



**Castle Rock Water Commission
Agenda - Final-Amended**

David Hammelman, Chair
Tony Rathbun, Vice Chair
Angie Brown
Brian Gaddie
KiKi Miller
Melanie Penoyar-Perez
Cortland Wolfe

Wednesday, December 11, 2024

6:00 PM

**Castle Rock Water
175 Kellogg Ct., Bldg. 183
Castle Rock, CO 80109**

Special Meeting to replace November & December regular meetings

This meeting is open to the public and will be held in a hybrid format in accordance with Town Council Electronic Participation, Connected, and Hybrid Meeting Policy. The in-person meeting will be held at 171 Kellogg Ct. Castle Rock CO 80109 or this meeting can be accessed online at: <https://crgov.webex.com/crgov/j.php?>

MTID=m6401955ddf95914b4e565b3e91a37dd1 the Meeting password: Dec04CRWC (33204279 from video systems) or phone in by calling (720) 650-7664, meeting code 2484 244 9079. One or more Council members may also attend this meeting, during which the items listed herein will be discussed.

6:00 pm CALL TO ORDER / ROLL CALL

COUNCIL UPDATE

COMMISSION COMMENTS

DOUGLAS COUNTY WATER COMMISSION UPDATE

ADMINISTRATIVE BUSINESS

1. [WC 2024-115](#) Introduction of New Water Commission Member
2. [WC 2024-116](#) Pine Canyon Update
3. [WC 2024-117](#) Approval of the October 30, 2024 Meeting Minutes

Attachments: [Attachment A: Meeting Minutes](#)

ACTION ITEMS (HIGH PRIORITY / TIME CRITICAL)

4. [WC 2024-118](#) Resolution Approving the Progressive Design-Build Agreement with S. J. Louis Construction, Inc. for the Sedalia Lift Station and Force Main to Plum Creek Water Reclamation Authority Project [Located in Sedalia, CO]

Attachments: [Attachment B: Map of Sedalia Options](#)

5. [WC 2024-119](#) Resolution Approving an Amendment to the Rueter-Hess Drought Water Supply Pilot Plan Intergovernmental Agreement (IGA) between the Town of Castle Rock Water Enterprise and Denver Water, Parker Water and Sanitation District, and East Cherry Creek Valley Water and Sanitation District [Located in northwest and northeast Douglas County]
Town Council Agenda Date: December 17, 2024

6. [WC 2024-120](#) An Ordinance Amending Title 15.36 of the Castle Rock Municipal Code Adopting by Reference as Primary Code the Town of Castle Rock, Colorado Storm Drainage Design and Technical Criteria Manual – First Reading [Castle Rock Boundary]

Attachments: [Attachment A: Ordinance](#)
 [Attachment B: Summary of Changes](#)

7. [WC 2024-121](#) An Ordinance Approving Changes to Municipal Code, 13.12.070, Emergency regulation of water [Entire Castle Rock Water service area]

8. [WC 2024-122](#) Resolution Approving the 2025 Drought Management Plan (Entire Castle Rock service area)

Attachments: [Attachment A: Ordinance](#)
 [Attachment B: Summary of Changes](#)

DIRECTOR FOLLOW-UP AND INFORMATIONAL / UPDATE ITEMS

9. [WC 2024-123](#) 2024 Sanitary Survey Results
10. [WC 2024-124](#) Follow-up on Rates and Fees Study RFP
11. [WC 2024-125](#) Update on Tallgrass Project
12. [WC 2024-126](#) Upcoming Town Council Items

COMMISSIONER MEETING COMMENTS



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 1. File #: WC 2024-115

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water

**Introduction of New Water Commission Member
Town Council Agenda Date: November 19, 2024**

Executive Summary

Commissioner Cortland Wolfe announced that he would no-longer be able to serve on the Water Commission at the October 30, 2024 meeting. The interview committee revisited the list of approved candidates from the May interviews and recommended Town Council approve Ole Gjerde as the new Water Commission member. Town Council officially appointed Mr. Gjerde to the Water Commission at the November 19, 2024 Council meeting. He will serve out the term of Cortland Wolfe that ends on May 31, 2026.

Staff would like to welcome Ole Gjerde to the Castle Rock Water Commission.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 2. **File #:** WC 2024-116

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water

Pine Canyon Update

Town Council Agenda Date: NA

Executive Summary

This will be an update only item.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 3. File #: WC 2024-117

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water

**Approval of the October 30, 2024 Meeting Minutes
Town Council Agenda Date: NA**

Executive Summary

Attached are the meeting minutes for the October 30, 2024 Water Commission Meeting.

Proposed Motion

"I move to approve the Minutes as presented"

Attachments

Attachment A: October 30th Mtg. Minutes



**Castle Rock Water Commission
Meeting Minutes - Draft**

David Hammelman, Chair
Tony Rathbun, Vice Chair
Angie Brown
Brian Gaddie
KiKi Miller
Melanie Penoyar-Perez
Cortland Wolfe

Wednesday, October 30, 2024

6:00 PM

**Castle Rock Water
175 Kellogg Ct., Bldg. 171
Castle Rock, CO 80109**

This meeting is open to the public and will be held in a hybrid format in accordance with Town Council Electronic Participation, Connected, and Hybrid Meeting Policy. The in-person meeting will be held at 171 Kellogg Ct. Castle Rock CO 80109 or this meeting can be accessed online at: <https://crgov.webex.com/crgov/j.php?MTID=m2647c6e12770d31e3f47fcf2341e78d0> the Meeting password: Oct23CRWC

(62823279 from video systems) or phone in by calling (720) 650-7664, meeting code 2490 791 3501. One or more Council members may also attend this meeting, during which the items listed herein will be discussed.

CALL TO ORDER / ROLL CALL

- Present** 6 - Vice Chair Tony Rathbun, Angie Brown, Brian Gaddie, KiKi Miller, Melanie Penoyar-Perez, and Cortland Wolfe
- Not Present** 1 - Chair David Hammelman
- Attendance** 10 - Jason Gray, Mark Marlowe, Matt Benak, Nichol Bussey, Roy Gallea, Frank Main, Erin Evans, Matt Hayes, Paul Rementer, and Melinda Pastore

COUNCIL UPDATE

Time was allowed for Mayor Gray and Mr. Marlowe to share a council update.

COMMISSION COMMENTS

Time was allowed for commissioner comments. Commissioner Wolfe informed the commission that he is moving out-of-state next month and this was his last meeting.

Mr. Marlowe and the other Commissioners expressed their appreciation for Commissioner Wolfe’s service on the commission.

DOUGLAS COUNTY WATER COMMISSION UPDATE

Mr. Marlowe shared an update on the most recent Douglas County Water Commission meeting.

ADMINISTRATIVE BUSINESS

[WC 2024-104](#) **WEFTEC Utility of the Future Today Award**
Town Council Agenda Date: NA

Mr. Marlowe informed the commission that Castle Rock Water received the Utility of the Future Award at the Water Environment Federation Technical Exhibition and Conference on October 8, 2024 in New Orleans, LA. The area of performance was for water reuse for innovative and forward-thinking practices that provide sustainable, efficient and value-added services to the community.

[WC 2024-105](#) **Approval of the September 25, 2024 Meeting Minutes
Town Council Agenda Date: NA**

I move to approve the September 25, 2024 Meeting Minutes

Yes: 6 - Vice Chair Rathbun, Brown, Gaddie, Miller, Penoyar-Perez, and Wolfe

Not Present: 1 - Chair Hammelman

[WC 2024-106](#) **Pine Canyon Update
Town Council Agenda Date: NA**

Mayor Gray and Mr. Marlowe updated the commission on the proposed Pine Canyon development. Douglas County continued this item to December 17, 2024. We are waiting on a pre-annexation agreement from the developer for the Town to consider.

[WC 2024-107](#) **Castle Rock Water Customer Mailer 2024
Town Council Agenda Date: NA**

Mr. Marlowe informed the commission about a Castle Rock Water mailer that is scheduled to be mailed late November 2024 to all Town of Castle Rock addresses. Though satisfaction for water topics remains high, confidence slipped slightly in 2023 with most of this attributed to growth. This mailer was designed to answer the questions regarding water quality, conservation programs, managing long-term water supplies, and the value of services for rates paid. The cost of the mailer is estimated at \$13,500, which will be funded through Castle Rock Water’s marketing budget.

ACTION ITEMS (HIGH PRIORITY / TIME CRITICAL)

[WC 2024-108](#) **An Ordinance Amending Title 15.48 of the Castle Rock
Municipal Code Adopting by Reference as Primary Code the
Town of Castle Rock, Colorado 2025 Landscape and
Irrigation Criteria Manual [*Entire Castle Rock Service Area*]
Town Council Agenda Date: November 19, 2024**

Ms. Convy presented the proposed changes to the Landscape and Irrigation Criteria Manual. The manual outlines landscape and irrigation criteria that reduces water waste, improves watering efficiency, and supports landscapes that are native, regionally adaptive, functional, and appealing to the senses as a ColoradoScape design. The proposed changes focus on updating the minimum

criteria for ColoradoScape design requirements to improve functionality, overall value and appeal in residential applications.

The major proposed changes are:

- Updating the defensible space definition to include a link to the CSU Extension Low Flammability Landscape Plants fact sheet.
- Updating surety percentage to 115% of the remaining work to be completed to provide an adequate amount should the project not be completed and the Town is required to finish.
- Redefining irrigable area for purposes of residential ColoradoScape design
- Adding functionality as a criterion for residential front and backyard access
- Enhancing plant quantities and varieties required to improve the visual appearance and vegetative cover
- Expanding non-vegetative landscape materials to include required categories enhancing the visual interest and diversity.
- Providing flexibility and adding diversity of backyard landscaping, larger areas of native or alternative grasses may be considered but must not exceed the established water budget of a 500-square-foot area of Tahoma 31 grass.

There are no significant anticipated additional costs to the Town for these proposed changes. Mayor Gray asked if there is a time period that residents are required to finish their backyard landscaping. Ms. Convy replied that the requirement is generally with the homeowners association (HOA) and is typically six months to a year. Mayor Gray said that council is concerned with aesthetics and drainage.

I move to recommend Town Council approve the Ordinance as presented.

Yes: 6 - Vice Chair Rathbun, Brown, Gaddie, Miller, Penoyar-Perez, and Wolfe

Not Present: 1 - Chair Hammelman

[WC 2024-109](#)

Resolution Approving a Construction Contract between the Town of Castle Rock and 53 Corporation, LLC, for the McMurdo Gulch Stream Reclamation Priority 3 Project

[McMurdo Gulch south of the intersection of Castle Oaks Drive and Autumn Sage Street]

Town Council Agenda Date: November 19, 2024

Mr. Main presented this request to award a construction contract to 53 Corporation, LLC for the McMurdo Gulch Stream Reclamation Priority 3 Project in the amount of \$2,412,127, plus approximately a two percent Town-managed contingency in the amount of \$48,000, for a total authorization of \$2,460,127. The project is located adjacent to Castle Oaks Drive; at four sites south of the intersection of Castle Oaks Drive and Autumn Sage Street. The improvements will mitigate impact and preserve the natural drainageway within the project area.

This project will be funded through the Stormwater Enterprise Fund (41%), a developer contribution (34%), and through a Participation Agreement from the Cherry Creek Basin Water Quality Authority (25%). Construction is scheduled for December 2024 through August 2025.

Commissioner Brown asked if we've been seeing challenges in this area. Mr. Gallea said he believes this has been prompted mostly by the growth in the area and making sure that with the increase in water runoff we don't run into any issues. Commissioner Wolfe asked if the Town of Castle Rock owns the McMurdo Gulch property. Mr. Main replied that the Town owns a big portion and Castle Rock Water is working to obtain permanent easements for the other areas so the work can be done.

I move to recommend Town Council approve the Resolution as presented.

Yes: 6 - Vice Chair Rathbun, Brown, Gaddie, Miller, Penoyar-Perez, and Wolfe

Not Present: 1 - Chair Hammelman

[WC 2024-110](#)

Resolution Approving the Third Amendment to the Participation Agreement between the Cherry Creek Basin Water Quality Authority (CCBWQA) and the Town of Castle Rock for the Design and Construction of Stream Reclamation Improvements for McMurdo Gulch [Near the intersection of Castle Oaks Drive and Autumn Sage Drive]
Town Council Agenda Date: November 19, 2024

Mr. Main presented this request to approve a Third Amendment to the Participation Agreement between the Cherry Creek Basin Water Quality Authority (CCBWQA) and the Town of Castle Rock (TOC) for the design and construction of stream reclamation for McMurdo Gulch. The Town has partnered with the CCBWQA on other projects since 2011 on McMurdo Gulch, with the CCBWQA contributing over \$1,470,000 to-date. In 2017, the Town completed a stream assessment of McMurdo Gulch that prioritized areas where McMurdo Gulch needed stream channel improvements. In 2020, the Town and the CCBWQA partnered to complete the Priority 1 improvements under separate agreement from this one.

The Town entered into this Participation Agreement with the Authority in October 2020 for design of the Priority 2 stream reclamation improvements for McMurdo Gulch, followed by the First Amendment that authorized construction of the Priority 2 improvements in December 2021. The Second Amendment to the Participation Agreement approved in June 2022 included a contribution for the design of the Priority 3 improvements in the amount of \$170,129. This Third Amendment to the Participation Agreement includes a contribution for construction of the Priority 3 improvements in the amount of \$1,290,347, which includes transfer of the remaining balance of funds from the Priority 1 and 2

improvements in the amount of \$251,380 and an additional contribution of \$868,846.

McMurdo Gulch is a western tributary to Cherry Creek, extending along the eastern edge of the Town. Under the terms of the agreement, funds will be received following the execution of this amendment, to implement construction of the McMurdo Gulch Stream Reclamation Priority 3 Project.

I move to recommend Town Council approve the Resolution as presented.

Yes: 6 - Vice Chair Rathbun, Brown, Gaddie, Miller, Penoyar-Perez, and Wolfe

Not Present: 1 - Chair Hammelman

[WC 2024-111](#)

Resolution Approving a Second Amendment to the Service Agreement with Dewberry Engineers Inc. for the Young American Infrastructure Improvements, Bell Mountain Raw Pipeline, and Bell Mountain Flow Meter Vault Upgrade Projects [Young American neighborhood and Bell Mountain Ranch]

Town Council Agenda Date: November 5, 2024

Ms. Evans presented this request. The current authorization for this Services Agreement includes Dewberry’s project cost for design in the amount of \$623,784, with a contingency of \$31,189, for a total authorization of \$654,973. Additional scope and fee is needed to complete the Young American Infrastructure Improvements design. The total added fee under Amendment 2 is \$138,653. This project will encumber the remaining project contingency of \$31,189 and staff is requesting approval of an additional \$107,464, for a total revised authorization amount of \$762,437.

Dewberry was tasked with re-phasing the project into more phases to more closely align with budgeting through project completion. Public Works was brought into the design process of the Young American waterline improvements project to allow collaboration with their Pavement Maintenance Program (PMP) to minimize impacts to the neighborhood. Castle Rock Water staff identified two more locations in need of critical upgrades, which were added to Dewberry’s scope; Hillside Drive and Overlook Road. Additional potholing for phases 2 and 3 will also be included in the scope of the waterline replacement design in the second amendment.

Staff is currently working with the HOA to try to determine a plan for the Overlook Road improvements, as it was developed as a private road in 1971. Most of the water and sewer infrastructure is private as well. There are four homes on Overlook Road.

Mr. Marlowe explained that we won’t allow Dewberry to proceed with this piece of the work until Castle Rock Water has a written agreement with the HOA. According to the platting, Castle Rock Water owns a piece of the six-inch water main that runs up the road, and then it splits off into a four-inch pipe that goes up

the rest of the road which is private. The sewer line is private until it hits Castle Rock Water’s infrastructure on Hillside. We are trying to determine who will pay for the portion of the infrastructure that is private. Castle Rock Water is working with the HOA on this issue. When there are leaks in that area, they don’t currently have the ability to repair them quickly. Ultimately, this should be public infrastructure, and it should be rehabilitated and brought up to Town codes.

The sanitary sewer rehabilitation and Bell Mountain flow meter vault upgrade design has been completed and both projects are currently under construction. The Bell Mountain Raw Water Pipeline Project design is progressing on schedule. An alignment has been determined, which has narrowed down the locations where easements are required to execute the project. Easement legal descriptions were not included in the initial scope for this project, so they are included in this second amendment. Project completion is anticipated by December 31, 2025.

I move to recommend Town Council approve the Resolution as presented.

Yes: 6 - Vice Chair Rathbun, Brown, Gaddie, Miller, Penoyar-Perez, and Wolfe

Not Present: 1 - Chair Hammelman

DIRECTOR FOLLOW-UP AND INFORMATIONAL / UPDATE ITEMS

[WC 2024-112](#)

Artificial Intelligence (AI) Leak Detection, Equipment and Services Acquisition Agreement with Digital Underground Solutions

Town Council Agenda Date: 2025

Mr. Hayes shared information about how artificial intelligence (AI) can be used to detect water leaks. Castle Rock Water (CRW) plans to contract with Digital Water Solutions for leak detection technology using acoustical loggers installed on fire hydrants (several vendors were considered). The technology uses the data from acoustical loggers to identify and locate water leaks in the distribution system. The initial implementation of this technology will be used as a pilot study in Cobblestone Ranch. The cost for the initial phase of this project is \$89,444, including \$79,705 for eight permanent loggers for fire hydrants and \$9,739 for software and training (plus a contingency of \$8,900).

The goal of this software is to help reduce real water loss seen within the distribution system and capture lost revenue of produced water from these losses. CRW’s annual real losses from leaks in the distribution system range from 133.3 million gallons to 240.0 million gallons over the last five years. The value of this water is \$410,770 to \$643,070. Reducing these water losses also helps to reduce the amount of water supply CRW has to develop to meet future demands.

Commissioner Brown asked what the timeline is for the pilot project. Mr. Hayes replied that the goal is to be under contact by November, then the pilot will be for

about six months. After that we could use the modules somewhere else.

[WC 2024-113](#)

Key Performance Indicators

Town Council Agenda Date: NA

Mr. Rementer shared an update on Key Performance Indicators from our financial management plan, which overall is looking good. Employee turnover is currently a big focus for us.

Mr. Marlowe explained that thanks to council for recently approving a change that increased wages in some positions, we've already seen a huge impact to the number of applications of qualified individuals that we are receiving.

Upcoming Town Council Items

Town Council Agenda Date: NA

This is a standing item that is used to share information about projects that are being worked on at the time of the meeting but that staff doesn't have information ready for yet.

There were no items at this time.

COMMISSIONER MEETING COMMENTS

Commissioners Penoyar-Perez and Brown congratulated Castle Rock Water on receiving the WEFTEC Utility of the Future Today award.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 4. **File #:** WC 2024-118

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Roy Gallea, P.E., Engineering Manager
Scott Tait, P.E., Water Resources Project Manager

Resolution Approving the Progressive Design-Build Agreement with S.J. Louis Construction, Inc. for the Sedalia Lift Station and Force Main to Plum Creek Water Reclamation Authority Project [Located in Sedalia, CO]
Town Council Agenda Date: December 17, 2024

Executive Summary

Castle Rock Water (CRW) seeks Town Council approval of a Resolution (**Attachment A**) approving an agreement (**Exhibit 1**) with S.J. Louis Construction, Inc., Sedalia Lift Station and Force Main to Plum Creek Water Reclamation Authority Project, for the amount of \$633,203.00, plus a 10% contingency, for a total authorization amount of \$696,523.30.

The Sedalia Lift Station and Force Main to Plum Creek Water Reclamation Authority (PCWRA) Project will improve water quality, fuel high quality economic development in a key corridor, allow CRW to capture reuse water supplies, create economies of scale, and support existing employers.

This project is to design and build the main wastewater conveyance system for Sedalia and the surrounding area. The project is funded by the American Rescue Plan Act (ARPA) through Douglas County with CRW acting as the Project Manager for the project and eventually owning and operating the system for the benefit of the community. Douglas County has approved the project award and agreement with S.J. Louis Construction, Inc.

The construction delivery method for the project is a Progressive Design-Build method. Phase 1 of the project includes a work product up to 60% design which is the basis for this Agreement. At 60% design, a Guaranteed Maximum Price or a lump sum price is negotiated and CRW has the option to accept either for the completion of the project. A Phase 2 Agreement is then negotiated for final design and construction. This Phase 2 Agreement will need to be approved by Douglas County and by Town Council. The entire project is scheduled to be completed by December 31, 2026.

Notification and Outreach Efforts

Douglas County has posted a news article on their web page about this Highway 85 Southern

Item #: 4. File #: WC 2024-118

Corridor Wastewater Project. ToCR has entered into an Intergovernmental Agreement (IGA) with Douglas County for this project.

CRW has developed a stakeholder group that includes key potential customers for the wastewater project. This group is meeting to review all aspects of the project and provide CRW and Douglas County input.

Plans are currently being made with Douglas County and CRW to encourage residents and businesses that are not current stakeholders to participate in the sewer trunkline planning and construction along with hooking up to the system.

History of Past Town Council, Boards & Commissions, or Other Discussions

Castle Rock Water Commission recommended approval of the Amended and Restated IGA with Douglas County for the Highway 85 Wastewater Collection and Treatment System on May 22, 2024.

The Amended and Restated IGA with Douglas County for the Highway 85 Wastewater Collection and Treatment System was approved by Town Council on July 2, 2024.

Douglas County approved the IGA on July 2, 2024.

Discussion

This project will benefit Sedalia residents and businesses by eliminating the need for onsite septic systems for their respective residential and facility wastewater treatment. The reduction of onsite wastewater treatment systems along the East Plum Creek corridor will assist in improving the water quality of East Plum Creek and Plum Creek, a water supply source for the Town of Castle Rock (ToCR).

This project will build a lift station to pump wastewater from Sedalia through a pipeline (force main) back to PCWRA. **Attachment B** shows potential lift station locations and force main routes. Sewer trunk lines and connections to residents and businesses will need to be constructed through potential customer financial inputs and / or system development fees to take full advantage of this project. The key stakeholders (customers) planning to discharge into the lift station for conveyance to PCWRA are the Douglas County School District, CORE Electric, Sedalia Water and Sanitation District water customers, current developers with development proposals in-process with Douglas County.

This project was publicly advertised on ???. CRW received five proposals as listed below. Proposers were ranked based on the most qualified and responsible offers. Rankings were built on grades in the areas of the Project Team, Approach, Pricing and Interview.

Proposers in Ranked Order of Most Qualified	Phase 1 - Fixed Price (Estimate was \$0.200M)	Phase 2 - Fixed Markup	Phase 2 - with Fixed Markup (Base Estimate at \$7.4M)	Total Estimate for Construction

Item #: 4. File #: WC 2024-118

S.J. Louis/Garver	\$0.634M	7.50%	\$7.955M	\$8.589M
Burns & McDonnell/Moltz	\$1.101M	7.75%	\$7.974M	\$9.071M
BT Construction/Wilson	\$0.598M	19%	\$8.801M	\$9.404M
Rice Lake West/JVA	\$1.291M	10%	\$8.140M	\$9.431M
RMS Utilities/RG & Associates	\$0.225M	0%	\$7.40M	\$7.625M

The S.J. Louis/Garver Team was ranked the highest and is therefore selected as the most qualified and responsible offer.

Budget Impact

The \$14M total funding for this project is being paid for by Federal, American Rescue Plan Act funds granted to Douglas County. The project is being administered by CRW. CRW will receive a 1% Project Management fee of up to \$140,000.00 for the management of the project. The projected costs for the project are:

Phase 1 (Up to 60% Design) - S.J. Louis this Staff Report	Easement Acquisitions - Western States and David Kilty	Easements Costs	Phase 2 (60% Design -100% Construction) <i>ESTIMATED</i>	Construction Management	CRW Project Management Fee	Contingency	Total Budgeted Cost
\$0.697	\$0.235M	\$0.200M	\$7.955M	\$0.600M	\$0.140M	\$4.173M	\$14M

As per the IGA with Douglas County, expenses to be reimbursed to CRW will be processed through GL Account # 213-4575-445.79-38 - 85 Regional Wastewater.

Proposed Motion

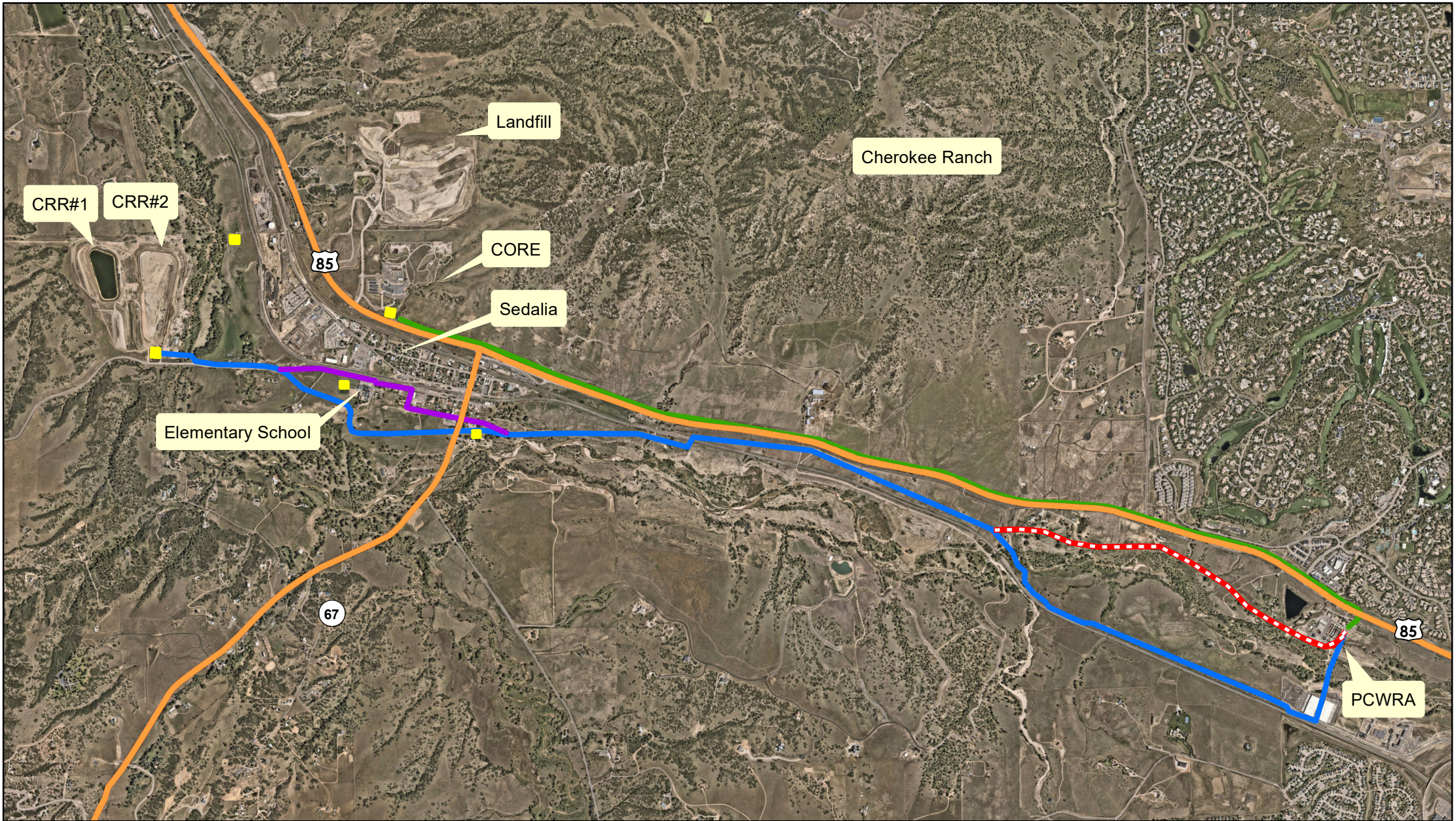
"I move to recommend to Town Council approval of Resolution as presented"

Attachments

- Attachment A: Resolution
- Exhibit 1: Agreement (*Not Attached*)
- Attachment B: Map of Sedalia Options

Map of Sedalia Lift Station Locations and Force Main Alignments

Attachment B



Legend

- Potential Lift Station Locations
- Alternate Path to Consider
- Conceptual Alignment Alternative Line
- N of HWY 85 Alignment
- Waterline Easement Alignment



Disclaimer: If you are unable to access any portion of this map due to a disability as defined under Colorado House Bill 21-1110, we are here to help! Please call us at 303-663-4440, email the Town's accessibility team at accessibility@CRgov.com or submit an accommodation request form at CRgov.com/A11yReques



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 5. **File #:** WC 2024-119

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Matt Benak, P.E., Water Resources Manager

Resolution approving an Amendment to the Rueter-Hess Drought Water Supply Pilot Plan Intergovernmental Agreement (IGA) between the Town of Castle Rock Water Enterprise and Denver Water, Parker Water and Sanitation District, and East Cherry Creek Valley Water and Sanitation District [Located in northwest and northeast Douglas County]

Town Council Agenda Date: December 17, 2024

Executive Summary

The purpose of this memorandum is to request Town Council approval of an Amendment to an Intergovernmental Agreement (IGA) between Castle Rock Water (CRW), Denver Water, Parker Water and Sanitation District (PWSD) and East Cherry Creek Valley Water and Sanitation District for the Rueter-Hess Drought Water Supply Pilot Plan. The resolution approving the amendment to the agreement is provided in **Attachment A** and the Amendment to the Intergovernmental Agreement (IGA) is **Exhibit 1** to the Resolution.

The aforementioned parties desire to extend the Pilot Plan for four additional years, expiring on December 31, 2028. This pilot project involves storage of water in Rueter-Hess Reservoir (RHR) under the current terms of the RHR 404 permit and helps CRW to store its currently permitted fully-reusable return flows, which are captured and stored in Chatfield Reservoir, into RHR using existing infrastructure.

The way the pilot operates is that Denver Water transfers “Pilot Water” into the WISE System using the existing Conduit 111 / WISE Pipeline interconnection. Pilot Water is then pumped through WISE infrastructure to PWSD’s Rueter-Hess Water Purification Facility (RHWPF) where it combines with other water and enters PWSD’s potable water distribution system. When PWSD uses the Pilot Water in the manner described above, PWSD has a reduced need to withdraw water supplies stored in RHR. Therefore, PWSD will book over water stored in a PWSD RHR storage account into a new PWSD subaccount titled “Pilot Plan Storage Account.”

On August 21, 2024, Denver Water and CRW coordinated to perform a swap of 390 acre-feet (AF) of water. This block of water was booked from Castle Rock’s Chatfield Reservoir storage account to a Denver Water Chatfield Reservoir storage account. Simultaneously, Denver Water booked over 390

AF of RHR Pilot Plan Storage Account water to the CRW RHR storage account.

The original IGA contemplated up to 1,000 AF of water (total) being transferred in the manner described above.

The benefit of this agreement to CRW is that it gives an opportunity to add additional supplies into RHR, where through other agreements with PWSD, we can treat and deliver additional potable water to our customers. PWSD will realize higher water levels in RHR and Denver Water will be able to investigate potential future options for storing water in RHR. The pilot project will also use some of ECCV's pumping and piping infrastructure to move water to PWSD's system, and because the primary benefit is for CRW, the Town will pay energy recovery costs and administrative fees to ECCV during the pilot project. In 2024, CRW paid \$15,581 to ECCV.

History of Past Town Council, Boards & Commissions, or Other Discussions

On August 18, 2020, the Castle Rock Water Commission unanimously recommended that Town Council approve the IGA when its final form was presented for Council consideration.

On December 15, 2020, Town Council approved the IGA.

Discussion

RHR is located in northeastern Douglas County one mile east of Castle Pines Parkway and I-25 on property owned by PWSD. RHR was completed in 2012 and has a storage capacity of 75,000-acre feet (AF) which will encompass 1,170 acres at full pool. Along with PWSD, Castle Pines North and Stonegate, CRW is also a participant in the reservoir and owns 8,000 AF of storage space.

To date, CRW has only been able to store around 6% of its current allocated space in water. The water we have been able to store is made up of return flows from the Town that are treated at the Pinery's wastewater treatment facility and discharged into Cherry Creek. CRW has an existing agreement with PWSD to capture these return flows and pump them into RHR, however, PWSD is limited by their water rights on Cherry Creek of when they can pump, thus limiting what CRW is able to put into RHR. In August 2024, CRW was able to store an additional 390 AF of water as part of this IGA.

As the Chatfield Reservoir Reallocation Project was nearing completion, CRW was approached by Denver Water and PWSD in late 2019 with the idea of a reservoir exchange pilot project. The basic concept was to have PWSD use some of Denver Water's fully reusable supplies within their distribution system, keep a like amount of water within RHR (that they otherwise would have had to draw upon), and then, at a mutually agreeable time, and for a mutually agreeable volume, a reservoir trade would be made between Denver Water and CRW. CRW would trade a volume of its fully reusable supplies stored in Chatfield to Denver Water, and Denver Water would trade the same volume of its fully reusable water over to CRW in RHR.

Item #: 5. File #: WC 2024-119

Budget Impact

The total cost of the Pilot Project will depend on the total quantity of water transferred and the time of year (ECCV's summer pumping rates are higher than the winter pumping rates). Assuming summer pumping and \$400 monthly administrative costs during the months when water is pumped, we estimate the cost of the Pilot Project to be approximately \$80,000 to transfer the full 1,000 AF of water. Payments for this Pilot Project will be made from the CIP operation and maintenance account 211-4375-443.40-90 <Project Code WR RHR>. CRW paid ECCV \$15,581 in 2024 for their pumping associated with this project.

Staff Recommendation

Staff and CRW Commission recommend that Town Council approve the first amendment to the Water Service IGA.

Proposed Motion

"I move to recommend to Town Council approval of the Resolution as presented"

Attachments

Attachment A: Resolution
Exhibit 1: Amended IGA



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 6. **File #:** WC 2024-120

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
David Van Dellen, Assistant Director

An Ordinance Amending Title 15.36 of the Castle Rock Municipal Code Adopting by Reference as Primary Code the Storm Drainage Design and Technical Criteria Manual (First Reading) [Castle Rock Boundary]
Town Council Agenda Date: January 7, 2025

Executive Summary

The purpose of this memorandum is to seek Town Council approval of an Ordinance (**Attachment A**) amending Title 15.36 of the Castle Rock Municipal Code adopting by reference as a Primary Code the Town of Castle Rock, Colorado Storm Drainage Design and Technical Criteria (Drainage) Manual. The recommended changes to the Drainage Manual are primarily in response to issues that have arisen as a result of large storms more frequently impacting single family detached subdivisions over the last several years like the one which occurred on June 9, 2024. This strengthening of storms is a phenomenon being seen in many places, not just Castle Rock.

The Drainage Manual is a critical document governing the design and construction of new storm drainage infrastructure in the Town including storm sewer systems, street drainage, stormwater detention and stream channel improvements. The Manual is a key element in stormwater quality and floodplain regulations which the Town is responsible to implement based on state and federal regulations. Revisions to the Drainage Manual generally focus on 1) ensuring adequate street capacity in large storm events, 2) providing for additional inlets in residential subdivisions to address over icing of residential roads and reduce flow depths in smaller storm events and 3) ensuring designated emergency overflow paths for ponds and inlets (see **Attachment B** for a full list of proposed revisions).

Notification and Outreach Efforts

Castle Rock Water staff discussed proposed changes during the EDC Water Subcommittee on October 11, 2024 and November 15, 2024 and the Developer Roundtable Meeting held on November 20, 2024.

Town staff provided public notification on November 21, 2024 to the Town's Economic Development partners outlining the proposed changes and a copy of the draft revisions were made available on the

Item #: 6. File #: WC 2024-120

Town's website on November 22, 2024.

Public notice was provided on this item in accordance with municipal code.

History of Past Town Council, Boards & Commissions, or Other Discussions

The Drainage Manual was originally adopted by Municipal Code in 2006 and updated in 2012 and 2019.

Discussion

The Drainage Manual was last updated in 2019. Since that time, the Town has experienced a rise in localized storm intensity overwhelming the 100-year major storm system especially impacting residential subdivisions. Additionally, the Mile High Flood District, formerly Urban Drainage and Flood Control District, who provides general guidance and standards for urban development along the Denver front range area, has adopted new standards with regard to runoff coefficients in response to broad sweeping changes in development densities and evolutions in landscaping practices and standards.

This revision will bring the Town's Drainage Criteria more in alignment with the Mile High Flood District standards and provide for a more robust infrastructure to account for more frequent, higher intensity storms. Revisions will primarily influence local streets within new residential subdivisions to reduce flow depths in local streets and provide further protection of private residential dwellings. These revisions will ensure that in new development higher intensity storm flows will not escape the Right of Way prematurely or in undesignated locations. These revisions will ensure that for new development redundant systems are in place to handle clogging inlets due to influences such as hail and emergency overflow paths stay within designated open space tracts and not through private lots. These revisions will also serve to increase the number of inlets in new subdivisions to reduce the buildup of ice in the gutter during winter months.

Land disturbances on Town open space resulting from development have been an on-going concern given the challenges in establishing and maintaining native vegetation. This revision provides for the establishment of slope easements on Town open space that assign ground maintenance to a private entity such as a Homeowner Association or Metropolitan District. This allows for a higher level of service through these entities to keep up with revegetation and erosion control.

Budget Impact

There are no immediate direct cost impacts to the Town as a result of this action, however, these revisions will result in additional cost on residential development and increased public storm drainage infrastructure. Over the long term, the Town will have more infrastructure to maintain which will increase operational costs as a result of the proposed changes.

Staff Recommendation

Staff recommends approving an Ordinance to amend Title 15.36 of the Castle Rock Municipal Code

Item #: 6. File #: WC 2024-120

adopting by reference as a Primary Code the Town of Castle Rock, Colorado Storm Drainage Design and Technical Criteria Manual.

Proposed Motion

“I move to recommend to Town Council approval of the Ordinance as presented”

Attachments

Attachment A: Ordinance
Exhibit 1: Redline version of Drainage Manual
Attachment B: Summary of Revisions

ORDINANCE NO. 2024-

AN ORDINANCE AMENDING CHAPTER 15.36.010 OF THE CASTLE ROCK MUNICIPAL CODE FOR THE PURPOSE OF ADOPTING BY REFERENCE AS A PRIMARY CODE THE 2025 TOWN OF CASTLE ROCK STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA MANUAL

WHEREAS, the Town Council of the Town of Castle Rock (the “Town”) is empowered to adopt such ordinances as are necessary and convenient to protect the health, safety and welfare of the community; and

WHEREAS, the Town Council has determined the necessity of adopting regulations pertaining to the planning, analysis and design of storm drainage systems within the Town; and

WHEREAS, the Castle Rock Water Commission has reviewed the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual (the “Manual”) and has recommended that the Manual be adopted by the Town Council; and

WHEREAS, a copy of the Manual has been filed with the Town Clerk and a public hearing has been held regarding its adoption before the Town Council as required by Town regulations and Section 31-16-203, C.R.S.

NOW, THEREFORE, IT IS ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO:

Section 1. Adoption. The Town Council hereby adopts the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual in the form on file with Town Clerk and presented to the Town Council at tonight’s meeting.

Section 2. Amendment. Section 15.36.010 of the Castle Rock Municipal Code is amended to read as follow:

15.36.010 - Adoption.

The Town adopts by reference the ~~following code: the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual, published June 2019 by the Castle Rock Water department, Town of Castle Rock, 100 N. Wilcox Street, Castle Rock, Colorado 80104,~~ and all secondary codes referenced therein. One ~~original and an electronic~~ copy of the Storm Drainage Design and Technical Criteria Manual shall be maintained on file in the office of the Town Clerk and may be inspected during regular business hours, ~~the same being adopted as if set out at length herein.~~

Section 3. Severability. If any clause, sentence, paragraph, or part of this ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect the remaining provisions of this ordinance.

Section 4. Safety Clause. The Town Council finds and declares that this ordinance is promulgated and adopted for the public health, safety and welfare and this ordinance bears a rational relation to the legislative object sought to be obtained.

APPROVED ON FIRST READING this ___ day of _____, 2025, by the Town Council of the Town of Castle Rock by a vote of ___ for and ___ against, after publication in compliance with Section 2.02.100.C of the Castle Rock Municipal Code; and

PASSED, APPROVED AND ADOPTED ON SECOND AND FINAL READING this ___ day of _____, 2025, by the Town Council of the Town of Castle Rock by a vote of ___ for and ___ against.

ATTEST:

TOWN OF CASTLE ROCK

Lisa Anderson, Town Clerk

Jason Gray, Mayor

Approved as to form:

Approved as to content:

Michael J. Hyman Town Attorney

Mark Marlowe, Director, Castle Rock Water

STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA MANUAL, PROPOSED DRAFT REVISIONS 2024		
Change	Applicable Section(s)	Description
Update Urban Drainage and Flood Control District to Mile High Flood District	Throughout	N/A
Add clarifying criteria designing for emergency overflow conveyance	2.1.14, 8.5.3	Emergency overflow routing, sized for the undetained 100-year peak flow rate, is necessary to ensure protection of structures and property. Plans shall clearly depict emergency overflow routing and design capacity on plan and report.
Add requirement for slope easements on land disturbances within Town open space	3.1.5	Land disturbances in Town Open Space is discouraged. Slope easements are required to convey maintenance responsibilities to a private entity for on-going erosion control and native ground cover upkeep.
Add clarifying language where sub-surface collection systems are required on residential development	3.1.5 and 3.3.3	Sub-surface collection systems are required downstream of lot to lot configurations and when homes are placed in a cut slope configuration.
Drainage easements become prohibited on individual residential lots other than as specifically required for storm sewer systems.	3.5.4	Individual lots shall be designed such that only a limited amount of drainage is allowed to drain through side lot swales.
Submittal requirements updated to match current requirements	4.4	Updated requirements will be provided on the Town's submittal checklists as well.
Updated Runoff Coefficient section to match new MHFD reference criteria and clarify calculation requirements	6.3.4	MHFD recently updated the Runoff Chapter with published impervious values referenced in Town criteria. Clarification on the applicable uses is also provided.
Allowable flow depth for minor storm limited to 4-inches in new residential development.	7.3.1	The Town has experienced a broad range of issues and complaints surrounding street drainage in residential subdivisions, including icing, flooding and property damage. Reduction in allowable flow depth is required to expand storm drainage catchments throughout the subdivision to reduce these impacts.
Street Capacity Charts removed	7.5	Charts are outdated and replaced with UD-Inlet Worksheet
Major storm street capacity limitations revised	7.5.3	Depths greater than the minor storm flow depth are only allowed when it is clearly

Attachment B

		demonstrated that major storm flow depths are completely contained within the Right-of-Way (ROW) and area adjacent to the ROW. Additional overlot grading requirements may apply.
Flanking inlets will only be allowed by variance	8.1.3	As a general requirement, inlet emergency overflow routing shall be through a drainage tract. Flanking inlets in-lieu of a drainage tract will only be allowed in specific situations such as existing developments or on arterial roadway applications.
Two layers of redundancy are required for all storm drain inlet networks in residential development	8.1.3	Sump inlets alone are not allowed. This is to provide for system redundancies and distribute the storm drainage collection system to beyond a single point of entry.
Inlet Capacity Charts removed	8.4	Inlet capacity charts for Type R and Combination Type 16 Inlets are outdated and replaced with UD-Inlet Worksheet.
Storm Sewer Easements required for infrastructure with limited access within Public Right-of-Way	9.4.2	Additional easement is required when the storm sewer system is within 10-feet of the Right-of-Way line.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 7. **File #:** WC 2024-121

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Nichol Bussey, Business Solutions Manager

An Ordinance Approving Changes to Municipal Code, 13.12.070, Emergency regulation of water [Entire Castle Rock Water service area]
Town Council Agenda Date: January 7, 2024

Executive Summary

The purpose of this memorandum is to seek Town Council approval of an ordinance (**Attachment A**) making changes to Municipal Code, 13.12.070, Emergency regulation of water for the implementation of Drought Rates, as part of the 2025 Drought Management Plan (“Plan”) update. The Plan was last updated in 2018 and did not include a provision for Drought Rates.

One of Castle Rock Water’s strategic goals is to have a water supply that is 75% renewable by 2050 and 100% renewable (in an average water year) by 2065. While these changes provide a more diverse and reliable long-term water supply, it also subjects the Town to potentially larger impacts from drought as renewable supplies are significantly less available during drought conditions. This also supports the importance of our strategic plan goal to protect our nonrenewable groundwater supplies, which are generally not impacted directly by droughts. Protection of these supplies will strengthen the long-term water resources of the community.

This Plan focused on long-term drought mitigation in addition to strategies that provide short-term responses to temporary drought-related water supply shortages. The largest change to the Plan from the 2018 Plan is the implementation of a reduction of residential water budget levels and an increase in the water surcharge rates during various drought stages.

The revised 2025 Plan (provided in **Attachment B**) was developed with input from a wide-spectrum of the community, including: Castle Rock Water; representatives of the Water Commission; Douglas County; Castle Rock Fire Department; Parks and Recreation; homeowners associations and members of the development community.

Notification and Outreach Efforts

In June of 2024, Castle Rock Water formed a stakeholder group to be involved in the development of

the updated Drought Management Plan. Large water users, key government water users, water users that would be significantly impacted economically, water users associated with critical public health and safety functions (e.g. the hospital), and members of the development community were invited to participate in the stakeholder group. Not all of those invited to participate decided to participate. Approximately 20 water users took part in the stakeholder process. A complete list is provided in the Plan.

On July 10, 2024, Castle Rock Water held the first stakeholder meeting to gain input on the proposed Plan revisions. After this meeting, a full draft updated Plan was prepared and sent to all the stakeholders for input. On September 11, 2024, Castle Rock Water held a second stakeholder meeting to seek additional input on the draft updated Plan.

Discussion

The key change to the Plan is implementation of a reduction of residential water budget levels and an increase in the water surcharge rates during various drought stages. The primary goal of these changes is to incentivize additional water conservation during droughts. Depending on the drought stage, Castle Rock Water is seeking to achieve additional conservation from 10% during the Voluntary Stage to as much as 60% during the Critical/Crisis Stage. A secondary goal is to ensure revenue stability since most of Castle Rock Water's costs are fixed costs. In fact, fixed costs are estimated at approximately 90% of total costs. Achieving the needed conservation could have a very negative impact on revenues during a drought. Drought rates can help mitigate this impact.

Castle Rock Water uses a water budget rate structure which is specifically designed to incentivize customers to use water efficiently. Changes being recommended to this water budget rate structure during droughts include reductions to outdoor water budgets, reductions to the Conservation Surcharge threshold and / or increases to Tier 3 and Conservation Surcharge rates. These changes can impact customer behavior during a drought by making it increasingly more expensive to use water at their normal consumption pattern. These options for practical implementation of drought rates were selected due to their ease of implementation in Castle Rock Water's billing system, the familiarity of customers with the concepts, and the ability to easily message the changes.

In 2013, Castle Rock Water worked with Stantec to develop a Conservation Impact Model (CIM) to help evaluate customer response to changes in rates, water budgets and surcharges. The CIM calculates how projected bill impacts to customers will influence water conservation, incorporating price elasticity factors due to price increases associated with various changes to the water budget rate structure. Stantec's complete report is provided as **Attachment C**. Ultimately, the CIM shows that increasing pricing has limits in terms of meeting needed conservation goals during a drought. This is in large part due to the relatively low cost of water given the importance and critical need for the resource. According to the CIM, the recommended drought rates are estimated to provide roughly 3% (Watch Stage) to 14% (Critical/Crisis Stage) additional conservation. The functional proposed increase in rates if customers did not change their behavior is 10% to 55%, respectively.

Financial Impact

The updated Drought Management Plan was developed by Castle Rock Water Staff. Thus, there was

no direct budget impact to developing the 2025 Plan. The implementation of a reduction of residential water budget levels and an increase in the water surcharge rates during various drought stages in the 2025 Plan will have an impact on revenue during a drought. The exact extent of the impact is hard to measure and will depend on how much customers conserve at the various drought stages. Castle Rock Water had the potential impacts of the reduction of residential water budgets and water surcharge rates evaluated by Stantec, Castle Rock Water’s rates and fees consultant, using the CIM. The estimated revenue impacts from this work are as follows:

Drought Stage	Drought Rates in Effect	Conservation from Price (% total use)	Conservation Target (% total use)	Key Restrictions	Potential Additional Revenue
Advisory	N	N/A	10%	Voluntary	N/A
Watch	Y	3.19%	25%	2x per week outdoor water	\$2.8 Million
Warning	Y	4.86%	40%	1x per week outdoor water	\$3.2 Million
Emergency	Y	10.29%	50%	Outdoor water banned	\$5 Million
Critical/Crisis	Y	13.40%	60%	Outdoor water banned + indoor restrictions	\$5 Million

A copy of Stantec’s report is provided as **Attachment C**.

Proposed Motion

“I move to recommend to Town Council approval of the Ordinance as presented”

Attachments

- Attachment A: Ordinance (Not Attached)
- Attachment B: 2025 Drought Plan
- Attachment C: Stantec Report

Item #: 7. File #: WC 2024-121



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 8. **File #:** WC 2024-122

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Matt Benak, P.E., Water Resources Manager
Adriana Alfaro, Water Resources program Analyst

Resolution Approving the 2025 Drought Management Plan [*Entire Castle Rock Service area*]

Town Council Agenda Date: January 21, 2024

Executive Summary

The purpose of this memorandum is to seek Town Council approval of a resolution (**Attachment A**) for the 2025 Drought Management Plan (“Plan”) (**Exhibit 1**). The Plan was last updated in 2018.

One of Castle Rock Water’s strategic goals is to have a water supply that is 75% renewable by 2050 and 100% renewable (in an average water year) by 2065. While these changes provide a more diverse and reliable long-term water supply, it also subjects the Town to potentially larger impacts from drought.

This Plan focused on long-term drought mitigation in addition to strategies that provide short-term responses to temporary drought-related water supply shortages. The Plan was also developed with input from a wide-spectrum of the community, including: Castle Rock Water; representatives of the Water Commission; Douglas County; Castle Rock Fire Department; Parks and Recreation; home owners associations and members of the development community.

Discussion

The Plan is intended to be a guide to facilitate water use decision-making if supply or water production shortages present themselves. Plan objectives include:

- Planning for droughts before they occur;
- Protecting public health and safety, and minimizing the adverse effects of a water supply shortage;
- Providing comprehensive and flexible guidance for drought response, allowing for an appropriate range of actions to respond;
- Identifying and determining the severity of droughts through clear definitions of triggers;

Item #: 8. File #: WC 2024-122

- Providing effective communication to customers, the public and governmental departments/agencies, so they clearly understand the situation and the actions taken.

Some of the key actions that Castle Rock Water either currently does, or will be doing for drought management include:

- Ongoing monitoring of drought indicators;
- Development of new water supplies (this includes WISE, the development of infrastructure to fully utilize our return flows in Plum Creek, and the Box Elder project);
- Cooperative water sharing agreements with neighboring communities;
- Operation and maintenance activities that improve water efficiency;
- Conservation measures specified in the Water Efficiency Master Plan (WEMP);
- Implementation of a reduction of residential water budget levels and an increase in the water surcharge rates during various drought stages.

Droughts can vary significantly in extent, severity and duration, and as such the Plan lays out what an appropriate level of response would be for each drought category. Ultimately, it will require the entire community to embrace water conservation during periods of drought conditions to help stretch our water supplies.

Notification and Outreach Efforts

On July 10, 2024, Castle Rock Water held the first stakeholder meeting to gain input on the Plan revisions.

On September 11, 2024, Castle Rock Water held a second stakeholder meeting to seek additional input on the draft updated Plan.

On September 18, 2024, Castle Rock Water hosted an Open House which allowed the public to ask questions about the Plan.

History of Past Town Council, Boards, & Commissions, and other Discussions

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on December 11, 2024, and the Castle Rock Water Commission voted XXXX to XXX to recommend Town Council approval of the Resolution as presented.

Budget Impact

The updated Drought Management Plan was developed by Castle Rock Water Staff. Thus, there was no direct budget impact to developing the 2025 Plan.

Recommendations

Staff and Castle Rock Water Commission recommend that the Drought Management Plan be

Item #: 8. File #: WC 2024-122

approved by Town Council.

Proposed Motion

“I move to approve the Resolution as introduced by title.”

Alternative Motions

“I move to approve the resolution as introduced by title, with the following conditions: (list conditions).”

“I move to continue this item to the Town Council meeting on _____ date to allow additional time to (list information needed).”

Attachments

Attachment A: Resolution
Exhibit 1: Drought Management Plan

ORDINANCE NO. 2024-

AN ORDINANCE AMENDING CHAPTER 15.36.010 OF THE CASTLE ROCK MUNICIPAL CODE FOR THE PURPOSE OF ADOPTING BY REFERENCE AS A PRIMARY CODE THE 2025 TOWN OF CASTLE ROCK STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA MANUAL

WHEREAS, the Town Council of the Town of Castle Rock (the “Town”) is empowered to adopt such ordinances as are necessary and convenient to protect the health, safety and welfare of the community; and

WHEREAS, the Town Council has determined the necessity of adopting regulations pertaining to the planning, analysis and design of storm drainage systems within the Town; and

WHEREAS, the Castle Rock Water Commission has reviewed the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual (the “Manual”) and has recommended that the Manual be adopted by the Town Council; and

WHEREAS, a copy of the Manual has been filed with the Town Clerk and a public hearing has been held regarding its adoption before the Town Council as required by Town regulations and Section 31-16-203, C.R.S.

NOW, THEREFORE, IT IS ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO:

Section 1. Adoption. The Town Council hereby adopts the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual in the form on file with Town Clerk and presented to the Town Council at tonight’s meeting.

Section 2. Amendment. Section 15.36.010 of the Castle Rock Municipal Code is amended to read as follow:

15.36.010 - Adoption.

The Town adopts by reference the ~~following code: the 2025 Town of Castle Rock Storm Drainage Design and Technical Criteria Manual, published June 2019 by the Castle Rock Water department, Town of Castle Rock, 100 N. Wilcox Street, Castle Rock, Colorado 80104,~~ and all secondary codes referenced therein. One ~~original and an electronic~~ copy of the Storm Drainage Design and Technical Criteria Manual shall be maintained on file in the office of the Town Clerk and may be inspected during regular business hours, ~~the same being adopted as if set out at length herein.~~

Section 3. Severability. If any clause, sentence, paragraph, or part of this ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect the remaining provisions of this ordinance.

Section 4. Safety Clause. The Town Council finds and declares that this ordinance is promulgated and adopted for the public health, safety and welfare and this ordinance bears a rational relation to the legislative object sought to be obtained.

APPROVED ON FIRST READING this ___ day of _____, 2025, by the Town Council of the Town of Castle Rock by a vote of ___ for and ___ against, after publication in compliance with Section 2.02.100.C of the Castle Rock Municipal Code; and

PASSED, APPROVED AND ADOPTED ON SECOND AND FINAL READING this ___ day of _____, 2025, by the Town Council of the Town of Castle Rock by a vote of ___ for and ___ against.

ATTEST:

TOWN OF CASTLE ROCK

Lisa Anderson, Town Clerk

Jason Gray, Mayor

Approved as to form:

Approved as to content:

Michael J. Hyman Town Attorney

Mark Marlowe, Director, Castle Rock Water

STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA MANUAL, PROPOSED DRAFT REVISIONS 2024		
Change	Applicable Section(s)	Description
Update Urban Drainage and Flood Control District to Mile High Flood District	Throughout	N/A
Add clarifying criteria designing for emergency overflow conveyance	2.1.14, 8.5.3	Emergency overflow routing, sized for the undetained 100-year peak flow rate, is necessary to ensure protection of structures and property. Plans shall clearly depict emergency overflow routing and design capacity on plan and report.
Add requirement for slope easements on land disturbances within Town open space	3.1.5	Land disturbances in Town Open Space is discouraged. Slope easements are required to convey maintenance responsibilities to a private entity for on-going erosion control and native ground cover upkeep.
Add clarifying language where sub-surface collection systems are required on residential development	3.1.5 and 3.3.3	Sub-surface collection systems are required downstream of lot to lot configurations and when homes are placed in a cut slope configuration.
Drainage easements become prohibited on individual residential lots other than as specifically required for storm sewer systems.	3.5.4	Individual lots shall be designed such that only a limited amount of drainage is allowed to drain through side lot swales.
Submittal requirements updated to match current requirements	4.4	Updated requirements will be provided on the Town's submittal checklists as well.
Updated Runoff Coefficient section to match new MHFD reference criteria and clarify calculation requirements	6.3.4	MHFD recently updated the Runoff Chapter with published impervious values referenced in Town criteria. Clarification on the applicable uses is also provided.
Allowable flow depth for minor storm limited to 4-inches in new residential development.	7.3.1	The Town has experienced a broad range of issues and complaints surrounding street drainage in residential subdivisions, including icing, flooding and property damage. Reduction in allowable flow depth is required to expand storm drainage catchments throughout the subdivision to reduce these impacts.
Street Capacity Charts removed	7.5	Charts are outdated and replaced with UD-Inlet Worksheet
Major storm street capacity limitations revised	7.5.3	Depths greater than the minor storm flow depth are only allowed when it is clearly

Attachment B

		demonstrated that major storm flow depths are completely contained within the Right-of-Way (ROW) and area adjacent to the ROW. Additional overlot grading requirements may apply.
Flanking inlets will only be allowed by variance	8.1.3	As a general requirement, inlet emergency overflow routing shall be through a drainage tract. Flanking inlets in-lieu of a drainage tract will only be allowed in specific situations such as existing developments or on arterial roadway applications.
Two layers of redundancy are required for all storm drain inlet networks in residential development	8.1.3	Sump inlets alone are not allowed. This is to provide for system redundancies and distribute the storm drainage collection system to beyond a single point of entry.
Inlet Capacity Charts removed	8.4	Inlet capacity charts for Type R and Combination Type 16 Inlets are outdated and replaced with UD-Inlet Worksheet.
Storm Sewer Easements required for infrastructure with limited access within Public Right-of-Way	9.4.2	Additional easement is required when the storm sewer system is within 10-feet of the Right-of-Way line.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 9. **File #:** WC 2024-123

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Hannah Branning, Water Quality & Regulatory Compliance Manager

2024 Sanitary Survey Results
Town Council Agenda Date: January 2025

Executive Summary

This will be a presentation only item.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 10. File #: WC 2024-124

To: Members of the Castle Rock Water Commission
From: Mark Marlowe, P.E., Director of Castle Rock Water
Nichol Bussey, Business Solutions and Support Manager

Follow-up on Rates and Fees Study RFP
Town Council Agenda Date: NA

Executive Summary

The purpose of this memo is to request approval of the attached services agreement with Stantec Consulting Services, Inc. to provide professional services to accomplish the 2025 Rates and Fees Study for 2026-2030.

The scope for this study is to investigate both rates and fees for the Department's four enterprise funds. The work product for this effort will be a study that revisits proposed rates and fees for the years 2026 through 2030. Based on the scope of work developed jointly by Castle Rock Water and Stantec, the not-to-exceed cost for preparing this study will be \$60,000.

Castle Rock Water submitted a Request for Proposal to Bidnet for the 2025 Rates and Fees Study in October 2024. Five companies responded with proposals and three of the respondents were selected for interviews. After interviews, Stantec was selected as the preferred vendor based on value and experience.

Castle Rock Water used Stantec Consulting Services, Inc. for the annual study last year and staff was pleased with the quality of Stantec's models and their work. Consistency in this service is important, and we use Stantec's modeling software. The schedule for the completion of the study is December 31, 2025.

- Major services and items to be accomplished include:
- Task 1: Review Customer Characteristics
 - Task 2: Review SDF, Financial and Cost of Service Models
 - Task 3: Review Rate Design Models
 - Task 4: Review Presentation Materials and Study Reports

Budget

There is adequate budget appropriated for this project in 2025. This project cost is split 25% to the Water Fund, 25% to the Water Resources Fund, 25% to the Wastewater Fund and 25% to the Stormwater Fund:

210-4221-442-3090, Technical Services	(25%)	\$15,000
211-4321-443-3090, Technical Services	(25%)	\$15,000
212-4421-444-3090, Technical Services	(25%)	\$15,000
213-4521-445-3090, Technical Services	(25%)	\$15,000
Total	(100%)	\$60,000



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 11. **File #:** WC 2024-125

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Matt Benak, P.E., Water Resources Manager

Update on Tallgrass Project
Town Council Agenda Date: NA

Executive Summary

This will be an update only item.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 12/11/2024

Item #: 12. **File #:** WC 2024-126

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water

Upcoming Town Council Items
Town Council Agenda Date: NA

Executive Summary

This item is an informational update only, and is designed to give Commission a preview of time critical items that may need to go to Council prior to review at a Commission Meeting.

Items for this month include:

- Resolution Approving a Construction Agreement for the 5th St. Project
- Resolution Approving a Sewer Infrastructure Reimbursement Agreement with St. Francis of Assisi Church
- Resolution Approving a Water & Sewer Infrastructure Reimbursement Agreement with Cornerstone Church
- Resolution Approving an Extraterritorial Sewer Service Agreement with DeGarmo