of water. Multiple different strategies including chemical, biological, hydraulic, UV light, and remove/replacement have been used to manage the effects of Quagga and Zebra Mussels. Since their introduction into the U.S., they have cost businesses, communities, and power companies billions of dollars to maintain clear passages of their waterways.

In Colorado, CPW manages an Aquatic Nuisance Species Program, which includes required inspections, certifications, decontamination, impoundment, monitoring, and reporting related to AIS. In addition, waters are tested for the presence of AIS. Currently, Green Mountain Reservoir has potential AIS from a positive Quagga Mussel larvae test. CPW has increased the inspection and certification requirements for boats leaving this reservoir to prevent spread. Continued testing of Green Mountain Reservoir will be conducted because it is unknown if the found Quagga Mussel DNA came from dead or live larvae.

Denver Water follows state protocols and has incorporated CPW's requirements into our standard operations. Aquatic nuisance species inspectors enforce state protocols at Antero, Dillion, Eleven Mile, and Williams Fork Reservoirs, Denver Water's only reservoirs that allow motorized watercrafts. All other Denver Water reservoirs either prohibit public access or only allow inspection-exempt non-motorized watercrafts. Exempt non-motorized watercrafts include "car top" boats such as canoes, paddleboards, and kayaks. For these watercraft, control and

prevention of AIS spread is accomplished through AIS public education programs including signage, leaflets, website information, and publicizing how to report AIS.

Public access is prohibited at Ralston Reservoir. However, if a Denver Water motorized watercraft or a contractor motorized watercraft is to enter Ralston Reservoir, it has to pass an aquatic nuisance species inspection prior to entering the reservoir. Gross Reservoir, which is upstream of Ralston Reservoir, allows public access and non-motorized watercrafts onto the water. Gross Reservoir will follow Denver Water's best management practices to prevent the spread of AIS through public education programs and inspections for Denver Water and its contractors' motorized watercrafts. Since Ralston Reservoir will be drained for construction, inspection of equipment entering the reservoir will be required to assure it is clean and dry.

Alternatives

Additional preventative measures have been investigated for Ralston Reservoir's intake structure including antifouling and foul release coatings. Antifouling coatings use biocides to prevent AIS from collecting on surfaces, and foul release coatings have a silicon-like surface which makes it difficult for organisms to adhere to. Antifouling coating have potential biological side effects and are not effective around continuous water flowing conditions seen at intake structures. According to Bureau of Reclamation studies, the antifouling coatings do not work for more than a few months and the foul release coating are effective for 5-10 years on intake structures before repairs or replacement is required.

The initial added cost to apply a foul release coating at Ralston Reservoir would be about \$10,000. It would cost about \$20,000 to \$30,000 every 5-10 years to maintain this coating on the intake structure.

Approach

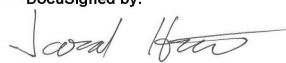
With the current strategies in place, the limited public access to Gross Reservoir and Ralston Reservoir, and non-detectable population of live Quagga and Zebra Mussels in Colorado, it is believed the risk probability of AIS spread to Ralston Reservoir is currently low. However, since we have the opportunity to apply a foul release coating on the trash rack for minimal added costs, we are going to take the proactive approach. Ralston Reservoir's intake structure is easily accessible to marine divers due to the proximity to Denver and relatively shallow dive depth. This application presents a good opportunity to monitor the foul release coating's longevity performance.

We will progress on a facility-by-facility basis for future opportunities to apply AIS preventative measures to better understand their performance in our water collection system.


Owner(s)

Jared Heath, P.E., Engineering
Ian Oliver, Director of Source of Supply
Brandon Ransom, Recreation Manager

Respectfully submitted,

DocuSigned by:

3AAD30849E2042F...

Jared Heath
Senior Engineer

DocuSigned by:

FB0A4D37EBF6446...

Robert J. Mahoney
Chief Engineering Officer