



Castle Rock Water Commission Agenda - Final

Todd Warnke, Chair
John Wright, Vice Chair
Wyn Barrett
Kathryn Gienger
Ben Johnson
Bill Leung
Katherine Redmond

Wednesday, January 26, 2022

6:00 PM

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

This meeting is open to the public and will be held in a virtual format in accordance with Town Council Meeting Special Procedures During Declared Disasters. This meeting can be accessed online at: <https://crgov.webex.com/crgov/j.php?>

MTID=m91bc7204291c143e2b583509d4ca4115 the meeting password is: bkJprpEX686 (25577739 from video systems) or phone in by calling (720) 650-7664, meeting code 2499 641 9017##. Three 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

ADMINISTRATIVE BUSINESS

1. [TMP](#) Approval of the December 1, 2021 Meeting Minutes
[2022-016](#)

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

ACTION ITEMS (HIGH PRIORITY / TIME CRITICAL)

2. [TMP](#) Resolution Approving Agricultural Water Lease Agreements (H&H Farms,
[2022-026](#) Turnpike, Dove Meadow Dairy, and Ruppel)

Attachments: [Attachment A: H&H Farms](#)
[Attachment B: Turnpike](#)
[Attachment C: Ruppel Farms](#)
[Attachment D: Dove Meadow Dairy](#)

3. [TMP](#) Resolution Approving the 2022 Conservation Rebate Incentive Program
[2022-013](#)

Attachments: [Attachment B: Conservaton Rebates vs Surcharge_Violation Revenues](#)
[Attachment C: 2022 Conservation rebate funding summary](#)

4. [TMP](#)
[2022-014](#) Resolution Approving Updates to the Water Use Management Plan (WUMP) [All areas serviced by the Castle Rock Water Department]
- Attachments:** [Exhibit 1: 2022 WUMP draft 1.20.22](#)
[Attachment B: 2022 WUMP summary of changes](#)
[Attachment C: Five year Violation summary 2017 through 2021](#)

DIRECTOR FOLLOW-UP AND INFORMATIONAL / UPDATE ITEMS

5. [TMP](#)
[2022-027](#) Update: Ordinance Approving Water Resources Debt Issuance
- Attachments:** [Attachment A: TC Memo Debt Issuance 2nd Reading](#)
6. [TMP](#)
[2021-1011](#) Resolution Approving a Service Agreement Between the Town of Castle Rock and Muller Engineering Company, Inc., for the McMurdo Gulch Stream Reclamation Priority 3 Project [McMurdo Gulch south of the intersection of Castle Oaks Drive and Autumn Sage Street]
- Attachments:** [Attachment A: TC Memo McMurdo Gulch Priority 3](#)
7. [TMP](#)
[2022-011](#) Resolution Approving a Construction Contract with 53 Corporation, LLC for the Omni Tributary - Prairie Hawk Drive to Red hawk Drive Project [1662 March Hawk Drive and 1551 Prairie Hawk Drive]
- Attachments:** [Attachment A: TC Memo 53 Corp_Omni Trib Final](#)
8. [TMP](#)
[2022-023](#) Update on Water Commission By-Laws
9. [TMP](#)
[2022-017](#) Upcoming Town Council Items

COMMISSIONER MEETING COMMENTS



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 1. **File #:** TMP 2022-016

To: Members of the Castle Rock Water Commission

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

Approval of the December 1, 2021 Meeting Minutes
Town Council Agenda Date: NA

Executive Summary

Attached are the meeting minutes for the December 1, 2021 Water Commission Board Meeting.

Proposed Motion

"I move to approve the Meeting Minutes as presented"

Attachments

Attachment A: December 1st Meeting Minutes



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

Todd Warnke, Chair
John Wright, Vice Chair
Wyn Barrett
Kathryn Gienger
Ben Johnson
Bill Leung
Katherine Redmond

Wednesday, December 1, 2021

6:00 PM

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

Special Meeting -Combined November/December Meeting

This meeting is open to the public and will be held in a hybrid format in accordance with Town Council Meeting Special Procedures During Declared Disasters. The in-person meeting will be held at 175 Kellogg Ct. Bldg. 171 Castle Rock CO 80109 or this meeting can be accessed online at: <https://crgov.webex.com/crgov/j.php?MTID=mb4a99e81b6606158f62b96a2a45c4bba> the meeting password is: P6QgRJZ8GW7 (76747598 from video systems) or phone in by calling (720) 650-7664, meeting code 24801312682##. Three or more Council members may also attend this meeting, during which the items listed herein will be discussed.

CALL TO ORDER / ROLL CALL

- Present** 7 - Chair Todd Warnke, Commissioner Bill Leung, Commissioner Katherine Redmond, Commissioner Kathryn Gienger, Commissioner Ben Johnson, Commissioner Wyn Barrett, and Vice Chair John Wright
- Attendance** 6 - Caryn Johnson, Mark Marlowe, Roy Gallea, Josh Hansen, Paul Rementer, and MaryJo Woodrick

COUNCIL UPDATE

Time was allowed for Mr. Marlowe to share an update on Town Council items.

COMMISSION COMMENTS

Time was allowed for Commissioner Comments.

ADMINISTRATIVE BUSINESS

[WC 2021-103](#)

**Approval of the October 27, 2021 Meeting Minutes
Town Council Agenda Date: NA**

It was moved by John Wright and seconded by Ben Johnson to approve the meeting minutes for the October 27, 2021 meeting as written. The motion passed with a vote of 7-0.

- Yes:** 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

ACTION ITEMS (HIGH PRIORITY / TIME CRITICAL)

[WC 2021-104](#)

**Resolution Approving a Construction Contract between the Town of Castle Rock and C&L Water Solutions for Woodlands Sewer Interceptor Manhole Rehabilitation Phase 2 [Woodlands Boulevard and Saddleback Drive]
Town Council Agenda Date: December 21, 2021**

Mr. Hansen shared that this is phase 2 of the Woodlands Sewer Interceptor Manhole Rehabilitation project that was shared with Water Commission earlier in 2020. During Phase 1, 7 interceptor manholes were rehabilitated, an additional 25 have been inspected and evaluated. All of the evaluated manholes showed anywhere from moderate to severe corrosion from sewer gases so staff is recommending that all 25 be rehabilitated. The request for proposals was issued in October of 2021. Staff received 5 proposals. C&L Water Solutions proposal was selected based on value and risk mitigation. C&L Water was also the vendor for Phase 1. Budget for the project is \$ 960,095. The schedule is to begin in June 2022 with project completion scheduled for December 2022.

Commissioner Warnke asked if there are concerns with procurement of supplies. Mr. Hansen explained at this time the staff and vendor don't have any concerns.

Kathryn Gienger moved to recommend Town Council approval of the Resolution as presented. Ben Johnson seconded the motion. Passed unanimously 7-0.

Yes: 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

[WC 2021-105](#)

**Resolution Approving an Intergovernmental Agreement with Parker Water and Sanitation District for WISE Pump Station Expansion and Infrastructure Design [Rueter-Hess Reservoir, Parker Water and Sanitation District, Parker, CO]
Town Council Agenda Date: December 7, 2021**

Mr. Benak shared that this is an intergovernmental agreement for cost sharing with Parker Water and Sanitation District (PWSD) for design of an expansion to PWSD's WISE pump station and associated infrastructure. The design RFP was issued in September 2021; 7 proposals were received. HDR has been selected as the vendor. Once this project is completed, Castle Rock Water (CRW) will be able to receive up to 9 million gallons per day (mgd) through this system (6 mgd from WISE and 3 mgd from the Box Elder property). The project is projected to be online by 2024. PWSD will be managing this project. The estimated cost of the project is \$825,600 + 10% contingency for a total cost of \$885,600. CRW's cost will be 54% of the total cost. The project timeline is to begin design in January 2022 with design completion planned for January 2023.

Commission members asked for clarification on the costs and why PWSD was managing the project? Matt Benak explained that PWSD will ultimately own and operate the pump station and Castle Rock will own capacity in the system. Clarification on costs was also provided.

Ben Johnson moved to recommend Town Council approval of the Resolution as presented. John Wright seconded the motion. Passed unanimously 7-0.

Yes: 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

[WC 2021-106](#)

Resolution Approving the First Amendment to the Participation Agreement between the Cherry Creek Basin Water Quality Authority and the Town of Castle Rock for Design of Stream Reclamation Improvements for McMurdo Gulch Priority 2 Project [McMurdo Gulch near the intersection of Castle Oaks Drive and Autumn Sage Street]

Town Council Agenda Date: December 7, 2021

Mr. Van Dellen explained that this is the 1st Amendment to the participation agreement between the Cherry Creek Basin Water Quality Authority (Authority) for design of the stream reclamation improvements on McMurdo Gulch. This is an ongoing project and at this time the Authority has contributed \$1.1M. The original agreement included \$75,000 for the design work and the amendment will add an additional \$540,000 for construction of the project. The total project construction cost is \$2,160,000 and is part of the Town’s Stormwater legacy project funding. Currently, this project is under budget.

John Wright moved to recommend Town Council approval of the Resolution as presented. Kathryn Gienger seconded the motion. Passed unanimously 7-0.

Yes: 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

[WC 2021-107](#)

Resolution Approving a Construction Contract Between the Town of Castle Rock and Tezak Heavy Equipment Co., Inc., for the McMurdo Gulch Stream Reclamation Priority 2 Project [McMurdo Gulch near the intersection of Castle Oaks Drive and Autumn Sage Street]

Town Council Agenda Date: December 7, 2021

Mr. Van Dellen explained that design and permitting for this project started in 2020 and now staff are ready to begin construction. This project involves stream channel improvements to mitigate impacts and preserve the natural drainageway. Staff received 13 bids. Tezak Heavy Equipment was selected as the contractor. Estimated cost for this project is \$1,623,182 + \$162,318 contingency for a total of \$1,785,500. Construction will begin in December 2021, and the anticipated project completion is June 2022.

Commissioner Johnson asked if there were unused funds if they would be returned to the Authority? Mr. Van Dellen explained that yes if funds were leftover they would be returned.

John Wright moved to recommend Town Council approval of the Resolution as presented. Ben Johnson seconded the motion. Passed unanimously 7-0.

Yes: 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

[WC 2021-108](#)

Resolution Approving the First Amendment to the Intergovernmental Agreement Between the Town of Castle Rock and Crowfoot Valley Ranch Metropolitan District Nos. 1 and 2 Regarding the Monitoring and Enforcement of Town Conservation Regulations [Located in the Macanta subdivision off of Crowfoot Valley Road, northeast of Castle Rock in unincorporated Douglas County]

Town Council Agenda Date: December 7, 2021

Mr. Friday reported that CRW has several intergovernmental agreements within the Macanta Subdivision (previously known as Canyons South). One of the agreements is for the enforcement of the conservation regulations. It has become clear that there is a disconnect between the Metro Districts and the homeowners moving into the area as to the landscaping and conservation guidelines. This agreement allows for the Metro Dist. to assign the responsibility over to the HOA so that the entity that works with the homeowner can make sure that correct information/guidelines are shared with the home buyers, and the Town receives plans for review before landscaping is installed.

Ben Johnson moved to recommend Town Council approval of the Resolution as presented. Katherine Redmond seconded the motion. Passed unanimously 7-0.

Yes: 7 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, Commissioner Barrett, and Vice Chair Wright

[WC 2021-109](#)

An Ordinance Amending Titles 3, 4, and 13 of the Castle Rock Municipal Code By Changing Stormwater Development Impact Fees, Water Resources System Development Fees, Water System Development Fees, Wastewater System Development Fees, Water Resources, Stormwater and Wastewater Rates, Meter Set Fees; and Making Certain Editorial Updates to Such Titles (2nd Reading) [Entire Town of Castle Rock and extraterritorial service areas]

Town Council Agenda Date: December 7, 2021

Mr. Marlowe shared that Water Commission board members saw and approved this Ordinance on 1st Reading but since that time significant changes have been made to the system development fees so staff has brought it back for a second approval. Mr. Marlowe explained there are no changes to the existing customer rates. The increases are to the fees for new homes being built. The rates and fees study showed that an increase of fairly significant amounts could be charged immediately, but on first reading the staff suggested the increases be spread out over a 5-year period. Since

that time staff have reevaluated that approach and feel that adding the entire suggested increase at this time is a better option. The recommendation is to increase the development fees for the Water fund by 41.4%, Water Resources fees by 43%, Stormwater fees by 49.3% in Plum Creek and 22.5% in Cherry Creek and Wastewater fund by 22%.

Kathryn Gienger moved to recommend Town Council approval of the Ordinance as presented. Ben Johnson seconded the motion. Passed unanimously 6-0.

Yes: 6 - Chair Warnke, Commissioner Leung, Commissioner Redmond, Commissioner Gienger, Commissioner Johnson, and Commissioner Barrett

Not Present: 1 - Vice Chair Wright

DIRECTOR FOLLOW-UP AND INFORMATIONAL / UPDATE ITEMS

[WC 2021-110](#)

Resolution Approving an Intergovernmental Agreement Between the Douglas County School District and the Town of Castle Rock Regarding the District's Compliance with the Town's MS4 Stormwater Discharge Permit Requirements
[Item applies to current and future Douglas County School District facilities within the Town boundaries]
Town Council Agenda Date: November 16, 2021

Mr. Marlowe explained that this is an update item only as Town Council has already approved it.

[WC 2021-111](#)

Resolution Approving a Variance Pursuant to Chapter 9.16.070E of the Castle Rock Municipal Code for the Village North Drainage and Infrastructure Improvements Project
[Intersection of Park and Malibu Street]
Town Council Agenda Date: December 7, 2021

Mr. Marlowe reported that this item is to get Town Council approval to allow for overnight work for the Village North Drainage and Infrastructure Improvements Project. This is not a residential area; it is mainly commercial. The purpose of the night work is to not interrupt service during the work day and further inconvenience the businesses in this area.

[WC 2021-112](#)

Tank 18 Project Update *[Liberty Village Subdivision]*
Town Council Agenda Date: December 21, 2021

Mr. Hansen explained that Tank 18 was previously designed in 2013 and bid for construction in 2014. Bid prices were significantly over budget at the time and construction of the project was deferred. Since that time Liberty Village/Cobblestone has almost reach build out. Staff have been working to update the design. The RFQ was published in October. Five contractors have been placed on the shortlist. Bids will be requested in December 2021-January 2022. With construction planned for 2022.

The budget for this project is \$3.85M.

[WC 2021-113](#)

Results from the 2021 Sanitary Survey
Town Council Agenda Date: NA

Mr. Marlowe reported that Colorado Department of Public Health and Environment Water Quality Control Division (CDPHE) conducted a Sanitary Survey for CRW in September 2021. Mr. Marlowe was happy to report that there were no violations or deficiencies. CDPHE made some suggestions on items that needed to be updated before the next survey. CRW staff made all suggested changes within about 2 weeks of the survey.

[WC 2021-114](#)

Platte Valley Water Partnership Proposal to Douglas County
Town Council Agenda Date: NA

Mr. Marlowe shared that CRW worked with PWSD to turn in a proposal to Douglas County for American Recovery Plan Act funding for a project in eastern Colorado to bring back water supply from the Lower South Platte River.

[WC 2021-115](#)

Upcoming Town Council Items
Town Council Agenda Date: NA

This is a standing item that will be 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 yet.

Mr. Marlowe just wanted to let Commission members know that the Town Managers office is working on some changes to the Boards & Commissions code. Some changes include: all board and commission members will need to take an oath of office, the allowable absences from board meetings will be adjusted, and by-laws will need to be posted on the website.

COMMISSIONER MEETING COMMENTS

Time was allowed for Commissioner Comments.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 2. **File #:** TMP 2022-026

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
Lauren Moore, Water Resources Program Analyst

Resolution Approving Agricultural Water Lease Agreements (H&H Farms, Turnpike, Ruppel Farms and Dove Meadow Dairy)
Town Council Agenda Date: Feb 15, 2022

Executive Summary

Attached are four Agricultural Water Lease Agreements for your review.

Proposed Motion

"I move to recommend Town Council approval of all four Agricultural Water Lease Agreements as presented"

Attachments

Attachment A: H&H Farms
Attachment B: Turnpike
Attachment C: Ruppel Farms
Attachment D: Dove Meadow Dairy



Meeting Date: February 15, 2022

AGENDA MEMORANDUM

To: Honorable Mayor and Members of Town Council

Thru: Dave Corliss, Town Manager

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

Title: Resolution: Approving the Town of Castle Rock/H&H Farms Agricultural Water Lease Agreement [Weld County, Co]

Executive Summary

Castle Rock Water is seeking Town Council approval of a resolution (**Attachment A**) for an agricultural water lease with H&H Farms. H&H Farms is a farmer located in Weld County adjacent to the Lost Creek Basin wells we purchased in 2017 as part of our Alternate Source of Supply Project. As part of their 2021 lease, the farmer used 198.6 AF of water from these wells in 2021 for irrigation and has paid the Town \$7,248.90. H&H Farms is interested in an additional one-year lease of our Lost Creek Basin water rights. The Town of Castle Rock does not plan to export these water rights in 2022 as the infrastructure needed to move the water has not yet been designed or constructed. H&H Farms wishes to lease up to 275 acre-feet (AF) at a rate of \$36.50 per AF, which could amount to \$10,037.50 in revenue. The price is reasonable for agricultural leased water of this type at this location based on available data regarding other leases in the area. The agreement terminates on November 15, 2022. This lease agreement is consistent with Castle Rock Water's strategic plan. A key tactic in that plan is to maximize leasing opportunities for idle water rights.

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

February 28, 2018, Castle Rock Water Commission unanimously recommended that Town Council approve the 2018 water lease agreement.

March 6, 2018, Town Council unanimously approved the 2018 water lease agreement.

January 23, 2019, Castle Rock Water Commission recommended that Town Council approve the 2019 water lease agreement.

February 5, 2019, Town Council unanimously approved the 2019 water lease agreement.

October 23, 2019, Castle Rock Water Commission recommended that Town Council approve the 2020 water lease agreement.

November 5, 2019, Town Council unanimously approved the 2020 water lease agreement.

February 24, 2021, Castle Rock Water Commission recommended that Town Council approve the 2021 water lease agreement.

March 2, 2021, Town Council unanimously approved the 2021 water lease agreement.

January 26, 2022, Castle Rock Water Commission _____ that Town Council approve the 2022 water lease agreement.

Discussion

As part of the Town’s hybrid renewable water solution, the Town purchased several Lost Creek Basin wells in 2017 and 2021. These wells came with approximately 1,492 AF (annually) of fully exportable water rights which could be used for municipal and other purposes. Eventually, the Town intends to use these water rights directly or as an augmentation source. However, until infrastructure is built to transport this water to a treatment plant or place of augmentation, leasing this water for other purposes helps to generate some revenue for Castle Rock Water. In 2021, H&H Farms used 198.6 AF of water and has paid the Town \$7,248.90, with a lease rate of \$36.50/AF. The farmers are also planning to use this water in 2022.

The key terms of the 2022 water lease agreement are summarized below:

- Agreement will terminate November 15, 2022.
- H&H Farms will lease up to 275 AF of water at a rate of \$36.50 per AF.

The following table outlines the wells that will be used and the amount of water we will be leasing to H&H Farms.

Well	Maximum Water to be Leased, AF	Annual Water Rights, AF
31640	275	297.2
Total	275	297.2

As noted in the Executive Summary, maximizing the leasing of idle water rights is part of Castle Rock Water’s strategic plan. Revenues from this leasing help to offset the costs for purchasing and developing long term renewable water supplies. Total revenues from water leases with H&H over the last four years are shown in the table below.

Year	AF	\$/AF	Total Revenue
2018	183.55	\$ 35.00	\$ 6,424.25
2019	142.74	\$ 35.00	\$ 4,995.94
2020	198.68	\$ 35.00	\$ 6,953.84
2021	198.60	\$ 36.50	\$ 7,248.90
Total			\$ 25,622.93

Budget Impact

If Council approves the agreement, Castle Rock Water would receive up to \$10,037.50 in revenue in 2022. The revenue will be deposited into Water Resources Fund Capital Leases account 211-4375-393.70-00 <WRAWL>.

Recommendations

Staff recommends approval of the 2022 agricultural water lease agreement with H&H Farms for 275 acre-feet of water which will generate a revenue of up to \$10,037.50.

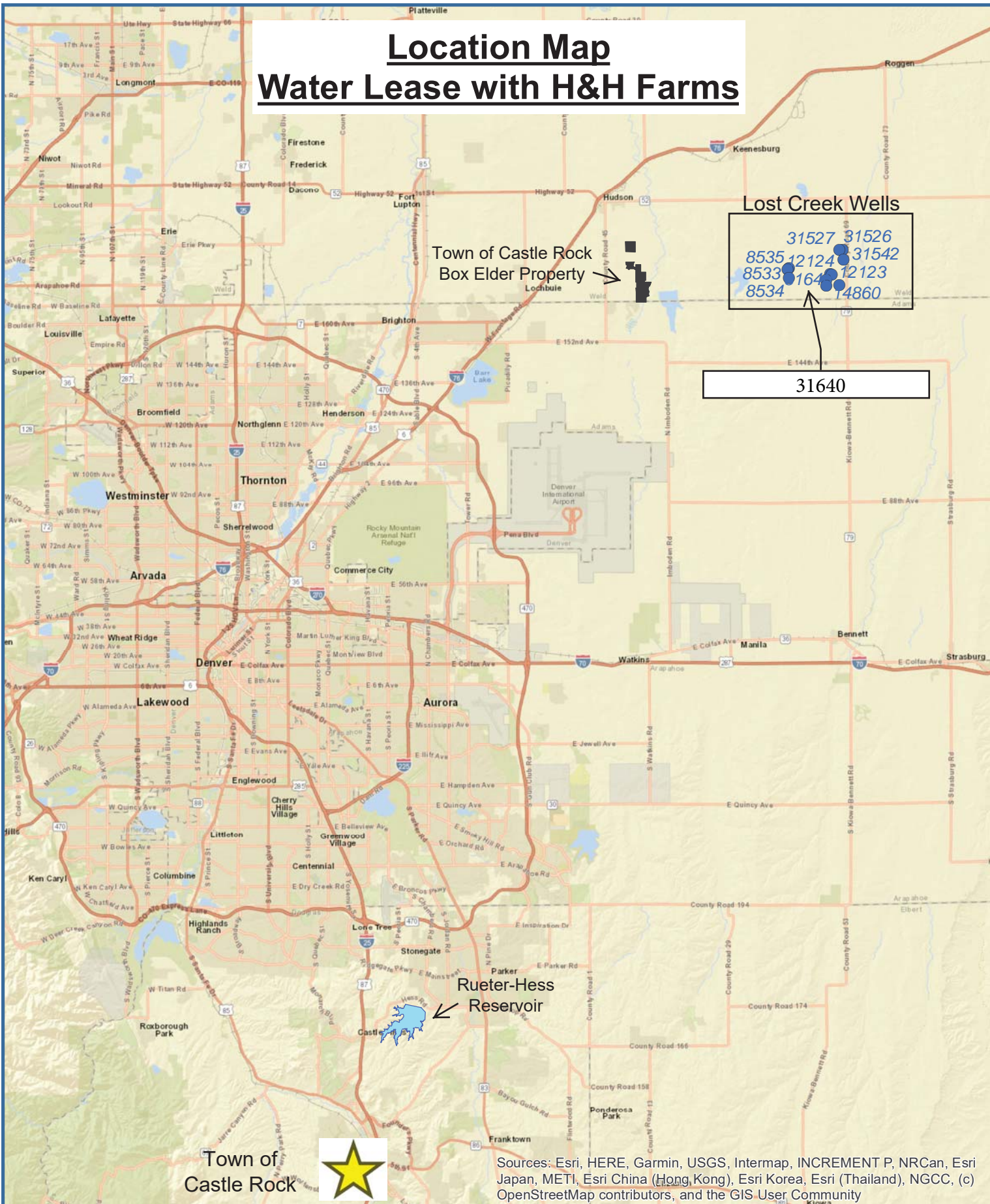
Proposed Motion

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

Attachments

Attachment A: Resolution
Exhibit 1: Agreement
Attachment B: Location Map

Location Map Water Lease with H&H Farms



Lost Creek Wells

- 31527
- 31526
- 8535
- 12124
- 31542
- 8533
- 164
- 12123
- 8534
- 14860

31640

Town of Castle Rock
Box Elder Property

Rueter-Hess
Reservoir

Town of
Castle Rock



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



0 16,500 33,000 66,000 Feet
Date: 1/21/2022 1 inch = 32,921 feet



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product the Town of Castle Rock assumes no liability for its use or accuracy. Questions or comments regarding the cartographic composition of this map including, but not limited to, errors, omissions, corrections, and/or updates, should be directed to the Utilities Department, Town of Castle Rock, (720) 733-6087. Copyright 2017, Town of Castle Rock Utilities Mapping.

**CASTLE ROCK
UTILITIES MAP
(INTERNAL USE ONLY)**



Meeting Date: February 15, 2022

AGENDA MEMORANDUM

To: Honorable Mayor and Members of Town Council

Thru: Dave Corliss, Town Manager

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

Title: Resolution: Approving the Town of Castle Rock/Turnpike LLC Agricultural Water Lease Agreement [Weld County, Co]

Executive Summary

Castle Rock Water is seeking Town Council approval of a resolution (**Attachment A**) for an agricultural water lease with Turnpike LLC. Turnpike LLC is a farmer located in Weld County adjacent to the Lost Creek Basin wells we purchased in 2017 as part of our Alternate Source of Supply Project. As part of their 2021 lease, the farmer used 701.6 AF of water from these wells in 2021 for irrigation and has paid the Town \$26,604.40. Turnpike LLC is interested in an additional one-year lease of our Lost Creek Basin water rights. The Town of Castle Rock does not plan to export these water rights in 2022 as the infrastructure needed to move the water has not yet been designed or constructed. Turnpike LLC wishes to lease up to 485 acre-feet (AF) at a rate of \$36.50 per AF, which could amount to \$17,702.50 in revenue. The price is reasonable for agricultural leased water of this type at this location based on available data regarding other leases in the area. The agreement terminates on November 15, 2022. This lease agreement is consistent with Castle Rock Water's strategic plan. A key tactic in that plan is to maximize leasing opportunities for idle water rights.

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

February 28, 2018, Castle Rock Water Commission unanimously recommended that Town Council approve the 2018 water lease agreement.

March 6, 2018, Town Council unanimously approved the 2018 water lease agreement.

January 23, 2019, Castle Rock Water Commission recommended that Town Council approve the 2019 water lease agreement.

February 5, 2019, Town Council unanimously approved the 2019 water lease agreement.

October 23, 2019, Castle Rock Water Commission recommended that Town Council approve the 2020 water lease agreement.

November 5, 2019, Town Council unanimously approved the 2020 water lease agreement.

July 21, 2020, Town Council approved the First Amendment to the 2020 water lease agreement, increasing the water lease by 30 AF.

February 24, 2021, Castle Rock Water Commission recommended that Town Council approve the 2021 water lease agreement.

March 2, 2021, Town Council unanimously approved the 2021 water lease agreement.

January 26, 2022, Castle Rock Water Commission _____ that Town Council approve the 2022 water lease agreement.

Discussion

As part of the Town’s hybrid renewable water solution, the Town purchased several Lost Creek Basin wells in 2017 and 2021. These wells came with approximately 1,492 AF (annually) of fully exportable water rights which could be used for municipal and other purposes. Eventually, the Town intends to use these water rights directly or as an augmentation source. However, until infrastructure is built to transport this water to a treatment plant or place of augmentation, leasing this water for other purposes helps to generate some revenue for Castle Rock Water. In 2021, Turnpike LLC used 701.6 AF of water from these wells for irrigation and has paid the Town \$26,604.40, with a lease rate of \$36.50/AF. The farmers are also planning to use this water in 2022.

The key terms of the 2022 water lease agreement are summarized below:

- Agreement will terminate November 15, 2022.
- Turnpike LLC will lease up to 485 AF of water at a rate of \$36.50 per AF.

The following table outlines the wells that will be used and the amount of water we will be leasing to Turnpike LLC.

Well	Maximum Water to be Leased**, AF	Annual Water Rights, AF
31526	190	144.4
31527	180	139.1
31643	115	111.3
14860	0*	74.3
Total	485	738.6

*Well not operational

**Maximum water to be leased may exceed annual water rights of an individual well if banked water is available

As noted in the Executive Summary, maximizing the leasing of idle water rights is part of Castle Rock Water’s strategic plan. Revenues from this leasing help to offset the costs for purchasing and developing long term renewable water supplies. Total

revenues from water leases with Turnpike over the last four years are shown in the table below.

Year	AF	\$/AF	Total Revenue
2018	343.28	\$ 35.00	\$ 12,014.80
2019	322.423	\$ 35.00	\$ 11,284.81
2020	466.22	\$ 35.00	\$ 16,317.70
2021	701.60	\$ 36.50	\$ 26,604.40
Total			\$ 78,979.91

Budget Impact

If Council approves the agreement, Castle Rock Water would receive up to \$17,702.50 in revenue in 2022. The revenue will be deposited into Water Resources Fund Capital Leases account 211-4375-393.70-00 <WRAWL>.

Recommendations

Staff recommends approval of the 2022 agricultural water lease agreement with Turnpike LLC for 485 acre-feet of water which will generate a revenue of up to \$17,702.50.

Proposed Motion

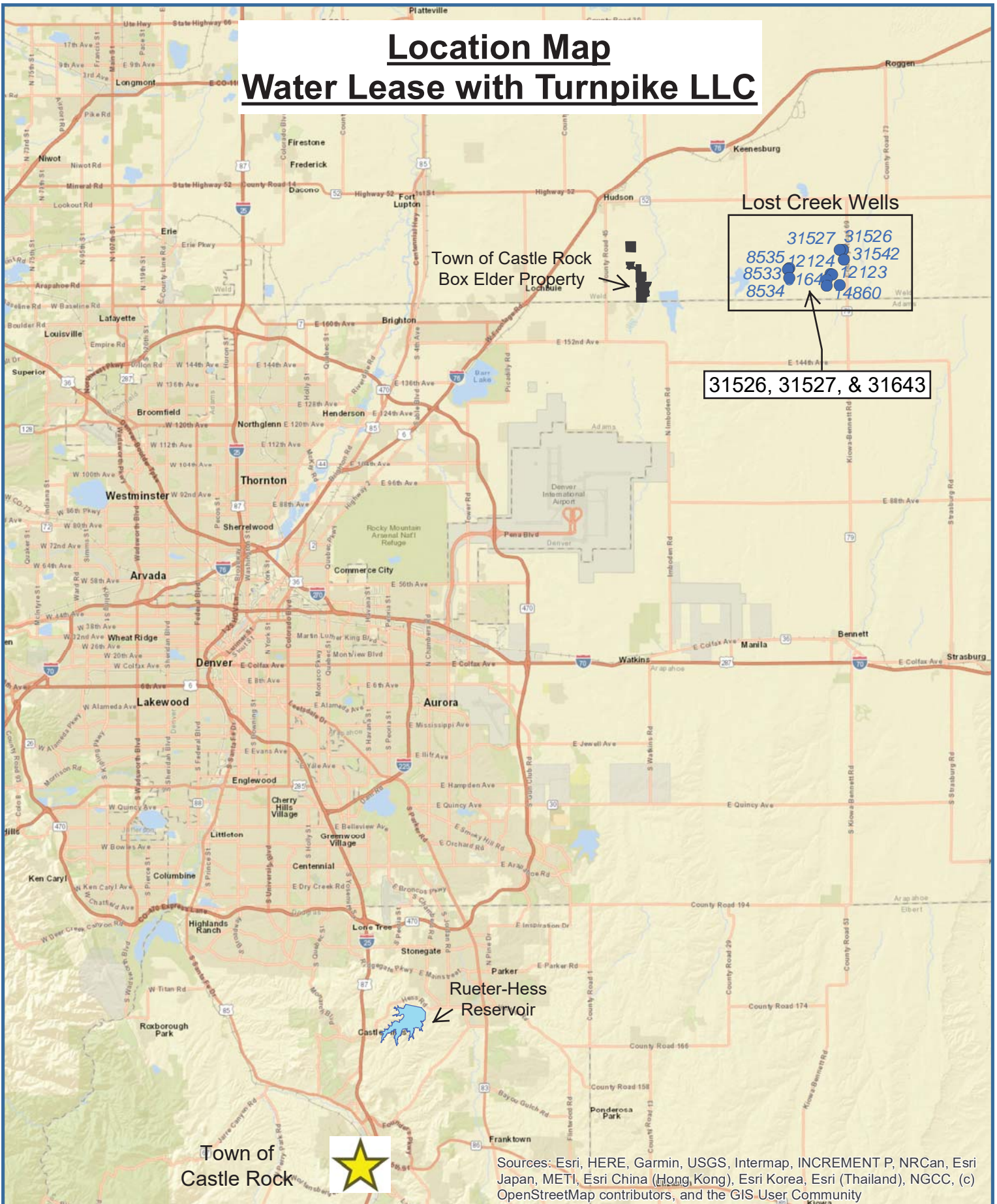
“I move to approve the Resolution as introduced by title.”

Attachments

- Attachment A: Resolution
- Exhibit 1: Agreement
- Attachment B: Location Map

Location Map

Water Lease with Turnpike LLC



Lost Creek Wells

31527 31526
 8535 12124 31542
 8533 164 12123
 8534 14860

31526, 31527, & 31643

Town of Castle Rock
 Box Elder Property

Rueter-Hess
 Reservoir

Town of
 Castle Rock



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



0 16,500 33,000 66,000 Feet

Date: 1/21/2022

1 inch = 32,921 feet



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**CASTLE ROCK
 UTILITIES MAP
 (INTERNAL USE ONLY)**



Meeting Date: February 15, 2022

AGENDA MEMORANDUM

To: Honorable Mayor and Members of Town Council

Thru: Dave Corliss, Town Manager

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

Title: Resolution: Approving the Town of Castle Rock/Rupple Farms LLC
Agricultural Water Lease Agreement [Weld County, Co]

Executive Summary

Castle Rock Water is seeking Town Council approval of a resolution (**Attachment A**) for an agricultural water lease with Rupple Farms, LLC (Rupple). Rupple is a farmer located in Weld County adjacent to the Lost Creek Basin wells we purchased in 2017 as part of our Alternate Source of Supply Project. Previously, Turnpike LLC (Turnpike) was the lessee of these wells, but has recently sold a few of their parcels in 2021. Rupple is one of the new tenants occupying two of the parcels sold by Turnpike. Rupple is interested in a one-year lease of our Lost Creek Basin water rights. The Town of Castle Rock does not plan to export these water rights in 2022 as the infrastructure needed to move the water has not yet been designed or constructed. Rupple wishes to lease up to 525 acre-feet (AF) at a rate of \$36.50 per AF, which could amount to \$19,162.50 in revenue. The price is reasonable for agricultural leased water of this type at this location based on available data regarding other leases in the area. The agreement terminates on November 15, 2022. This lease agreement is consistent with Castle Rock Water's strategic plan. A key tactic in that plan is to maximize leasing opportunities for idle water rights.

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

January 26, 2022, Castle Rock Water Commission _____ that Town Council approve the 2022 water lease agreement.

Discussion

As part of the Town's hybrid renewable water solution, the Town purchased several Lost Creek Basin wells in 2017 and 2021. These wells came with approximately 1,492 AF (annually) of fully exportable water rights which could be used for municipal and other purposes. Eventually, the Town intends to use these water rights directly or as an augmentation source. However, until infrastructure is built to transport this water to a treatment plant or place of augmentation, leasing this water for other purposes helps to generate some revenue for Castle Rock Water. In 2021, Turnpike LLC, the prior

lessee, sold some parcels that Ruppel is now tenant on and Ruppel has expressed interest in using this water for irrigation in 2022.

The key terms of the 2022 water lease agreement are summarized below:

- Agreement will terminate November 15, 2022.
- Ruppel will lease up to 525 AF of water at a rate of \$36.50 per AF.

The following table outlines the wells that will be used and the amount of water we will be leasing to Ruppel. The Lost Creek Basin in Weld County, where these wells are located, allows for three-year modified banking of any unused annual allotment of water. Due to this banking and as shown below, sometimes the maximum amount water leased may exceed the annual water rights for each well.

Well	Maximum Water to be Leased, AF	Annual Water Rights, AF
8533	100**	84.0
8534	0*	81.5
8535	150**	96.9
31542	275**	193.3
Total	525**	455.7

*Well not operational

**Maximum water to be leased may exceed annual water rights of an individual well if banked water is available

As noted in the Executive Summary, maximizing the leasing of idle water rights is part of Castle Rock Water’s strategic plan. Revenues from this leasing help to offset the costs for purchasing and developing long term renewable water supplies.

Budget Impact

If Council approves the agreement, Castle Rock Water would receive up to \$19,162.50 in revenue in 2022. The revenue will be deposited into Water Resources Fund Capital Leases account 211-4375-393.70-00 <WRAWL>.

Recommendations

Staff recommends approval of the 2022 agricultural water lease agreement with Ruppel for 525 acre-feet of water which will generate a revenue of up to \$19,162.50.

Proposed Motion

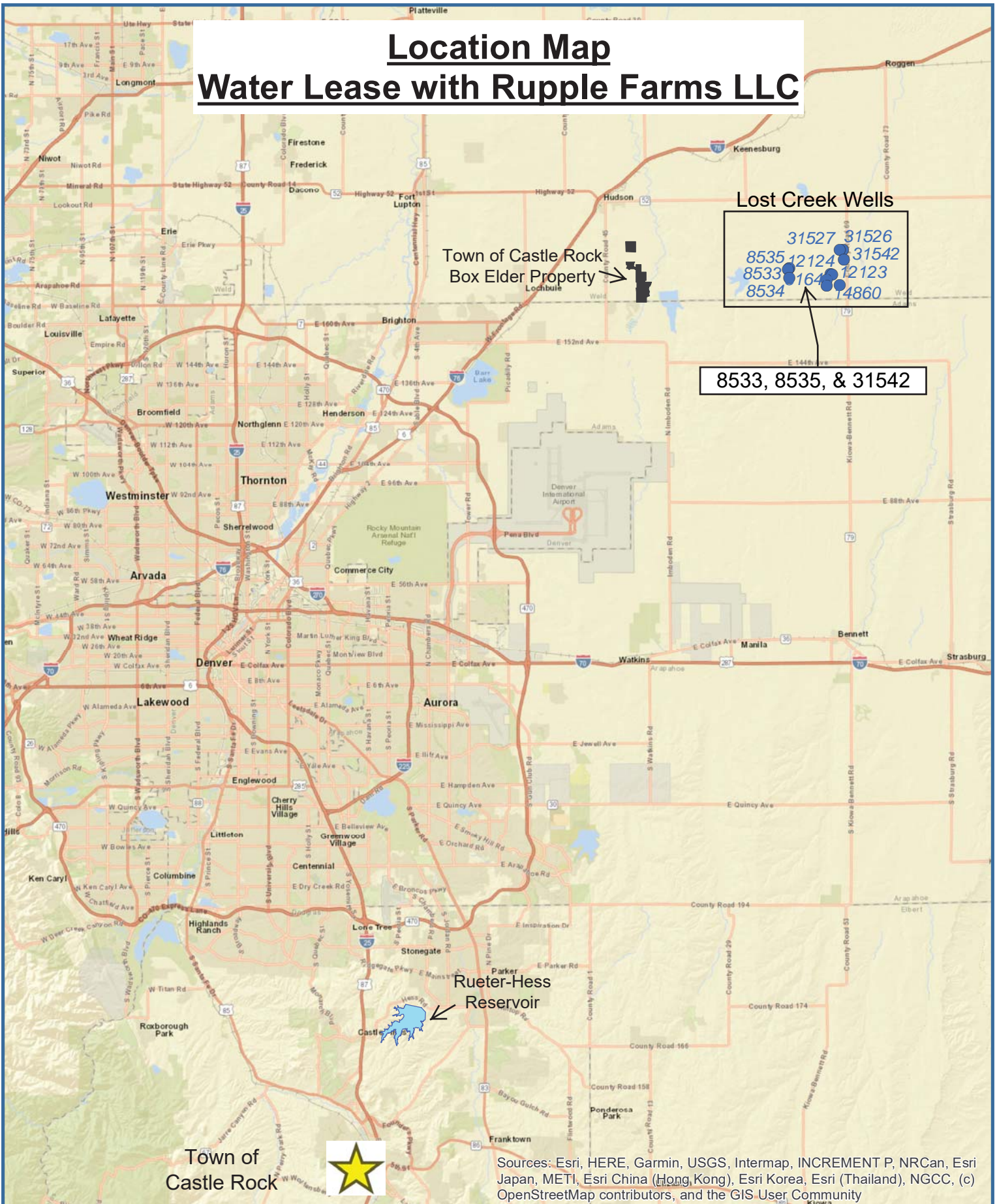
“I move to approve the Resolution as introduced by title.”

Attachments

- Attachment A: Resolution
- Exhibit 1: Agreement
- Attachment B: Location Map

Location Map

Water Lease with Ruppel Farms LLC



Town of
Castle Rock



Rueter-Hess
Reservoir

Lost Creek Wells

31527 31526
8535 12124 31542
8533 164 12123
8534 14860

8533, 8535, & 31542

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



0 16,500 33,000 66,000 Feet

Date: 1/21/2022

1 inch = 32,921 feet



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product the Town of Castle Rock assumes no liability for its use or accuracy. Questions or comments regarding the cartographic composition of this map including, but not limited to, errors, omissions, corrections, and/or updates, should be directed to the Utilities Department, Town of Castle Rock, (720) 733-6087. Copyright 2017, Town of Castle Rock Utilities Mapping.

**CASTLE ROCK
UTILITIES MAP
(INTERNAL USE ONLY)**



Meeting Date: February 15, 2022

AGENDA MEMORANDUM

To: Honorable Mayor and Members of Town Council

Thru: Dave Corliss, Town Manager

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

Title: Resolution: Approving the Town of Castle Rock/Dove Meadow Dairy LLC
Agricultural Water Lease Agreement [Weld County, Co]

Executive Summary

Castle Rock Water is seeking Town Council approval of a resolution (**Attachment A**) for an agricultural water lease with Dove Meadow Dairy, LLC (Dove Meadow Dairy). Dove Meadow Dairy is a farmer located in Weld County adjacent to the Lost Creek Basin wells we purchased in 2017 as part of our Alternate Source of Supply Project. Previously, Turnpike LLC (Turnpike) was the lessee of these wells, but has recently sold a few of their parcels in 2021. Dove Meadow Dairy is one of the new tenants occupying one of the parcels sold by Turnpike. Dove Meadow Dairy is interested in a one-year lease of our Lost Creek Basin water rights. The Town of Castle Rock does not plan to export these water rights in 2022 as the infrastructure needed to move the water has not yet been designed or constructed. Dove Meadow Dairy wishes to lease up to 150 acre-feet (AF) at a rate of \$36.50 per AF, which could amount to \$5,475.00 in revenue. The price is reasonable for agricultural leased water of this type at this location based on available data regarding other leases in the area. The agreement terminates on November 15, 2022. This lease agreement is consistent with Castle Rock Water's strategic plan. A key tactic in that plan is to maximize leasing opportunities for idle water rights.

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

January 26, 2022, Castle Rock Water Commission _____ that Town Council approve the 2022 water lease agreement.

Discussion

As part of the Town's hybrid renewable water solution, the Town purchased several Lost Creek Basin wells in 2017 and 2021. These wells came with approximately 1,492 AF (annually) of fully exportable water rights which could be used for municipal and other purposes. Eventually, the Town intends to use these water rights directly or as an augmentation source. However, until infrastructure is built to transport this water to a treatment plant or place of augmentation, leasing this water for other purposes helps to

generate some revenue for Castle Rock Water. In 2021, Turnpike LLC, the prior lessee, sold a parcel to Dove Meadow Dairy and Dove Meadow Dairy has expressed interest in using this water for irrigation in 2022.

The key terms of the 2022 water lease agreement are summarized below:

- Agreement will terminate November 15, 2022.
- Dove Meadow Dairy will lease up to 150 AF of water at a rate of \$36.50 per AF.

The following table outlines the wells that will be used and the amount of water we will be leasing to Dove Meadow Dairy.

Well	Maximum Water to be Leased**, AF	Annual Water Rights, AF
12123	0*	163.1
12124	150	106.4
Total	150	269.5

*Well not operational

**Maximum water to be leased may exceed annual water rights of an individual well if banked water is available

As noted in the Executive Summary, maximizing the leasing of idle water rights is part of Castle Rock Water’s strategic plan. Revenues from this leasing help to offset the costs for purchasing and developing long term renewable water supplies.

Budget Impact

If Council approves the agreement, Castle Rock Water would receive up to \$5,475.00 in revenue in 2022. The revenue will be deposited into Water Resources Fund Capital Leases account 211-4375-393.70-00 <WRAWL>.

Recommendations

Staff recommends approval of the 2022 agricultural water lease agreement with Dove Meadow Dairy for 150 acre-feet of water which will generate a revenue of up to \$5,475.00.

Proposed Motion

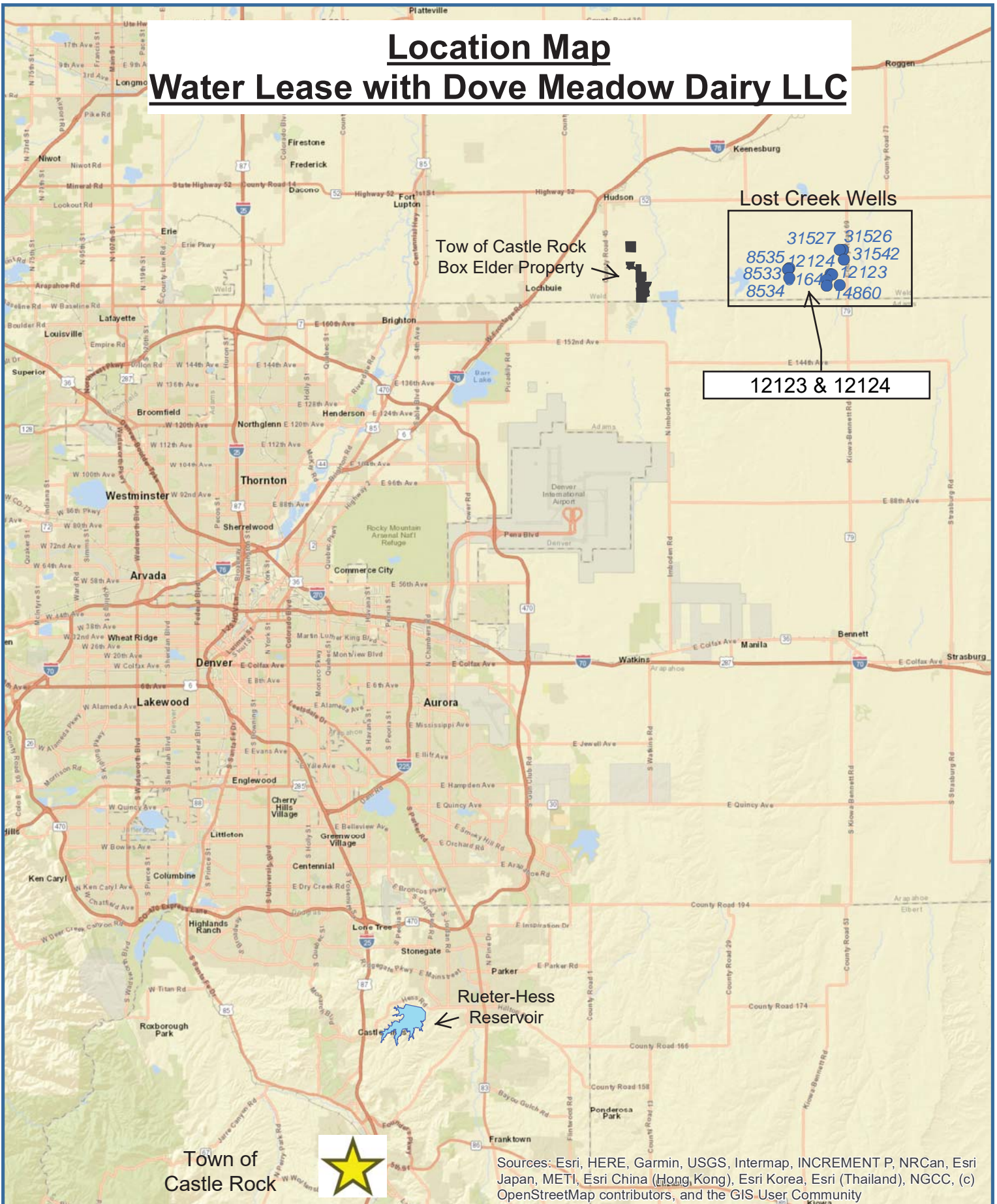
“I move to approve the Resolution as introduced by title.”

Attachments

- Attachment A: Resolution
- Exhibit 1: Agreement
- Attachment B: Location Map

Location Map

Water Lease with Dove Meadow Dairy LLC



Lost Creek Wells

31527 31526
 8535 12124 31542
 8533 164 12123
 8534 14860

12123 & 12124

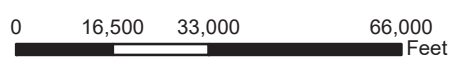
Tow of Castle Rock
 Box Elder Property

Rueter-Hess
 Reservoir

Town of
 Castle Rock



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Date: 1/21/2022 1 inch = 32,921 feet



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**CASTLE ROCK
 UTILITIES MAP
 (INTERNAL USE ONLY)**



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 3. **File #:** TMP 2022-013

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Rick Schultz, Water Efficiency Supervisor
Linda Gould, Water conservation Technician

Resolution Approving the 2022 Conservation Rebate Incentive Program
Town Council Agenda Date: Feb 15, 2022

Executive Summary

The purpose of this memorandum is to request Town Council approval by resolution of the 2022 Conservation Rebate Incentive program (**Attachment A**). The program is proposed to be funded at a level of \$145,000 again this year with rebates being awarded in any of the proposed categories below on a first come first served basis until the funds have been exhausted.

The core rebate categories remain intact, with only a few proposed changes for 2022. Staff is recommending the following changes to the residential ColoradoScape Renovation rebate, Non-residential ColoradoScape Renovation rebate, and the Smart Irrigation Controller rebate.

The proposed rebates and recommended changes for 2022 are:

- Residential ColoradoScape Renovation - Raise the minimum turf removal required to 400 square feet or entire front yard. Increase the rebate amount per square foot from \$1.10 to \$1.20, amount not to exceed \$1,800.00.
- Non-Residential ColoradoScape Renovation - Increase the rebate amount per square foot from \$1.10 to \$1.20, amount not to exceed \$18,000.00.
- Smart Irrigation Controller - Continue to offer a 50% rebate. Reduce the maximum rebate allowed from \$300.00 to \$200.00.
- Rotary Nozzle Retrofit Rebate - Up to \$5 per nozzle; maximum rebate of \$2,000 for non-residential customers.
- Toilet Retrofit Rebate - Up to \$100 per toilet; maximum rebate of \$400 or four (4) toilets for residential and non-residential customers.

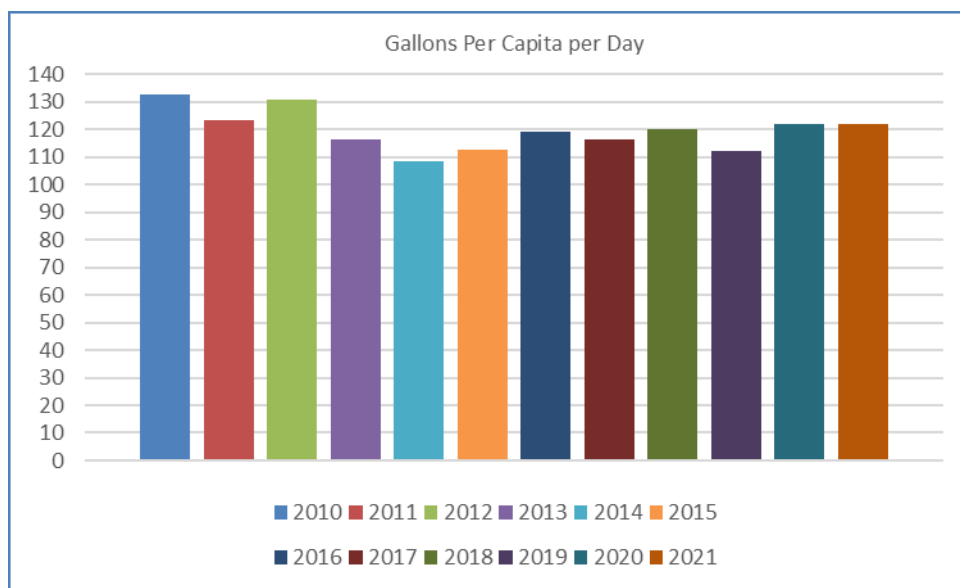
- Whole-home Water Monitoring System Rebate - fifty (50) percent of the cost of the system up to \$200 for residential and non-residential customers.

Notification and Outreach Efforts

This information will be available on CRconserve.com and promoted through Community Relations' outreach avenues, such as Facebook, Twitter, Town Talk, and press releases.

Discussion

The original Water Conservation Master Plan (WCMP) was adopted in 2006 with an overall goal of achieving a water savings of 18% (165 to 135 gallons per capita per day) through various programs. The Castle Rock community, with the help of the Castle Rock Water team, has exceeded this goal. In 2015, the Water Resources / Conservation Division of Castle Rock Water updated this document as the new Water Efficiency Master Plan (WEMP) which received approval from the Colorado Water Conservation Board (CWCB) in February 2016. The WEMP set a goal for per capita water use to 100 Gallons Per Capita Per Day (GPCD) by 2055. Progress on GPCD water use since 2015 when the WEMP was published is shown in the Figure below.



The figure indicates excellent progress over the last twelve years with per capita water use going as low as 112 GPCD. Ongoing water conservation and efficiency efforts are required in order to continue reductions achieved and meet our future goal of 100 GPCD. The WEMP is due to be updated in 2022.

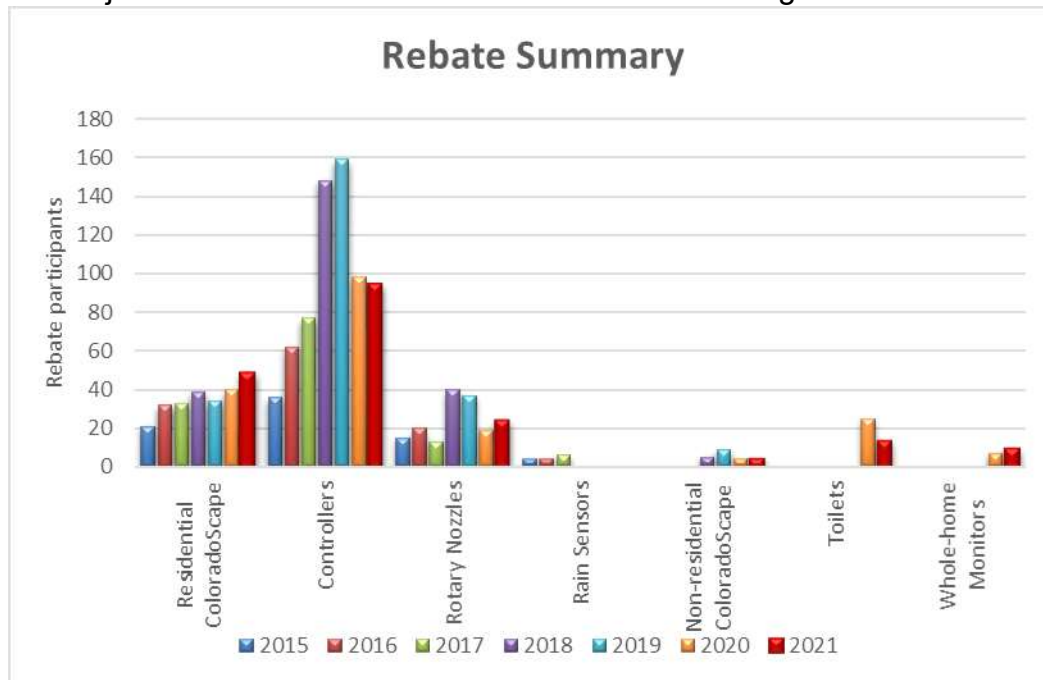
One way Castle Rock Water continues to work toward sustaining and building on the conservation goals outlined in the original WCMP and the new WEMP is by offering water efficiency rebates to the community. The WEMP calls for evaluating options to update and expand this rebate program.

After evaluation of the 2021 program, staff is recommending a reduction of the maximum rebate

Item #: 3. File #: TMP 2022-013

amount for the smart irrigation controller rebate program. We will continue to offer a 50% rebate, with the maximum rebate amount reduced from \$300.00 to \$200.00. With reductions in retail pricing, this will have a minimal impact to our rebate participants. Additionally, we are proposing an increase in the minimum square foot required from 250 square feet to 400 square feet (or the entire front yard for exposure) for the residential ColoradoScape renovation rebate. Analysis of water consumption data indicates smaller retrofit projects are not producing desired results. Staff is also recommending an increase from \$1.10 to \$1.20 per square foot for residential (maximum rebate amount up to \$1,800.00) and non-residential (maximum rebate amount up to \$18,000.00) ColoradoScape rebate participants. We hope to encourage increased levels of participation and help to offset rising labor and material costs.

The most popular rebates are the smart irrigation controller and the residential ColoradoScape renovation. Smart irrigation controllers have seen the largest gain in popularity primarily due to improvements in technology, reduced costs, ease of use, and availability. Turf reduction through the ColoradoScape renovation rebate continues to be the most effective. 2013 through 2019 data indicates a 17% water savings on residential accounts and 2018 through 2019 data indicates a 29% water savings on non-residential accounts. The rebate program undergoes continuous evaluation and adjustments are recommended as needed. See figure below.



Overall funding for the 2022 rebate incentive program is proposed at the same level as in 2021.

Budget Impact

The 2022 program will continue to be funded from revenue generated during 2021 watering restriction violations and a portion of funds from the Block 4 surcharge rate. The average revenues generated and estimated costs for the violations program are shown on **Attachment B**. The total proposed rebate amount for 2022 is \$145,000, which based on 2021 violations and Block 4 surcharge revenues will cover the program.

Item #: 3. File #: TMP 2022-013

Attachment C summarizes the rebate activity for the previous three years, and sets the starting point for the current year program.

Staff Recommendation

Castle Rock Water staff recommends approval of the 2022 Conservation Rebate Incentive Program.

Proposed Motion

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

Attachments

Attachment A: Resolution (Not Attached)
Attachment B: Rebates vs Surcharge Violation Revenues
Attachment C: Funding Summary

Conservation Rebates/Expenses vs. Violation/ Surcharge Revenues

	Expenditures				Revenues									Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue-Expenditures		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	(8,227.88)	(28,227.88)
2012	18,000.00	18,000.00	60,866.69	42,866.69	25,000.00	51,373.31	26,373.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	166.71	(19,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,851.51	2,851.51	-	15,500.00	19,500.00	50,000.00	72,441.51	22,441.51	15,000.00	44,281.71	29,281.71
2014	30,000.00	45,000.00	42,082.07	(2,917.93)	25,000.00	41,714.84	16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84	(20,000.00)	5,807.77	25,807.77
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	43,780.06	(6,219.94)	-	4,575.00	(2,425.00)	37,000.00	48,305.06	(8,644.94)	12,000.00	24,432.38	12,432.38
2016	45,000.00	45,000.00	35,110.66	(9,889.34)	50,000.00	55,878.63	5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63	5,000.00	21,542.97	16,542.97
2017	45,000.00	45,000.00	44,110.33	(889.67)	45,000.00	79,621.49	34,621.49	5,500.00	11,475.00	5,975.00	50,000.00	91,096.49	41,096.49	5,500.00	46,786.61	41,286.61
2018	45,000.00	145,000.00	86,104.34	(8,895.66)	-	88,454.30	88,454.30	5,500.00	34,475.00	28,975.00	5,500.00	122,929.30	117,429.30	(139,500.00)	36,924.96	176,324.96
2019	145,000.00	135,000.00	90,789.71	(4,210.29)	60,000.00	58,664.49	(1,335.51)	5,500.00	88,892.00	83,392.00	65,500.00	147,556.49	82,056.49	(89,500.00)	56,766.78	146,266.78
2020	145,000.00	145,000.00	103,406.21	(41,593.79)	25,000.00	99,860.96	24,860.96	15,000.00	100,975.00	85,975.00	90,000.00	200,835.96	110,835.96	(55,000.00)	97,429.75	152,429.75
2021	145,000.00	183,886.00	99,312.22	(84,673.78)	75,000.00	106,027.28	31,027.28	15,000.00	46,050.00	31,050.00	90,000.00	152,077.28	62,077.28	(93,986.00)	52,765.06	146,751.06
2011 - 2021 Subtotal	\$ 753,000.00	\$ 788,000.00	\$ 584,262.94	\$ (153,737.06)	\$ 429,000.00	\$ 633,302.65	\$ 204,302.65	\$ 72,500.00	\$ 277,192.00	\$ 204,692.00	\$ 725,000.00	\$ 910,494.65	\$ 185,494.65	\$ (236,500.00)	\$ 326,231.71	\$ 562,731.71
2022 Budget	\$ 145,000.00	\$ 145,000.00	\$ -	\$ (145,000.00)	\$ 80,000.00	\$ -	\$ (80,000.00)	\$ 75,000.00	\$ -	\$ (75,000.00)	\$ 155,000.00	\$ -	\$ (155,000.00)	\$ 10,000.00	\$ -	\$ (10,000.00)
2021 Water Surcharge Revenues Earned	\$	\$	\$ 106,027.28	\$ 211-4330-351-50-00	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2021 Water Violation Revenues Earned	\$	\$	\$ 46,050.00	\$ 211-4330-351-51-00	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2021 Total Revenues Earned	\$	\$	\$ 152,077.28	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Less 2021 Rebates Issued	\$	\$	\$ 99,312.22	\$ 211-4330-443-81-10	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Less 2021 Seasonal Water Violation Monitors	\$	\$	\$ 45,723.14	\$ 211-4330-443-10-30	\$	\$ 48,770.00	\$ 211-4330-443-10-30	\$	\$	\$	\$	\$	\$	\$	\$	\$
Salaries	\$	\$	\$ 6,915.77	\$ Seasonal salaries not related to water monitoring	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$ 38,807.37	\$ Water Monitoring Program Salaries (Net of seasonal salaries not related to water monitoring program specifically)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2021 Revenues in Excess of Costs	\$	\$	\$ 13,957.69	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Principal Only Payment for Mettler Park Turf Replacement Project for 2021 Unused Rebates \$ 84,673.78

Conservation Rebates/Expenses vs. Violation/ Surcharge Revenues

	Expenditures				Revenues									Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue-Expenditures		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	(8,227.88)	(28,227.88)
2012	18,000.00	18,000.00	60,866.69	42,866.69	25,000.00	51,373.31	26,373.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	166.71	(16,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,851.51	2,851.51	-	15,550.00	19,550.00	50,000.00	72,441.51	22,441.51	15,000.00	44,281.71	29,281.71
2014	30,000.00	45,000.00	42,082.07	(2,917.93)	25,000.00	41,714.84	16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84	(20,000.00)	5,807.77	25,807.77
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	43,780.06	(6,219.94)	-	4,575.00	(2,425.00)	37,000.00	48,305.06	(8,644.94)	12,000.00	24,432.38	12,432.38
2016	45,000.00	45,000.00	35,110.66	(9,889.34)	50,000.00	55,878.63	5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63	5,000.00	21,542.97	16,542.97
2017	45,000.00	45,000.00	44,110.33	(889.67)	45,000.00	79,421.49	34,421.49	5,500.00	11,475.00	5,975.00	50,000.00	91,096.49	41,096.49	5,500.00	46,786.49	41,286.49
2018	45,000.00	145,000.00	86,104.34	(58,895.66)	-	88,454.30	88,454.30	5,500.00	34,475.00	28,975.00	5,500.00	122,929.30	117,429.30	(19,500.00)	36,824.96	17,324.96
2019	145,000.00	135,000.00	90,789.71	(54,210.29)	60,000.00	58,664.49	(1,335.51)	5,500.00	88,892.00	83,392.00	65,500.00	147,556.49	82,056.49	(89,500.00)	56,766.78	146,266.78
2020	145,000.00	145,000.00	503,426.71	(41,593.78)	75,000.00	69,800.96	(5,199.04)	15,000.00	100,975.00	85,975.00	90,000.00	208,850.96	119,825.96	(55,000.00)	97,429.75	152,429.75
2011 - 2020 Subtotal	\$ 608,000.00	\$ 788,000.00	\$ 584,262.94	\$ (153,737.06)	\$ 420,000.00	\$ 633,362.65	\$ 204,362.65	\$ 72,500.00	\$ 277,192.00	\$ 204,692.00	\$ 503,500.00	\$ 910,494.65	\$ 406,994.65	\$ (136,500.00)	\$ 326,231.71	\$ 562,731.71
2021 Budget	\$ 145,000.00	\$ 145,000.00	\$ -	\$ (145,000.00)	\$ 75,000.00	\$ -	\$ (75,000.00)	\$ 15,000.00	\$ -	\$ (15,000.00)	\$ 90,000.00	\$ -	\$ (90,000.00)	\$ (55,000.00)	\$ -	\$ 55,000.00

2020 Water Surcharge Revenues Earned \$ 99,860.96 211-4330-351-50-00
 2020 Water Violation Revenues Earned \$ 100,975.00 211-4330-351-51-00
 2020 Total Revenues Earned \$ 200,835.96

Less 2020 Rebates Issued \$ 103,406.21 211-4330-443-81-10

Less 2020 Seasonal Water Violation Monitors
 Salaries \$ 56,185.62 211-4330-443-10-30 2021 Budget \$ 48,770.00 211-4330-443-10-30 This does not include the salaries from department wide staff who helped with the water restrictions and water violation issuances.
 \$ 6,316.08 Seasonal salaries not related to water monitoring
 \$ 49,868.54 Water Monitoring Program Salaries (Net of seasonal salaries not related to water monitoring program specifically).

2020 Revenues in Excess of Costs \$ 47,560.81

Principal Only Payment for Mettler Park Turf Replacement Project for 2020 Unused Rebates \$ 41,593.79

Conservation Rebates/Expenses vs. Violation/ Surcharge Revenues

	Expenditures				Revenues									Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue-Expenditures		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	(8,227.88)	(28,227.88)
2012	18,000.00	18,000.00	60,866.69	42,866.69	25,000.00	56,173.31	31,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	166.71	(16,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,851.51	2,851.51	-	15,550.00	19,550.00	50,000.00	72,441.51	22,441.51	15,000.00	44,281.71	29,281.71
2014	30,000.00	45,000.00	42,082.07	(2,917.93)	25,000.00	41,714.84	16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84	(20,000.00)	5,807.77	25,807.77
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	43,780.06	(6,219.94)	-	4,575.00	(2,425.00)	37,000.00	48,305.06	(8,694.94)	12,000.00	24,432.38	12,432.38
2016	45,000.00	45,000.00	35,110.66	(9,889.34)	50,000.00	55,878.63	5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63	5,000.00	21,542.97	16,542.97
2017	45,000.00	45,000.00	44,110.33	(889.67)	45,000.00	79,421.49	34,421.49	5,500.00	11,475.00	5,975.00	50,000.00	91,096.49	40,096.49	5,500.00	46,786.66	41,286.66
2018	45,000.00	145,000.00	86,104.34	(58,895.66)	-	88,454.30	88,454.30	5,500.00	34,475.00	28,975.00	5,500.00	122,929.30	117,429.30	(19,500.00)	36,824.96	176,324.96
2019	145,000.00	155,000.00	90,789.71	(64,210.29)	60,000.00	58,664.49	(1,335.51)	5,500.00	88,892.00	83,392.00	65,500.00	147,556.49	82,056.49	(89,500.00)	56,766.78	146,266.78
2011-2019 Subtotal	\$ 483,000.00	\$ 593,000.00	\$ 460,652.73	\$ (112,347.27)	\$ 314,000.00	\$ 513,441.69	\$ 179,441.69	\$ 37,500.00	\$ 176,217.00	\$ 138,717.00	\$ 411,500.00	\$ 708,158.69	\$ 296,158.69	\$ 1,369,000.00	\$ 930,601.11	\$ 438,398.89
2020 Budget	\$ 145,000.00	\$ 145,000.00	\$ -	\$ (145,000.00)	\$ 75,000.00	\$ -	\$ (75,000.00)	\$ 15,000.00	\$ -	\$ (15,000.00)	\$ 90,000.00	\$ -	\$ (90,000.00)	\$ (55,000.00)	\$ -	\$ 55,000.00

2019 Water Surcharge Revenues Earned	\$ 58,664.49	211-4330-351-50-00			
2019 Water Violation Revenues Earned	\$ 88,892.00	211-4330-351-51-00			
2019 Total Revenues Earned	\$ 147,556.49				
Less 2019 Rebates Issued	\$ 90,789.71	211-4330-443-81-10			
Less 2019 Seasonal Water Violation Monitors					
Salaries	\$ 54,710.01	211-4330-443-10-30	2020 Budget \$ 48,772.00	211-4330-443-10-30	This does not include the salaries from department wide staff who helped with the water restrictions and water violation issuances.
	\$ 14,566.26	Seasonal salaries not related to water monitoring			
	\$ 40,063.75	Water Monitoring Program Salaries (Net of seasonal salaries not related to water monitoring program specifically)			
2019 Revenues in Excess of Costs	\$ 16,303.63				

Principal Only Payment for Mettler Park Turf Replacement Project for 2019 Unused Rebates \$ 64,210.29

Conservation Rebates/Expenses vs. Violation/ Surcharge Revenues

	Expenditures				Revenues						Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)
2012	18,000.00	18,000.00	60,806.60	42,806.60	25,000.00	59,173.31	34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,891.53	2,891.53	-	19,500.00	19,500.00	50,000.00	72,443.53	22,443.53
2014	30,000.00	45,000.00	42,083.07	(2,917.93)	25,000.00	41,714.84	16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	43,280.06	(6,719.94)	7,000.00	4,575.00	(2,425.00)	57,000.00	48,355.06	(8,644.94)
2016	45,000.00	45,000.00	35,310.66	(9,689.34)	50,000.00	55,878.63	5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63
2017	45,000.00	45,000.00	44,310.33	(689.67)	45,000.00	79,621.49	34,621.49	5,500.00	11,475.00	5,975.00	50,500.00	91,096.49	40,596.49
2018	45,000.00	145,000.00	86,104.34	(58,895.66)	45,000.00	88,454.30	43,454.30	5,500.00	34,475.00	28,975.00	5,500.00	122,029.30	117,429.30
2011-2018 Subtotal	\$ 318,000.00	\$ 438,000.00	\$ 390,907.02	\$ (47,092.98)	\$ 294,000.00	\$ 474,777.20	\$ 180,777.20	\$ 52,000.00	\$ 87,325.00	\$ 35,325.00	\$ 346,000.00	\$ 562,102.20	\$ 216,102.20
2019 Budget	\$ 145,000.00	\$ 145,000.00	\$ -	\$ (145,000.00)	\$ 60,000.00	\$ -	\$ (60,000.00)	\$ 5,500.00	\$ -	\$ (5,500.00)	\$ 65,500.00	\$ -	\$ (65,500.00)
2018 Water Surcharge Revenues Earned	\$ 88,454.30	211-4330-351-50-00											
2018 Water Violation Revenues Earned	\$ 34,475.00	211-4330-351-51-00											
2018 Total Revenues Earned	\$ 122,929.30												
Less 2018 Rebates Issued	\$ 86,104.34	211-4330-443-81-10											
Less 2018 Seasonal Water Violation Monitors													
Salaries	\$ 47,337.72	211-4330-443-10-30	2019 Budget	\$ 48,772.00	211-4330-443-10-30								
	\$ 12,070.30	Seasonal salaries not related to water monitoring											
	\$ 35,267.42	Water Monitoring Program Salaries (Net of seasonal salaries not related to water monitoring program specifically)											
2018 Revenues in Excess of Costs	\$ 3,557.59												
Principal Only Payment for Mettler Park Turf Replacement Project for 2018 Unused Rebates	\$ 58,895.66												

This does not include the salaries from department wide staff who helped with the water restrictions and water violation issuances.

Conservation Rebates/Expenses vs. Violation/ Surcharge Revenues

	Expenditures				Revenues						Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)
2012	18,000.00	18,000.00	40,806.60	22,806.60	25,000.00	59,173.31	34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,891.53	2,891.53	-	19,500.00	19,500.00	50,000.00	72,443.53	22,443.53
2014	30,000.00	45,000.00	42,083.07	(2,917.93)	25,000.00	41,714.84	16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	43,780.06	(6,219.94)	7,000.00	4,575.00	(2,425.00)	57,000.00	48,355.06	(8,644.94)
2016	45,000.00	45,000.00	35,310.66	(9,689.34)	50,000.00	55,878.63	5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63
2017	45,000.00	45,000.00	44,310.33	(689.67)	45,000.00	77,898.62	32,898.62	5,500.00	11,475.00	5,975.00	50,500.00	89,373.62	38,873.62
2011-2017 Subtotal	\$ 273,000.00	\$ 293,000.00	\$ 303,962.68	\$ 10,962.68	\$ 294,000.00	\$ 384,620.03	\$ 90,620.03	\$ 46,500.00	\$ 52,850.00	\$ 6,350.00	\$ 440,500.00	\$ 437,450.03	\$ 96,950.03
2018 Budget	\$ 45,000.00	\$ 45,000.00	\$ -	\$ (45,000.00)	\$ -	\$ -	\$ -	\$ 5,500.00	\$ -	\$ (5,500.00)	\$ 5,500.00	\$ -	\$ (5,500.00)
2017 Water Surcharge Revenues Earned	\$ 77,898.62	211-4330-351-50-00											
2017 Water Violation Revenues Earned	\$ 11,475.00	211-4330-351-51-00											
2017 Total Revenues Earned	\$ 89,373.62												
Less 2017 Rebates Issued	\$ 44,310.33	211-4330-443-81-10											
Less 2017 Seasonal Water Violation Monitors	\$ 45,957.51	211-4330-443-10-30	2018 Budget	\$ 48,772.00	211-4330-443-10-30	This does not include the salaries from department wide staff who helped with the water restrictions and water violation issuances.							
Salaries	\$ 28,207.59	Seasonal salaries not related to water monitoring (Linda's Salary outside of Seasonal Months and 75% of her Salary in June and 50% in July and Aug not for Water Monitoring)											
	\$ 17,749.92	Water Monitoring Program Salaries (Net of seasonal salaries not related to water monitoring program specifically)											
2017 Revenues in Excess of Costs	\$ 27,313.37	(589,373.62-544,310.33-517,749.92)											
2018 Rebate Budget	\$45,000												

	Original Budget	Conserva
2008		-
2009		636,566.00
2010		7,398.00
Funding Redirection to CIP for 2010 Rates		
2011		60,000.00
2012		18,000.00
2013		30,000.00
2014		30,000.00
2015		45,000.00
2016		45,000.00
2011- 2016 Subtotal	\$	228,000.00
2017 Budget		45,000.00
2016 Water Surcharge Revenues Earned		55,878.63
2016 Water Violation Revenues Earned		975.00
2016 Total Revenues Earned		56,853.63
Less 2016 Rebates Issued		35,310.66
Less 2016 Seasonal Water Violation Monitors		
Salaries		33,628.93
		23,063.16
	\$	10,565.77
2016 Revenues in Excess of Costs	\$	10,977.20

2017 Rebate Budget \$45,000

Conservation Rebates vs. Violation & Surcharge Revenues

Expenditures				
Conservation Rebates 211-4330-443-81-10			Water Surcharge 211-4330-351-	
Revised Budget	Actual	Bud-Act Variance	Budget	Actual
-	-	-	-	-
1,332,398.00	189,977.76	(1,142,420.24)	119,198.00	50,602.78
123,622.00	110,032.10	(13,589.90)	49,000.00	49,978.81
-	1,000,000.00	1,000,000.00	-	-
60,000.00	69,390.44	9,390.44	49,000.00	53,263.06
18,000.00	60,806.60	42,806.60	25,000.00	59,173.31
35,000.00	28,159.80	(6,840.20)	50,000.00	52,891.51
45,000.00	42,082.07	(2,917.93)	25,000.00	41,714.84
45,000.00	23,902.78	(21,097.22)	50,000.00	43,780.06
45,000.00	35,310.66	(9,689.34)	50,000.00	55,878.63
\$ 248,000.00	\$ 259,652.35	\$ 11,652.35	\$ 249,000.00	\$ 306,701.41

45,000.00 - (45,000.00) 45,000.00 -

211-4330-351-50-00
211-4330-351-51-00

211-4330-443-81-10

211-4330-443-10-30 2017 Budget \$ 48,772.00 211-4330-443-10-30
Seasonal salaries not related to water monitoring (Linda's Salary outside of Seasonal Months and only 87% of total)
Water Monitoring Salaries

Revenues						
-50-00	Water Violations 211-4330-351-51-00			Total Revenues		
Variance	Budget	Actual	Variance	Budget	Actual	Variance
-	-	-	-	-	-	-
(68,595.22)	68,380.00	27,200.00	(41,180.00)	187,578.00	77,802.78	(109,775.22)
978.81	31,000.00	12,825.00	(18,175.00)	80,000.00	62,803.81	(17,196.19)
-	-	-	-	-	-	-
4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)
34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31
2,891.51	-	19,550.00	19,550.00	50,000.00	72,441.51	22,441.51
16,714.84	-	6,175.00	6,175.00	25,000.00	47,889.84	22,889.84
(6,219.94)	7,000.00	4,575.00	(2,425.00)	57,000.00	48,355.06	(8,644.94)
5,878.63	-	975.00	975.00	50,000.00	56,853.63	6,853.63
\$ 57,701.41	\$ 41,000.00	\$ 41,375.00	\$ 375.00	\$ 290,000.00	\$ 348,076.41	\$ 58,076.41
(45,000.00)	5,500.00	-	(5,500.00)	50,500.00	-	(50,500.00)

per Salary in those months)

Variances			Water Monitor Salaries Only
Revenue-Expenditures			211-4330-443-10-30
Budget	Actual	Variance	Actual
-	-	-	-
(1,144,820.00)	(112,174.98)	1,032,645.02	23,882.00
(43,622.00)	(47,228.29)	(3,606.29)	27,468.91
-	(1,000,000.00)	(1,000,000.00)	-
20,000.00	(8,227.38)	(28,227.38)	22,761.89
10,000.00	566.71	(9,433.29)	8,782.25
15,000.00	44,281.71	29,281.71	14,212.45
(20,000.00)	5,807.77	25,807.77	
12,000.00	24,452.28	12,452.28	
5,000.00	21,542.97	16,542.97	
\$ 42,000.00	\$ 88,424.06	\$ 46,424.06	\$ 97,107.50

5,500.00 - (5,500.00)

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditures				Revenues									Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue Expenditures		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	(8,227.38)	(28,227.38)
2012	18,000.00	18,000.00	60,806.60	42,806.60	25,000.00	59,173.31	34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	566.71	(9,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,891.51	2,891.51	-	19,550.00	19,550.00	50,000.00	72,441.51	22,441.51	15,000.00	44,281.71	29,281.71
2014	30,000.00	45,000.00	42,082.07	(2,917.93)	25,000.00	43,305.82	18,305.82	-	6,175.00	6,175.00	25,000.00	49,480.82	24,480.82	(10,000.00)	7,398.75	27,398.75
2015	45,000.00	45,000.00	23,902.78	(21,097.22)	50,000.00	44,716.05	(5,283.95)	7,000.00	4,575.00	(2,425.00)	57,000.00	49,291.05	(7,708.95)	12,000.00	26,388.27	13,388.27
2011-2015 Subtotal	\$ 183,000.00	\$ 203,000.00	\$ 224,341.69	\$ 21,341.69	\$ 199,000.00	\$ 253,349.75	\$ 54,349.75	\$ 41,000.00	\$ 40,400.00	\$ (600.00)	\$ 240,000.00	\$ 293,749.75	\$ 53,749.75	\$ 37,000.00	\$ 69,408.00	\$ 32,408.00
2016 Budget	45,000.00	45,000.00	-	(45,000.00)	50,000.00	-	(50,000.00)	-	-	-	50,000.00	-	(50,000.00)	5,000.00	-	(5,000.00)
2015 Water Surcharge Revenues Earned	44,716.05	211-4330-351-50-00														
2015 Water Violation Revenues Earned	4,575.00	211-4330-351-51-00														
2015 Total Revenues Earned	49,291.05															
Less 2015 Rebates Issued	23,902.78	211-4330-443-81-10														
Less 2015 Seasonal Water Violation Monitors Salaries	39,787.66	211-4330-443-10-30	2016 Budget	\$ 48,772.00	211-4330-443-10-30											
	11,868.50	Seasonal salaries not related to water monitoring														
	\$ 27,919.16	Water Monitoring Salaries														
2015 Costs in Excess of Revenues	\$ (2,530.80)															
Original 2016 Budget	45,000.00	211-4330-443-81-10														
2015 Costs in Excess of Revenues	(2,530.80)															
	\$ 42,469.11															

2016 Rebate Budget \$45,000

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditures				Revenues									Variances		
	Conservation Rebates 211-4330-443-81-10				Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue Expenditures		
	Original Budget	Revised Budget	Actual	Bud-Act Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	18,227.38	(1,772.62)
2012	18,000.00	18,000.00	40,806.60	22,806.60	25,000.00	59,173.11	34,173.11	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	566.71	(9,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,891.51	2,891.51	-	19,550.00	19,550.00	50,000.00	72,441.51	22,441.51	15,000.00	44,281.71	29,281.71
2014	30,000.00	45,000.00	45,532.76	15,532.76	25,000.00	43,305.82	18,305.82	-	6,175.00	6,175.00	25,000.00	49,480.82	24,480.82	(20,000.00)	3,948.06	(16,051.94)
2011-2014 Subtotal	\$ 138,000.00	\$ 158,000.00	\$ 203,889.60	\$ 65,889.60	\$ 149,000.00	\$ 208,633.70	\$ 59,633.70	\$ 34,000.00	\$ 35,825.00	\$ 1,825.00	\$ 183,000.00	\$ 244,458.70	\$ 61,458.70	\$ 25,000.00	\$ 40,569.10	\$ 15,569.10
2015 Budget	45,000.00	45,000.00	-	(45,000.00)	50,000.00	-	(50,000.00)	7,000.00	-	(7,000.00)	57,000.00	-	(57,000.00)	12,000.00	-	(12,000.00)
2014 Water Surcharge Revenues Earned	43,305.82	211-4330-351-50-00														
2014 Water Violation Revenues Earned	6,175.00	211-4330-351-51-00														
2014 Total Revenues Earned	49,480.82															
Less 2014 Rebates Issued	45,532.76	211-4330-443-81-10														
Less 2014 Seasonal Water Violation Monitors Salaries	20,627.56	211-4330-443-10-30	2015 Budget	\$ 47,000.00	211-4330-443-10-30											
2014 Costs in Excess of Revenues	\$ (16,679.50)															
Original 2015 Budget	45,000.00	211-4330-443-81-10														
2014 Costs in Excess of Revenues	(16,679.50)															
Total	\$ 28,320.50															

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditures			Revenues						Variances			
	Conservation Rebates 211-4330-443-81-10			Water Surcharge 211-4330-351-50-00		Water Violations 211-4330-351-51-00		Total Revenues			Revenue Expenditures		
	Original Budget	Revised Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Variance	Budget	Actual	Variance
2011	60,000.00	60,000.00	69,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,500.00	(23,100.00)	80,000.00	61,163.06	(18,836.94)
2012	18,000.00	18,000.00	60,806.60	42,806.60	25,000.00	59,173.31	34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	53,347.73	3,347.73	-	19,550.00	(19,550.00)	50,000.00	71,897.73	21,897.73
2011-2013 Subtotal	108,000.00	113,000.00	158,356.84	45,356.84	124,000.00	164,784.10	40,784.10	34,000.00	29,650.00	(4,350.00)	158,000.00	194,434.10	36,434.10
2014 Budget	30,000.00	30,000.00	-	(30,000.00)	25,000.00	-	(25,000.00)	-	-	-	25,000.00	-	(25,000.00)
2013 Water Surcharge Revenues Earned	52,347.73	211-4330-351-50-00											
2013 Water Violation Revenues Earned	19,550.00	211-4330-351-51-00											
2013 Total Revenues Earned	71,897.73												
Less 2013 Rebates Issued	28,159.80	211-4330-443-81-10											
Less 2013 Seasonal Water Violation Monitors Salaries	14,212.45	211-4330-443-10-30											
2013 Revenues in Excess of Costs	29,525.48												
Original 2014 Budget	30,000.00	211-4330-443-81-10											
Additional allocation of budget due to 2013 excess run rates	15,000.00	Budget Transfer/Amendment Needed											
Total Amount for 2014 Rebate Program	45,000.00												

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditures			Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Variances			
	Conservation Rebates 211-4330-443-81-10			Water Surcharge 211-4330-351-50-00			Water Violations 211-4330-351-51-00			Total Revenues			Revenue-Expenditures			
	Original Budget	Revised Budget	Actual	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	
2008																
2009	636,566.00	1,332,398.00	189,977.76	(1,142,420.24)	119,198.00	50,602.78	(68,595.22)	68,380.00	27,200.00	(41,180.00)	187,578.00	77,802.78	(109,775.22)	(1,144,830.00)	(112,174.38)	1,032,655.62
2010	7,398.00	123,622.00	110,032.10	(13,589.90)	49,000.00	49,978.81	978.81	31,000.00	12,825.00	(18,175.00)	80,000.00	62,803.81	(17,196.19)	(43,622.00)	(47,328.29)	(3,666.29)
Funding Redirection to CIP for 2010 Rates			1,000,000.00	1,000,000.00	-	-	-	-	-	-	-	-	-	(1,000,000.00)	(1,000,000.00)	-
2011	60,000.00	60,000.00	60,390.44	9,390.44	49,000.00	53,263.06	4,263.06	31,000.00	7,000.00	(24,000.00)	80,000.00	61,163.06	(18,836.94)	20,000.00	(8,227.38)	(28,227.38)
2012	18,000.00	18,000.00	60,806.60	42,806.60	25,000.00	59,173.31	34,173.31	3,000.00	2,200.00	(800.00)	28,000.00	61,373.31	33,373.31	10,000.00	566.71	(9,433.29)
2013	30,000.00	35,000.00	28,159.80	(6,840.20)	50,000.00	52,347.73	2,347.73	-	19,550.00	19,550.00	50,000.00	71,897.73	21,897.73	15,000.00	43,737.93	28,737.93
2008 - 2013 Subtotal	\$ 751,964.00	\$ 1,569,020.00	\$ 1,458,366.70	\$ (110,653.30)	\$ 292,198.00	\$ 265,365.69	\$ (26,832.31)	\$ 133,380.00	\$ 69,675.00	\$ (63,705.00)	\$ 425,578.00	\$ 335,040.69	\$ (90,537.31)	\$ (1,143,442.00)	\$ (1,123,326.01)	\$ 20,115.99
2014 Budget	30,000.00	30,000.00	-	(30,000.00)	25,000.00	-	(25,000.00)	-	-	-	25,000.00	-	(25,000.00)	(5,000.00)	-	5,000.00
2013 Water Surcharge Revenues Earned	52,347.73	211-4330-351-50-00														
2013 Water Violation Revenues Earned	19,550.00	211-4330-351-51-00														
2013 Total Revenues Earned	71,897.73															
Less 2013 Rebates Issued	28,159.80	211-4330-443-81-10														
Less 2013 Seasonal Water Violation Monitors Salaries	14,212.45	211-4330-443-10-30														
2013 Revenues in Excess of Costs	\$ 29,525.48															

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Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditure			Revenues							
	Conservation Rebates 4330-443-81-10			Water Surcharge 4330-351-50			Water Violations 4330-351-51-00			Variance	
	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance		
<= 2008 in ADG											
2009	1,332,398.00	189,977.00	1,142,421.00	119,198.00	50,602.78	(68,595.22)	68,380.00	27,200.00	(41,180.00)		
Funding Redirection to CIP for 2010 Rates	-	1,000,000.00	(1,000,000.00)	-	-	-	-	-	-		
2010	123,622.00	110,032.10	13,589.90	49,000.00	49,978.81	978.81	31,000.00	12,825.00	(18,175.00)		
2011	60,000.00	69,390.44	(9,390.44)	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)		
2009 - 2011 Subtotal	1,516,020.00	1,369,399.54	146,620.46	217,198.00	153,844.65	(63,353.35)	130,380.00	47,925.00	(82,455.00)	812.11	
2012 unaudited, as of 2/25/13	18,000.00	59,124.00	(41,124.00)	25,000.00	59,173.00	34,173.00	3,000.00	2,200.00	(800.00)	(7,751.00)	
2009 - 2012 Subtotal								Cumulative SubTotal		(6,938.89)	
2013 Budget Request, 8/24/12	30,000.00	-	30,000.00	25,000.00	-	25,000.00	-	-	-	(5,000.00)	
				understated surcharge budget?							
2009 - 2013 Subtotal								Cumulative SubTotal		(11,938.89)	
2013 Potential Budget Amendment, April 2013	35,000.00	-	35,000.00	50,000.00	-	50,000.00	-	-	-	15,000.00	
Potential 2009 - 2013 Subtotal				increase revenue for historical trend - valid?					Cumulative SubTotal		3,061.11

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditure			Revenues							
	Conservation Rebates 4330-443-81-10			Water Surcharge 4330-351-50			Water Violations 4330-351-51-00			Variance	
	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance		
<= 2008 in ADG											
2009	1,332,398.00	189,977.00	1,142,421.00	119,198.00	50,602.78	(68,595.22)	68,380.00	27,200.00	(41,180.00)		
Funding Redirection to CIP for 2010 Rates	-	1,000,000.00	(1,000,000.00)	-	-	-	-	-	-		
2010	123,622.00	110,032.10	13,589.90	49,000.00	49,978.81	978.81	31,000.00	12,825.00	(18,175.00)		
2011	60,000.00	69,390.44	(9,390.44)	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)		
2009 - 2011 Subtotal	1,516,020.00	1,369,399.54	146,620.46	217,198.00	153,844.65	(63,353.35)	130,380.00	47,925.00	(82,455.00)	812.11	
2012 unaudited, as of 1/14/13	18,000.00	59,124.00	(41,124.00)	25,000.00	57,826.00	32,826.00	3,000.00	2,200.00	(800.00)	(9,098.00)	
2009 - 2012 Subtotal								Cumulative SubTotal		(8,285.89)	
2013 Budget Request, 8/24/12	30,000.00	-	30,000.00	25,000.00	-	25,000.00	-	-	-	(5,000.00)	
				understated surcharge budget?							
2009 - 2013 Subtotal								Cumulative SubTotal		(13,285.89)	
2013 Potential Budget Amendment, April 2013	35,000.00	-	35,000.00	50,000.00	-	50,000.00	-	-	-	15,000.00	
Potential 2009 - 2013 Subtotal				increase revenue for historical trend - valid?					Cumulative SubTotal		1,714.11

Conservation Rebates vs. Violation & Surcharge Revenues

	Expenditure			Revenues						Variance
	Conservation Rebates			Water Surcharge			Water Violations			Expenditure vs. Revenues
	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	
<= 2008 in ADG										
2009	1,332,398.00	189,977.00	1,142,421.00	119,198.00	50,602.78	(68,595.22)	68,380.00	27,200.00	(41,180.00)	
Funding Redirection to CIP for 2010 Rates			(1,000,000.00)	-	-	-	-	-	-	
2010	123,622.00	110,032.10	13,589.90	49,000.00	49,978.81	978.81	31,000.00	12,825.00	(18,175.00)	
2011	60,000.00	69,390.44	(9,390.44)	49,000.00	53,263.06	4,263.06	31,000.00	7,900.00	(23,100.00)	
2009 - 2011 Subtotal	1,516,020.00	369,399.54	146,620.46	217,198.00	153,844.65	(63,353.35)	130,380.00	47,925.00	(82,455.00)	812.11
2012, as of 10/30/12	18,000.00	59,124.00	(41,124.00)	25,000.00	58,220.00	33,220.00	3,000.00	2,200.00	(800.00)	(8,704.00)
2013 Budget Request, 8/24/12	30,000.00	-	30,000.00	25,000.00		25,000.00	-		-	(5,000.00)
					understated budget?					
									Cumulative Variance	(12,891.89)

Attachment C

Rebate and Customer Assistance Program Funding Summary								
Category	2019		2020		2021		Average %	2022 (pro \$ per Category)
	Total \$	% of Total	Total \$	% of Total	Total \$	% of Total	of Prior Years	
Residential ColoradoScape Renovation Rebate	\$22,221	22%	\$34,027	35%	\$42,193	46%	34%	\$50,000
Non-Residential ColoradoScape Renovation Rebate	\$61,554	60%	\$42,290	43%	\$35,895	39%	47%	\$60,000
Rotary Nozzle Retrofit Rebate	\$3,029	3%	\$1,815	2%	\$1,653	2%	2%	\$2,000
Smart Irrigation Controller Rebate	\$16,238	16%	\$9,093	9%	\$8,364	9%	11%	\$20,000
Toilet Retrofit Rebate	N/A	N/A	\$8,797	9%	\$2,700	3%	6%	\$10,000
Whole Home Water Monitoring System Rebate	N/A	N/A	\$1,350	1%	\$1,697	2%	2%	\$3,000
Total	\$103,042	100%	\$97,372	100%	\$92,502	100%	N/A	\$145,000

Proposed)
% of Total
34%
41%
1%
14%
7%
2%
100%

Attachment C

Rebate and Customer Assistance Program Funding Summary								
Category	2018		2019		2020		Average % of Prior Years	2021 (pre) \$ per Category
	Total \$	% of Total	Total \$	% of Total	Total \$	% of Total		
SmartScape Renovation Rebate	\$29,344	35%	\$22,221	22%	\$34,027	35%	30%	\$43,000
Rotary Nozzle Retrofit Rebate	\$6,946	8%	\$3,029	3%	\$1,815	2%	4%	\$2,000
Smart Irrigation Controller Rebate	\$15,411	18%	\$16,238	16%	\$9,093	9%	14%	\$20,000
Toilet Retrofit Rebate	N/A	N/A	N/A	N/A	\$8,797	9%	N/A	\$10,000
Whole Home Water Monitoring System Rebate	N/A	N/A	N/A	N/A	\$1,350	1%	N/A	\$3,000
Non-Residential SmartScape Renovation Rebate	\$30,566	36%	\$61,554	60%	\$42,290	43%	46%	\$67,000
Irrigation Assessments	\$2,339	3%	N/A		N/A		N/A	N/A
Total	\$84,606	100%	\$103,042	100%	\$97,372	100%	N/A	\$145,000

Proposed)
% of Total
30%
1%
14%
7%
2%
46%
100%

Attachment E

Rebate and Customer Assistance Program Funding Summary									
Category	2018		2019		2020		Average %	2020 (proposed)	
	Total \$	% of Total	Total \$	% of Total	Total \$	% of Total	of Prior Years	\$ per Category	% of Total
SmartScape Renovation Rebate	\$29,344	35%	\$22,221	22%		#DIV/0!	#DIV/0!	\$25,000	17%
Rotary Nozzle Retrofit Rebate	\$6,946	8%	\$3,029	3%		#DIV/0!	#DIV/0!	\$4,000	3%
Rain Sensor Rebate, Residential	\$0	0%	\$0	0%		#DIV/0!	#DIV/0!	\$0	0%
Smart Irrigation Controller Rebate	\$15,411	18%	\$16,238	16%		#DIV/0!	#DIV/0!	\$16,000	11%
Irrigation Assessments	\$2,339	3%	\$0	0%		#DIV/0!	#DIV/0!	\$0	0%
Toilet Retrofit Rebate	N/A	N/A	N/A	N/A		N/A	N/A	\$10,000	7%
Whole Home Water Monitoring System Rebate	N/A	N/A	N/A	N/A		N/A	N/A	\$5,000	3%
Non-Residential SmartScape Renovation Rebate	\$30,566	36%	\$61,554	60%		#DIV/0!	N/A	\$90,000	60%
Total	\$84,606	100%	\$103,042	100%	\$0	#DIV/0!	N/A	\$150,000	100%



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 4. **File #:** TMP 2022-014

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Rick Schultz, Water Efficiency Supervisor
Linda Gould, Water Conservation Technician

Resolution Approving Updates to the Water Use Management Plan (WUMP) [All areas serviced by the Castle Rock Water Department]

Town Council Agenda Date: Feb 15, 2022

Executive Summary

The purpose of this memorandum is to request Town Council approval of a Resolution (**Attachment A**) adopting the 2022 Water Use Management Plan (WUMP). The WUMP is a demand management tool that identifies regulations, watering schedules to stagger demand, surcharges, and enforcement. The WUMP is referenced in Municipal Code 13.15.040 and 13.15.050. Minor revisions and administrative updates are proposed to the 2022 WUMP (**Exhibit 1**), and those are summarized in **Attachment B**.

Notification and Outreach Efforts

As defined in Chapter 13.15 of the Town's Municipal Code, all customers will receive the 2022 watering schedule via United States Mail within thirty (30) days prior to the commencement of the schedule implementation period (May through September). Additionally, this information will be available on the Town's websites (CRgov.com and CRconserve.com) and promoted through Community Relations' outreach avenues, such as Facebook, Twitter, Town Talk, and press releases.

Discussion

The WUMP focuses on two areas critical to water use management including public education on how demand management works and impacts each customer and implementation of the actual demand management tools including watering schedules, enforcement, and other tools. The public education component has multiple opportunities for water conservation guidance. While Castle Rock Water employs a wide range of tools for public education on efficient water use and conservation, the primary tool for educating customers on demand management is the Water Wiser workshop. Successful completion of the workshop exempts a customer from the watering schedule (i.e. meaning they can water on any day necessary), but it does not exempt them from the restrictions on time of day. Public education through the Water Wiser workshop has been very successful. In 2021

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alone, 549 customers attended the workshop and currently 3,497 customers are Water Wiser participants. Since 2018, customers are required to renew their participation every five years to stay current with the advancing conservation techniques and equipment. Castle Rock Water offers in person workshops in normal years, but created virtual workshops for 2020 and 2021. Renewals can also be completed by taking an online course. The ultimate goal is to get as many customers as possible to become Water Wiser's. The chart below shows the growth in Water Wiser participants over the last five years.

<u>Water Wiser Participants</u>	
2017	3,020
2018	3,993
2019	3,187
2020	3,316
2021	3,497

The Town of Castle Rock has used mandatory water demand management for landscape irrigation since 1985. Peak season demands for residential customers are staggered on an every-third-day format. This is the traditional circle, diamond, square watering schedule familiar to our customers. Consistent to what was originally adopted in 2019, the schedule period will remain May through September. Other than hand watering, no watering during the daytime hours of 8 a.m. - 8 p.m. is allowed. This format helps ensure our customers use irrigation water when it is most efficient and effective, ultimately saving customer's money. In addition, it allows positive pressures to be maintained throughout the water distribution system while maintaining appropriate fire flows. It also allocates time for the finished water storage tanks to recover volume.

For non-residential customers, the watering schedule is three days per week allowing customers to water east of I-25 on Tuesday, Thursday, Saturday and customers west of I-25 on Monday, Wednesday, Friday. Non-residential watering hours begin at 12 a.m. and must be completed by 8 a.m. on the designated day.

In order to accommodate resident's use, Town owned and managed parks water beginning on their designated day at 9 p.m. and finish no later than 5 a.m. the following morning.

In addition to the watering schedules, the WUMP covers alternative schedules for customers with hardships that make complying with the standard schedules impossible and temporary irrigation exemptions from the standard schedules for things like establishing new plant material. Other items covered in the WUMP include special circumstances impacting compliance, rules for other types of water use besides irrigation, definitions of water waste, and monitoring and enforcement.

Monitoring and enforcement is a key item in the WUMP. This section covers surcharges for violations, a key item of importance to customers. No changes are proposed to the surcharges for violations. The surcharges for 2022 are shown in the table below.

<u>Residential</u>	<u>Non-residential</u>
--------------------	------------------------

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1 st - Warning, no surcharge	1 st - Warning, no surcharge
2 nd - \$25 surcharge	2 nd - \$100 surcharge*
3 rd - \$50 surcharge	3 rd - \$200 surcharge*
4 th - \$100 surcharge	4 th - \$400 surcharge*
5 th - \$200 surcharge	5 th - \$800 surcharge*
Subsequent - \$200 surcharge*	Subsequent - \$800 surcharge*
*Subject to service discontinuance	*Subject to service discontinuance

The Watering Violations Summary from 2021 is included as **Attachment C**. The philosophy and focus of the program is to educate customers and avoid issuing surcharges for violations. While the water monitors have always issued violations, their direction is to contact the customer, explain the problem, and provide a solution whenever reasonable and possible.

Seasonal water conservation staff are hired every year to help monitor and enforce the WUMP. In 2021, field water monitors were utilized as well as an administrative employee. Staff anticipates increasing the level of seasonal staffing in 2022 to accommodate the additional service area.

The full WUMP is included as **Exhibit 1** to **Attachment A** and can also be found at CRgov.com/waterplans.

Budget Impact

The budget for 2022 seasonal water conservation staff is \$48,770 and is covered under account number 211-4330-443.10-30. The seasonal water conservation salaries are expected to exceed the budget amount by XXXX. Any overage will be covered within the other conservation division funds. Adequate additional appropriated budget is available. The 2023 budget will be adjusted to prevent future overages. The 2021 seasonal water conservation expenses were \$45,037.13.

Staff Recommendation

Staff recommends approval of the 2022 WUMP as presented.

Proposed Motion

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

Attachments

- Attachment A: Resolution (Not Attached)
- Exhibit 1: 2022 Water Use Management Plan (WUMP) DRAFT
- Attachment B: Summary of proposed changes
- Attachment C: Watering violations summary

Item #: 4. File #: TMP 2022-014

WATER USE MANAGEMENT PLAN

Date, 2022



Castle Rock Water
175 Kellogg Court
Castle Rock, CO 80109
720-733-6000
CRgov.com



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Section 1. Introduction

- 1.1 Policy Statement
- 1.2 Executive Summary
- 1.3 Definitions

1.1 Policy Statement

The Town of Castle Rock, through the implementation of the Water Use Management Plan (WUMP), is committed to the wise development and efficient use of water resources. The water use management program is designed as a demand management tool to control peak demand. This program operates in concert with the Town of Castle Rock Landscape and Irrigation Criteria Manual, the Water Efficiency Master Plan, and the Drought Management Plan, to encourage the wise use of a finite resource.

1.2 Executive Summary

The Town of Castle Rock has used mandatory water demand management for landscape irrigation since 1985. Peak season demands are managed through an alternating irrigation schedule.

Program administration and implementation has traditionally been accomplished through Castle Rock Water. The Town's restrictions, Chapter 13.15 of the Castle Rock Municipal Code, are included as **Exhibit 1**.

The water use management program implementation policy assists staff with implementation of the WUMP that deals with management of peak season related water use issues. The WUMP is reviewed and approved annually by Town Council.

The policy addresses:

- Identification of regular days and hours for landscape irrigation during designated peak demand months, i.e. irrigation schedule development.
- The need for alternative schedules due to various hardships and/or irrigation system limitations, and applicable criteria.
- Special watering circumstances, including hand watering.
- Enforcement of water use management strategies by issuance of warnings, surcharges, and ultimately the potential for discontinuance of water service.
- Appeals and variance issues.
- Further demand management tools.

1.3 Definitions

Alternative irrigation schedule: Schedules not meeting the regular criteria and have been approved by the program administrator.

ColoradoScape: A natural landscape, using low to very low water (less than 10-inches of water per growing season), plant material which blends in with the native Castle Rock landscapes. Plant material must be maintained in its natural, native form, utilizing a combination of hardscape and landscape materials, which provide a variety of colors, textures, sizes, shapes, and seasonal interest.

Common area: An area available for public use. May be publicly or privately owned, managed, or maintained.

Drought response: The stages of drought and the associated response as outlined in the Drought Management Plan.

Hand watering: Application of water to plant material while holding a hose in hand.

Irrigable area: The area of a property where a permanent irrigation system is installed and has the potential to be irrigated.

Irrigated area: The actual area of a property receiving regular/consistent supplemental irrigation.

Irrigation season: April 1 through October 31.

Landscape maintenance contractor: Designated by owner or responsible party to operate, manage, and maintain the landscape and irrigation of a defined property.

Monitor: A Town employee observing irrigation activities as defined and outlined in the WUMP.

Owner: Party identified by Castle Rock Water billing records.

Program administrator: As defined by municipal code, is the Town Manager or designee thereof, and for purposes of the WUMP, designated to Director of Castle Rock Water or designee thereof.

Public area: Town-owned, maintained, and managed properties and facilities.

Residential: Any dwelling unit that is individually metered.

Responsible party: Person or group identified in the Castle Rock Water billing or by owner as such, including owner, property manager, or homeowners' association representative.

Restriction period: Time period when designated watering days and hours are enforced. See current year calendar for specific details.

Special schedule: Approved alternative schedule designated for the current irrigation season.

Water budget: The water budget is the amount of water available to each account, each billing cycle. The average winter monthly consumption (AWMC) shall mean the AWMC calculated for each customer by averaging the total potable water consumption used by the customer in the months of November through February in accordance with standard operating procedures maintained by Castle Rock Water. The outdoor water budget is determined by the irrigated area, landscape type, and historical local evapotranspiration rate, April through October.

Water waste: Application of water that does not result in beneficial use. This includes:

- Continuous irrigation to any area resulting in ponding or pooling of water;
- Runoff of water not absorbed into the ground, which flows away from the area being irrigated;
- Any irrigation system that is leaking;
- Application of water intended for irrigation to any impervious surface;
- Letting water run unrestricted from a hose or faucet;
- Application of water to impervious surfaces such as street washing applications;
- Operation of any irrigation system when curtailment stages have been invoked



Section 2. Public Education

2.1 Education

Public education is a primary component of the WUMP. Outdoor water use during the April through October landscape irrigation season accounts for the largest demand on the system. Educating customers on industry best management practices, the need for adherence to the irrigation schedule, and the overall water use management program are the keys to success.

One of the primary educational opportunities for residential customers is the Water Wiser workshop. This program focuses on landscape preparation, efficient irrigation, water management, and indoor efficiency. The goal of the Water Wiser program is to provide the tools necessary to maintain a healthy landscape, while using less water. After completion of this workshop, residents are exempt from the every-third-day watering schedule. This exemption provides residents with the opportunity to take advantage of the weather and water only when necessary, not just because it's their scheduled watering day. Water consumption may be tracked through utility bills and program participants are expected to adhere to the program. The Town, at its discretion, reserves the right to return Water Wiser participants to the every-third-day watering schedule, at which time participants will be subject to enforcement as provided in the Town Municipal Code and Water Use Management Plan.

The Water Wiser designation will remain active for five (5) years and can be renewed by completion of another Water Wiser workshop or online renewal course with a passing score on the related test. The follow up workshop or renewal course must be completed prior to the expiration date.

The WUMP is designed for management of peak demand by designating days and hours for residential and non-residential customers to water. This reduces the necessary amount of water system infrastructure, water resource acquisition, treatment, storage, and distribution. Adherence to the designated schedule ensures peak demand is spread evenly throughout the irrigation season and allows for water storage tank recovery during non-irrigation periods. The designated watering hours also ensure customers irrigate at the times when watering is most effective and efficient.

Part of enforcement is to educate customers on these issues, and offer assistance with irrigation system problems and water use management when possible. This assistance is offered through newsletters, individual letters, and one-on-one communications. The Town of Castle Rock maintains two web sites (CRgov.com and CRconserve.com) where additional information about WUMP policies and water efficiency efforts can be found. Seasonal water monitors receive in-depth training on water efficiency and conservation.

Annual public education strategies are developed in relation to the Water Use Management Plan and water conservation programs. This includes providing water conservation information for residents, residential builders, property managers, and the non-residential community.



Section 3. Program Implementation

- 3.1 Annual Implementation Review
- 3.2 Regular Irrigation Schedules
- 3.3 Alternative Irrigation Schedules
- 3.4 Special Circumstances
- 3.5 Enforcement
- 3.6 Demand Management Tools

3.1 Annual Implementation Review

The WUMP is reviewed on an annual basis, and submitted to the Castle Rock Water Commission for review. Program and policy changes are forwarded to Town Council for adoption. Town Council may alter this program and its implementation as necessary.

3.2 Regular Irrigation Schedules

3.2.1 Residential Irrigation

1. *Day/Address Assignment:* Watering shall be limited to every-third-day in accordance with the following procedure:
 - a. Properties with addresses ending in zero (0) through three (3) are designated by a square.
 - b. Properties with addresses ending in four (4) through six (6) are designated by a circle.
 - c. Properties with addresses ending in seven (7) through nine (9) are designated by a diamond.
2. *Permissible Hours of Irrigation:* Permissible hours of irrigation are before 8 a.m. or after 8 p.m. on the designated day. These hours are for customers benefit as they ensure water is most efficiently applied to the landscape, minimizing evaporation and other losses. Under no circumstances, beyond hand watering, will irrigation be allowed between the hours of 8 a.m. to 8 p.m.
3. *Schedule Dissemination Criteria:* Schedules shall be distributed to water customers no later than thirty (30) days prior to the commencement of watering restrictions. See **Exhibit 2a**.
 - a. The watering schedule shall be distributed through the U.S. Postal Service to all Town of Castle Rock residents. See **Exhibit 2b**.
 - b. The Town Clerk shall receive a copy of the watering schedule.
 - c. The watering schedule shall be posted at Town Hall and Castle Rock Water offices.
 - d. The watering schedule and the general outline of the policy shall be published on CRconserve.com and in the official notice section of CRgov.com/notices.
 - e. Watering schedules shall be made available to all building permit applicants where the permit includes installation of an irrigation system, or when the building permit is for the sole purpose of installation of an irrigation system.
4. *New Customers:* All parties that become new customers will receive the watering schedule and educational materials through a new homeowner welcome packet.
5. *Residential Homebuilders:* Homebuilder landscape contractors that install and/or maintain residential landscaping shall be registered with Castle Rock Water to ensure those managing the properties are thoroughly versed on the Water Use Management Plan and the Landscape and Irrigation Criteria Manual. See Section 2 in the Landscape and Irrigation Criteria Manual for

information regarding registration of landscape professionals.

3.2.2 Non-Residential/Common Area/Public Area Irrigation

Non-residential, common, and public irrigated areas shall be considered as any property managed or owned by the same group or individual and which is not a single family residential property. This includes apartments, condominiums, townhomes, and multi-family developments under the control of the builder, commercial customers, religious institutions, streetscapes, common areas, or private areas. The “property” shall be considered one entity for the purpose of water restriction administration and enforcement regardless of the number of metered services serving the property. See **Exhibit 3**.

1. *Day / Geographic Location Assignment:* Watering days for the entire property will be three days per week as assigned by geographic location. For properties west of I-25, designated watering days are Monday, Wednesday, and Friday. For properties east of I-25, designated watering days are Tuesday, Thursday, and Saturday. Watering shall begin on the designated day and must be completed within the specified window (*See 2. below*).
2. *Permissible Hours of Irrigation:* Permissible hours of irrigation for non-residential, common, and public areas shall begin no earlier than 12 a.m. and be completed no later than 8 a.m. on the assigned day.
3. *Application Rates:* Total water application, during peak summer temperatures, shall not exceed one and one-half (1 ½) inches per week, per irrigation zone. Irrigation application during cooler spring and fall months shall be seasonally adjusted to lower levels.
4. *Leaking Irrigation Systems:* As deemed necessary, the Town has the ability to charge property owners for nighttime emergency call-outs that are attributable to malfunctioning, leaking irrigation systems. Three (3) or more call-outs of this type shall be considered excessive and the owner will be subject to incur the associated charges.
5. *Registered Landscape Professionals:* Landscape and irrigation installation and maintenance contractors working for non-residential customers shall be registered with Castle Rock Water to ensure those managing the properties are thoroughly versed on the Water Use Management Plan and the Landscape and Irrigation Criteria Manual. See Section 2 of the Landscape and Irrigation Criteria Manual for information regarding registration of landscape maintenance professionals.

3.2.3 Parks/Athletic Fields

The Town of Castle Rock Parks and Recreation Department utilizes an ET based computerized central control system. This system is monitored daily, and automatically adjusts based on changes in weather and soil moisture. The Parks Department will adhere to the established schedule as closely as possible, however, park size, level of activity, special events, and athletic programming will ultimately determine water needs.

3.3 Alternative Irrigation Schedules

Alternative irrigation schedules may be granted for hardship and/or special circumstances. Please contact Castle Rock Water to determine eligibility.

3.3.1 Exemptions

Irrigation exemptions may be issued to help establish new plant material or other exemptions as noted below. However, irrigation exemptions for establishing new plant material will not be issued or applicable between July 1 and July 31. This is typically the hottest month of the year and new plant material requiring an exemption should not be installed during this month. An administrative fee up to \$25 will be charged for processing of exemption applications.

Should the Program Administrator of the WUMP determine that granting an exemption would not significantly impact the water system, the Program Administrator may issue an exemption, stating appropriate conditions thereon. These conditions include the effective date, expiration date, designated address, required hours of irrigation, and any other special criteria associated with the exemption. The exemption allows for watering as needed, on any individual day; however, designated hours and water rates still apply. These exemptions may be revoked at any time should it be deemed necessary by Castle Rock Water. See *Exhibits 4a (residential request), 4b (non-residential request), and 5 (exemption placard)*.

Exemptions may be granted for:

1. *Establishment of New Plant Material:* An exemption to the established watering schedule may be granted to establish new plant material not to exceed twenty-one (21) days for new sod and not to exceed thirty (30) days for seed or other plant material, provided an exemption is obtained through Castle Rock Water. Conditions for this exemption include:
 - a. Verification through site inspection by the Program Administrator or designee, through certification by accredited landscape architect or the builder, through documentation by receipt or invoice, or through other means deemed acceptable by the Program Administrator that prior to seeding or sodding of turf, organic soil amendment at a **minimum** of four (4) cubic yards per one thousand (1,000) square feet or deemed by soil analysis, and has been tilled to a minimum depth of six (6) inches.
 - b. Evidence that an irrigation system backflow prevention assembly has been installed, tested, and approved.
2. *Disease Mitigation:* Exemptions may be granted to assist with mitigation of diseased plant material. Exemptions of this type are reviewed on a case-by-case basis. Potential exemptions are related directly to the disease or issue to be mitigated. Irrigation, however, must occur within the regularly scheduled hours.
3. *Fertilization:* Exemptions may be granted to allow watering as needed on any individual day for application of fertilizer. Exemptions of this type are reviewed on a case-by-case basis. Potential exemptions are related directly to the type of fertilization process, and current weather conditions. Duration of additional irrigation shall be determined by staff and shall not exceed the manufacturer's recommendation for application. Irrigation must occur within the regularly scheduled irrigation

hours.

4. *Hydro-seeding*: Installations in non-residential landscapes must be performed by a Castle Rock Water registered landscape contractor. Exemptions may be granted to allow watering as needed on any individual day for establishment of hydro-seeded areas. Staff may determine that irrigation may be allowed during identified water system recovery periods.
5. *Other*: Other exemptions may be granted should the Program Administrator determine a hardship or special circumstance exists for an applicant, due to irrigation requirements that cannot be met under previously outlined criteria, including but not limited to:
 - a. Residential customers that do not have programmable irrigation systems, have a family emergency, or similar demonstrated hardship may receive an exemption to alter their assigned watering day on a time-limited basis as approved by the Program Administrator.
 - ~~b. Non-residential properties will water on their designated day during the hours of 12 a.m. – 8 a.m.~~
 - ~~c. Town owned and managed parks will water beginning on their designated day at 9 p.m. and finishing no later than 5 a.m. the following morning.~~

Exemptions allowing watering as needed, on any individual day are applicable only to the areas designated on the exemption application. Non-applicable areas are not included under the exemption and may not be exempted from designated irrigation requirements.

3.4 Special Circumstances

3.4.1 Low Pressure Areas

Certain existing areas of Town have blocks of homes with addresses ending in the same digit. With the water system infrastructure being designed with the every-third day schedule, several residential addresses within a limited area, watering at the same time can create low-pressure situations. Assigning alternate symbols to the impacted homes mitigates this situation. Special schedules are given to these homeowners each year. for these impacted areas, as well as the letter (See *Exhibit 6a*) and special schedule (See *Exhibit 6b*) that is distributed to these homeowners in Founders Village.

3.4.2 Hand Watering

Watering plant material while holding a hose in hand is allowed at any time, on any day, as long as water waste is not occurring. Hand watering does not include irrigation with a hose and sprinkler, or manual operation of an automated irrigation system.

3.4.3 Water for Entertainment

Water used for entertainment purposes, e.g. children running through sprinklers, is allowed so long as persons are present and water waste does not occur.

3.4.4 Pressure Washing

Pressure washing may be allowed according to the following criteria:

1. High efficiency and low water use equipment is required.
2. Water waste shall not occur.
3. No excessive runoff shall leave site where water is being applied.
4. Equipment and application shall meet all Castle Rock Water Cross-Connection Control Program criteria.

3.4.5 Street Washing

1. *Streets in General:* Application of water to streets for the purpose of street washing shall occur by use of water efficient street sweeping equipment only. Use of fire hydrants is not allowed. Use of water trucks for the purpose of street sweeping is not allowed.
2. *Streets for Drive-Through Restaurants:* Application of water to impervious surfaces related to drive-through restaurant food service areas may be allowed under the following circumstances:
 - a. Water waste shall not occur.
 - b. No excessive runoff shall leave site where water is being applied. High efficiency and low water use equipment is required.
3. *Sidewalks/Driveways:* Application of water to sidewalks and driveways for the purpose of cleaning is discouraged, and may be considered water waste. Whenever possible, areas should be swept to eliminate site debris. Such water use may be allowed under the following circumstances:
 - a. Water waste shall not occur.
 - b. No excessive runoff shall leave the site where water is being applied.
 - c. Automatic shut off spray nozzles on hoses; such as pistol grip sprayers shall be used.
 - d. Cleaning of the surface cannot reasonably be accomplished without the use of water.
 - e. Sidewalk poses a safety hazard that cannot be resolved without water.

3.4.6 Car Washing

1. Commercial car wash installations shall meet the following criteria:
 - a. Newly constructed facilities, whether full-service, in bay, or self-serve shall use water recycling

systems or weep recovery systems.

- b. Demand management tools, consistent with curtailment identified in Section 3.6, shall apply to all commercial car wash systems.
 - c. Existing car washing systems that are being expanded, repaired, or rehabilitated shall conform to recycling requirements.
2. Homeowner car washing:
- a. There are no limitations for hours or days a homeowner may wash vehicles.
 - b. Water waste shall not occur.
 - c. Require use of automatic shut off spray nozzles on hoses, such as pistol grip sprayers.
 - d. Recommend parking on turf areas during car washing so all runoff is beneficially used by plant material.
 - e. Recommend use of bucket and cloth/sponge to apply soaps, clean major portions of vehicle, and use hose for final rinse only.

3.4.7 Fountains

Decorative fountains shall be recirculating and designed to reduce water losses through evaporation. Use of fountains is subject to additional demand management tools identified in Section 3.6.

3.4.8 Irrigation System Maintenance and Repair

Operation of any irrigation system outside of its established watering schedule may be allowed for repairs or routine maintenance without incurring a violation under the following circumstances:

1. *Residential:* The owner or operator of the system must be present at all times when the system is in operation for routine maintenance or repair purposes outside of the established watering schedule.
 - a. It is the responsibility of the account holder to ensure all irrigation system components are properly maintained and fully operational. This includes but is not limited to replacement of batteries in controllers and rain sensors.
2. *Non-residential:* The owner/responsible party/landscape contractor may post an “Irrigation System Check in Progress” sign in the immediate vicinity of the water use. Operation of the system shall be for routine maintenance (i.e. checking zones for broken heads, timer operation, etc.) and shall be limited to the briefest time to observe and detect malfunctions. An operator must be present and visible at all times when the system is in operation for routine maintenance or repair purposes outside of the established watering schedule.
 - a. It is the responsibility of the account holder to ensure all irrigation system components are properly maintained and fully operational. This includes but is not limited to flow sensors, master

valves, and replacement of batteries in controllers and rain sensors.

3.4.9 Water Waste

Water waste violations can be issued at any time and are independent of the watering restriction calendar. The following examples serve as illustrations of situations that shall be cited as violations of water waste. Similar situations as observed by Town of Castle Rock staff will also be cited at their discretion:

1. Continuous irrigation resulting in ponding, pooling, or runoff.
2. Failure to repair any irrigation system that is leaking.
3. Application of water intended for irrigation to an impervious surface, such as a street, sidewalk, or driveway.
4. Using potable water to wash outdoor impermeable surfaces.
5. Letting water run unrestricted from a hose or faucet.
6. Operation of any irrigation system when demand management tools of Section 3.6 of this policy have been invoked.
7. Irrigation during a storm event.
8. For water waste violations due to leaking or damaged irrigation components, the customer will be allowed a defined amount of time to repair the condition without incurring subsequent violations:
 - a. Residential customers shall complete necessary repairs within five (5) days of violation, or before the system is used again.
 - b. Non-residential areas shall complete necessary repairs within twenty-four (24) hours of notification or at a minimum before the system is used again.
 - c. Notwithstanding the enforcement provisions set forth in Town Code, extreme water waste may result in discontinuance of service. Associated service charges for disconnection and reconnection shall be applied to the account.

3.5 Enforcement

Enforcement of the watering schedule is for demand management, eliminating water waste, and promoting water conservation. This code enforcement is conducted to protect the interests of the public, and protect public health and safety. As the focus of the program is encouragement of compliance, first violations are issued as warnings with no surcharges applied, and subsequent violations are on a graduating scale. ~~Town of Castle Rock staff are authorized to issue violations, but also receive training in educating water customers about the purpose of the program with the intent to encourage compliance.~~

3.5.1 Seasonal Water Monitors

Water monitors are employed as part-time temporary positions during the water restriction period, and are hired through standard Town of Castle Rock employment procedures.

Wages are budgeted through the Water Resources Enterprise Fund. Funds must be allocated at the identified wage for adequate coverage of the water system. Coverage may be required to include 24-hours, seven days per week, and is dependent on water system conditions.

Water monitors drive throughout the Town and monitor water use, including irrigation and water waste. Water monitors receive training, as defined in **Exhibit 7**, during their first week of employment: 1) in customer service, public education; 2) operation/care of Town equipment; 3) irrigation system operation training; 4) information logging and violation processing; and 5) safety training.

Water monitors note date, time, and type of watering violation. Monitors note if personal contact was made with the customer and what level of public education took place, including distribution of schedule, and water conservation materials. Personal contact in issuance of violations is encouraged if the monitor feels safe in approaching the customer during daylight hours only.

3.5.2 Evidence of Violation

Violations of the regular and approved alternative watering schedules are violations of municipal code and are subject to surcharges and potential discontinuance of service for non-compliance. Violation issuance hierarchy is confined to the current irrigation year, January through December, and will not be carried over from one year to the next. New customers are not subject to pre-existing violations for that specific address.

The party issuing the affidavit must witness the violation. For example, the monitor must see the out of compliance irrigation or water waste.

Although not required by municipal code, monitors may take photographs and/or video of the violation, documenting date and time. Should the violation be appealed, this data may serve as additional evidence the violation actually occurred, and may be supplied to the customer upon request.

3.5.3 Warning/Surcharge Issuance Process

Violations requiring surcharge issuance are uploaded daily to Castle Rock Water Billing Division and will be applied to the appropriate water billing account.

Violations are noted as legal documents (see **Exhibit 8**). These forms are then processed on a daily basis, during regular business hours on standard forms that will be sent by U.S. Mail to the owner or responsible party.

Town staff makes every attempt to notify responsible parties of non-compliance so the situation may be corrected as soon as possible. It is, however, not the Town's responsibility to notify any individuals not listed on the water billing account information. At no time is bias applied in enforcement actions.

Private parties may contact Town staff to notify them a violation is occurring. As determined by staff

availability, this may be immediately investigated and documented accordingly.

Due to the size, public exposure, and potential negative impact to the water system, common and/or public areas, responsible parties, i.e. landscape contractors, may be notified by telephone or email of the violation so it may be immediately addressed. This is accomplished during regular business hours. Should the violation be blatant and considered waste, a violation will be issued and the service may be discontinued until the responsible party or contractor addresses and/or repairs the cause of the violation, i.e. leaking heads or zones going off at a non-approved time. If/when Castle Rock Water is required to disconnect or reconnect irrigation services, a fee will be assessed. See CRgov.com for current fee schedule.

The warning/surcharge issuance process is as follows:

All violations are processed and mailed to the aforementioned parties within twenty-four (24) hours (during regular business hours) of the violation. Failure to do so however, does not impact the validity of the enforcement action. Surcharges shall be applied to customer accounts within one (1) week of the date of the violation.

1st Violation – Warning, no surcharge incurred

The enforcement form is processed with the appropriate violation and mailed via U.S. Mail, to the account holder. See *Exhibit 8* for the sample postcard mailed in case of warning issuance.

2nd Violation – Surcharge

The enforcement form is processed with the appropriate violation and mailed via U.S. Mail, to the account holder. Second violations will not be issued during the five (5) day period following the first violation, allowing the customer time to rectify the situation once they are notified of the problem.

3rd Violation – Surcharge

The enforcement form is processed with the appropriate violation and mailed via U.S. Mail, to the account holder. Third violations will not be issued during the five (5) day period following the second violation to allow the water customer time to rectify the situation upon notifications of the most recent violation.

4th Violation – Surcharge

The enforcement form is processed with the appropriate violation and mailed, via U.S. Mail to the account holder. The Program Administrator will attempt to notify the water customer.

5th Violation – Surcharge

The enforcement form is processed with the appropriate violation and mailed, via U.S. Mail with notice that irrigation service may be discontinued should non-compliance persist, and a copy is sent to the account holder.

Subsequent Violations

The enforcement form is processed with the appropriate violation and mailed, via U.S. Mail, with notice that irrigation service may be discontinued without immediate compliance, and a copy is sent to the account holder. *Exhibit 9* is a copy of the subsequent violation enforcement postcard.

3.5.4 Surcharge Values

Per Chapter 13.15.050 of Municipal Code, surcharges may be issued against owners or responsible parties

for watering schedule non-compliance or water waste. The Town reserves the ability to immediately terminate irrigation or other water waste for due cause, and not to be reinstated until the system or use comes into compliance. Current policy guidelines outline the following charges to be applied to the appropriate Castle Rock Water billing account.

<u>Residential</u>	<u>Non-residential</u>
1 st - Warning, no surcharge	1 st - Warning, no surcharge
2 nd - \$25 surcharge	2 nd - \$100 surcharge*
3 rd - \$50 surcharge	3 rd - \$200 surcharge*
4 th - \$100 surcharge	4 th - \$400 surcharge*
5 th - \$200 surcharge	5 th - \$800 surcharge*
Subsequent - \$200 surcharge*	Subsequent - \$800 surcharge**
*Subject to service discontinuance	*Subject to temporary service disruption ** Subject to service discontinuance

For common areas where water charges are paid for by the Town of Castle Rock, yet landscape management is accomplished by a private entity such as a district or homeowner’s association, the private party that is managing the project is responsible for adhering to the criteria outlined in this policy and all charges incurred for non-compliance.

Public irrigated areas and facilities managed by the Town of Castle Rock are not exempt from surcharge issuance and are subject to all levels of enforcement.

3.5.5 Appeal Process

The appeal process does not apply to warning issuance. Appeals of violations with associated surcharges may be brought before the Program Administrator in written form. If a party believes that a surcharge has been assessed erroneously, the party may submit a letter of appeal. This appeal must be submitted, in writing, within ten (10) days of the mailing date of the violation notification to the Water Use Management Program Administrator at 175 Kellogg Ct., Castle Rock, CO 80109.

1. The appeal letter should include a thorough explanation of why the customer believes the surcharge is in error and any other reasons why the surcharge should be waived, and must include the following information:
 - a. Specific violation in question including violation number, date, and time.
 - b. Reason for the infraction proving it to be outside of the control of the owner, or responsible party.
 - c. Or why the party thinks the violation did not take place as identified on the violation notification.
 - d. Requested action by the Town.

- e. Signature of owner or responsible party.
2. Timing of Appeal Request: Appeals must be received within ten (10) days of the mailing date of the violation notification. Any appeal received after that date will not be considered, and the associated surcharge will not be removed from the account.
3. Timing of Response to Applicant: The Town shall respond to the customer within ten (10) business days of receipt of an appeal request.
4. Crediting Criteria: Associated surcharges must be paid by the customer by the billing due date of their water bill. If the customer's appeal is approved, the related surcharge will be credited to their water billing account within the subsequent billing cycle.

Should the Water Use Management Program Administrator deny the appeal, the party may appeal to the Director of Castle Rock Water. Subsequent appeal requests may be reviewed by the Town Manager. As with other code violations, ultimate authority over such cases lies in the Municipal Court system. Timing of appeal notifications shall be consistent with Chapter 13.14.080 of municipal code.

3.5.6 Appeal Approval Criteria

Appeals may be approved and subsequent surcharges may be waived based on the following criteria:

1. Mechanical Failure. Evidence of a verifiable mechanical failure of programmable timer, or other irrigation system components. This type of appeal may only be used for a one-time appeal approval and may not be used for subsequent violations.
2. Hardship. Demonstration of extreme hardship as approved by the Program Administrator.
3. Special Condition. As deemed appropriate by Program Administrator.

Owners are responsible to ensure their properties meet the water use management regulations. When a homeowner is on vacation, or otherwise unable to make this assurance, it is recommended the owner designate a responsible party to oversee the property during their absence.

Irrigation during storm events is not allowed. Public, non-residential, and common areas will be cited for water waste under these circumstances, and shall have properly functioning moisture-sensing equipment on all systems.

3.5.7 Customer Assistance Programs

The Town of Castle Rock offers the community various opportunities to conserve water. Please see www.CRconserve.com for current program information.

3.6 Demand Management Tools

Under drought conditions, Castle Rock Water may implement one or more of the demand management tools shown below. See Town of Castle Rock Drought Management Plan for more information.

3.6.1 Curtailment/Discontinuance of Public/Common Area Irrigation

(As approved by the Director of Castle Rock Water)

3.6.2 Discontinuance of Line Flushing

(As approved by the Director of Castle Rock Water)

3.6.3 Discontinuance of Bulk Water Sales

(As approved by the Director of Castle Rock Water)

3.6.4 Alteration of Regular and Approved Alternative Irrigation Schedule

(As determined by the Director of Castle Rock Water, Town Manager, and Town Council)

1. Curtail issuance of exemptions for new seed/sod installation
2. Further limiting times and dates of irrigation.
3. Discontinuance of car washing, decorative fountains, and water used for entertainment.
4. Discontinuance of all exterior water usage, including irrigation.
5. Discontinuance of all non-essential water usage.



Section 4. Database Management

4.1 Database Management

The water use management program information is maintained and managed in the Castle Rock Water billing system, including alternative irrigation schedules, exemptions, and enforcement actions.

This information is managed on an annual basis. Alternative schedule requests must be submitted and approved for each applicable irrigation season. Enforcement action is accomplished on an annual basis as well, and water waste enforcement occurs throughout the year.



Section 5. Rain Water Collection

5.1 Rain Barrels

On Aug. 10, 2016, it became legal to capture rainwater. According to Colorado law, homeowners can have two fifty-five (55) gallon rain barrels to be used for outdoor purposes. For more information, visit: <http://water.state.co.us/SURFACEWATER/RAINWATERCOLLECTION/Pages/default.aspx>

A fact sheet is also included as *Exhibit 10*.

FREQUENTLY ASKED QUESTIONS

Who can collect water under this law?

Any single-family residence or multi-family residence with four (4) or fewer units. Each home in a row of homes joined by common side walls, such as duplexes, triplexes, or townhomes, is considered a single-family residence.

Do I need a permit through the Division of Water Resources before I start collecting precipitation?

No permit or other approval is required for capture and use of precipitation in rain barrels with a combined storage capacity of one-hundred-ten (110) gallons in accordance with HB16-1005.

Where can I collect the water from?

From the roof of a building that is used primarily as a residence.

How much water can I collect?

You can fill and refill two (2) rain barrels with a combined storage capacity up to one-hundred-ten (110) gallons.

What can I collect the water in?

Water must be collected in rain barrels, up to one-hundred-ten (110) gallon total capacity, with sealable lids.

What can I use the water for?

Outdoor uses, such as lawn and garden irrigation, on the property where the water was collected. Though the rainwater can legally be used for a variety of outdoor uses (car washing, livestock watering, hot tub filling, irrigation, etc.) rainwater users should evaluate the quality of the collected rainwater to ensure it is appropriate for the proposed outdoor use. The water cannot be used for drinking water or indoor household purposes.

Will standing water in the rain barrels create a mosquito problem?

Rain barrels must have sealable lids to prevent insects or other pests from using the stored water.



Appendices

Exhibit 1	Water Restriction Code – Chapter 13.15
Exhibit 2a	Sample Residential Communication
Exhibit 2b	Sample Water Schedule
Exhibit 3	Sample Non-Residential Communication
Exhibit 4a	Residential Irrigation Exemption Request
Exhibit 4b	Non-Residential Temporary Irrigation Exemption Request
Exhibit 5	Exemption Placard
Exhibit 6a	Founders Special Schedule Communication
Exhibit 6b	Founders Area Special Watering Schedule
Exhibit 7	Water monitor Training Guidelines
Exhibit 8	Sample Warning Postcard 1st Violation
Exhibit 9	Sample Subsequent Enforcement Postcard 2nd Violation
Exhibit 10	DWR Rainwater Collection Information Table

Chapter 13.15 - Water Restrictions

13.15.010 - Definitions.

Irrigation season means the period between April 1 and October 31, inclusive, of each year.

Owner means the person or entity who is the owner of the real property receiving utility services, as shown in the public records of the County Assessor; provided, however, that if title is held in representative capacity, or the right to possession, use, and control of the property has been judicially vested in another party, such equitable owner(s) shall have the rights and responsibilities afforded and imposed by this Chapter.

Program Administrator means the Director of Castle Rock Water, or his or her designee.

Responsible party means the person or group identified by the owner as such, including property manager, or homeowner's association representative.

Restriction period means the period of time during the irrigation season which restrictions on lawn and landscaping irrigation is restricted to a defined/designated irrigation schedule.

Utility bill means the periodic statement of utility charges issued in accordance with [Section 13.14.040](#).

(Ord. No. [2018-005](#), § 1, 4-3-2018; Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

13.15.020 - Regulations.

The following regulations shall apply to the time and date for use of water for lawn and landscaping irrigation during the restriction period:

A. Irrigation schedules shall be established by the Program Administrator prior to the commencement of the restriction period.

B. In order to stagger the demand on the Town's water delivery system during the restriction period, residential lawn and landscape irrigation shall be restricted to every third day in accordance with the following procedure:

1. Residential properties with an assignment address ending in digit zero (0) through three (3) is designated by a square (□), digit four (4) through six (6) by a circle (○) and digit seven (7) through nine (9) by a diamond (◇).
2. Those non-residential properties for which several taps, services and/or addresses exist, the appropriate designated schedule shall be determined by the Program Administrator prior to commencement of the restriction period.

C. Annually, not later than thirty (30) days prior to commencement of the restriction period, the Program Administrator shall designate in writing the permissible watering days for each circle, square and diamond address, which shall be kept on file with the Town Clerk, posted in a conspicuous place at the Town's administrative offices and published on the Town of Castle Rock websites (CRconserve.com and CRgov.com); provided however, that the failure to make such timely designation shall not impair the enforceability of the ordinance codified in this Chapter .

(Ord. No. [2018-005](#), § 2, 4-3-2018; Ord. No. [2017-027](#), § 17, 9-19-2017; Ord. 2000-10 § 1(part), 2000; Ord. 99-10 § 1, 1999; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

13.15.030 - Alternative schedules.

In the event the Program Administrator determines a hardship/special circumstance exists for any owner, due to an irrigation requirement which cannot be met under the provisions of this Chapter, alternative schedules may be approved by the Program Administrator.

- A. The owner shall request an alternative schedule, verbally or in writing, to the Program Administrator, detailing the purpose of the request for an alternative schedule.
- B. If, upon review, the Program Administrator determines that granting an alternative schedule will not significantly impact the water system, the Program Administrator will notify the requestor of its determination and identify any conditions to the grant of the alternative schedule, and specifically identify the effective date, and the expiration date.

(Ord. No. [2018-005](#), § 3, 4-3-2018; Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

13.15.040 - Surcharges.

- A. Waste of potable water shall not be permitted. Waste is defined as applications of potable water which do not result in beneficial use of the water. Waste violations shall be those fines set forth in the Town's Water Use Management Plan in effect at the time of the use.
- B. Single-family surcharges are intended to reinforce the Town's conservation policies and discourage customers from consuming excessive amounts of water.
- C. Beginning January 1, 2019, a single-family customer (as defined in [Section 13.12.111](#)) using more than forty thousand (40,000) gallons of water in a billable month shall be assessed a surcharge as follows:

Single-Family Surcharges Usage in excess of 40,000 gallons per billable month (\$ per 1,000 gallons)

2019 and thereafter
\$8.56

The surcharge shall be in addition to the monthly charges for water set forth in [Section 13.12.112](#).

(Ord. No. [2018-031](#), § 13, 9-18-2018; [Ord. No. 2017-027, § 18, 9-19-2017](#); [Ord. No. 2016-030, § 18, 9-20-2016](#); [Ord. No. 2015-46, § 14, 11-3-2015](#); [Ord. No. 2014-31, § 11, 11-18-2014](#); Ord. 2013-34 § 12, 2013; Ord. 2012-30 § 9, 2012; Ord. 2011-31 § 7, 2011; Ord. 2010-34 § 8, 2010; Ord. 2009-32 § 3, 2009; Ord. 2009-22 § 1, 2009; Ord. 2007-43 § 1, 2007; Ord. 2004-37 § 1, 2004; Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

13.15.050 - Enforcement.

- A. The owner or responsible party shall be responsible for compliance with the provisions of this Chapter and will be subject to surcharges for noncompliance. Surcharges for violations of Sections [13.15.020](#) and [13.15.030](#) shall be those surcharges set forth in the Town's Water Use Management Plan in effect at the time of the violation.
- B. The Town reserves the ability to immediately terminate irrigation or other wasting for due cause with the Program Administrator's approval, and not to be reinstated until the system or use comes into compliance with this Chapter.

(Ord. 2004-37 §2, 2004; Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

13.15.060 - Appeals.

Appeals of such penalties may be brought before the Town Manager or such other person designated by the Town Manager to hear such appeals. The appeal process of [Section 13.14.080](#) shall apply to such appeals.

(Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

- **13.15.070 - Other actions authorized.**

Nothing contained herein shall preclude the Town or its officials from pursuing further injunctive relief, requesting the court to issue a restraining order or injunction precluding an offender from further use of the Town's potable water system for outside irrigation, during the balance of the irrigation season.

(Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

- **13.15.080 - Restrictive covenants.**

A. Definitions.

Restrictive covenant means any form of declaration of covenants, design guidelines, policies, conditions, restrictions or similar nongovernmental mechanisms for controlling land use on private property, including rules, regulations or guidelines implemented under the authority of restrictive covenants.

Restrictive covenants shall not include any Town code or regulation.

Turf or turf grass means continuous plant coverage consisting of hybridized grasses that, when regularly mowed, form a dense growth of leaf blades and roots.

- B. No person shall enforce or seek to enforce any provision contained in any restrictive covenant that has the effect of requiring that an area of any lot, or any minimum percentage of a lot, be landscaped with turf grass. However, this prohibition shall not preclude the enforcement of restrictive covenants requiring the watering and regular maintenance of turf grass.
- C. Any person who violates Subsection 13.15.080.B shall be punished by a fine of not more than one thousand dollars (\$1,000.00). Each such person shall be guilty of a separate offense for each and every day during any portion of which any violation is committed, continued or permitted by any such person.
- D. Any new restrictive covenant that prohibits or limits the installation or use of drought-tolerant vegetative landscapes is prohibited.

(Ord. 2004-57 §1, 2004)



Conservation is simple. Smart and everyday decisions can add up to enormous water savings. Together, let's reduce our water use by another 20 percent!

Water used for outdoor landscaping accounts for the largest demand on our water system. Castle Rock incorporated water use management guidelines to help create a community culture that embraces water efficiency. Increasing water efficiency can save the Town and its rate payers millions of dollars in infrastructure, help stabilize future rate increases, protect property owners' investment, and most importantly, extend the life of the aquifers. And it works – Castle Rock residents have conserved 20 percent since implementation!

One tool in our water use management program is a watering schedule. This demand management tool allows us to manage adequate volume and pressures within the water distribution system during landscape irrigation season.

Watering schedule

Castle Rock residents have followed an every-third-day irrigation schedule since 1985, which has proven to reduce peak demand as well as increase conservation. This schedule is in effect May 1st – September 30th for all customers, and is based on the last number of your address.

Watering hours

For residential customers, watering is allowed on your designated day before 8 a.m. or after 8 p.m. During these hours humidity is higher, and there is a reduction in solar radiation, temperatures, and winds. Watering during these times reduces water loss through evaporation.

Water Wiser Workshops

With potentially 20 to 75 percent of our water wasted through inefficient irrigation and poor water management, these workshops show how to improve the efficiency of your sprinkler system, detect water waste, and better understand your landscape watering needs. Completion of this workshop earns you a "Water Wiser" designation and exempts you from the every-third-day watering schedule. There is no charge to attend these workshops. As introduced in 2018, your Water Wiser designation expires after five years, at which time you must retake the course. Register for workshops at CRconserve.com/waterwiser.

Rebates

We offer a rebate if you're replacing a 1.6 gallon per flush, or higher, toilet with a more efficient .8 gallon per flush ultra-high efficiency toilet. We also offer rebates for Whole Home Water Monitoring Systems, turf removal, upgrading to a smart irrigation controller, and replacement of less efficient traditional fixed spray nozzles with rotary nozzles. Check out the ColoradoScape renovation rebate where you can receive \$1.20 per square foot for removing healthy, high water use plant material and replacing it with low or no water alternatives. The maximum amount allowed per account is \$1,800 and is available on a first come, first served basis. Visit CRconserve.com/rebates for program eligibility requirements.

ColoradoScape

Residents are encouraged to integrate ColoradoScape designs. These designs use low to very-low water use plant material which blends in with the native Castle Rock landscapes. This type of landscape features hardscape and other landscape materials which provide a variety of colors, textures, sizes, shapes, and seasonal interest. Returning this summer, a Parade of ColoradoScapes and landscape make-over contest. Watch for more details!

Irrigation exemptions

When installing a new landscape, an irrigation exemption allows any day watering, as needed, for sod for 21 days and 30 days for seed or other plant material. This exemption does not give you any more water; it simply removes the every-third-day watering schedule during the exemption period. Watering is not permitted between the hours of 8 a.m. and 8 p.m. Irrigation exemptions will not be issued or applicable during the month of July. An \$8 fee will be assessed to the water billing account.

Visit CRconserve.com – register, apply, learn

Specifically, for Castle Rock, this easy to use, interactive site is a great way to learn about water conservation, find your watering schedule, get weather data specific to your location, and get ColoradoScape inspiration. Find workshop and class registration, as well as rebate and irrigation exemption applications, at CRconserve.com.





2022 WATERING SCHEDULE RESIDENTIAL

On your watering day, water only: **before 8 a.m. or after 8 p.m.**

Your schedule is determined by your street address.

- Addresses ending in 0, 1, 2, 3
- Addresses ending in 4, 5, 6
- Addresses ending in 7, 8, 9

Certain streets in Founders Village have a special schedule, mailed separately.

MAY

Sun	Mon	Tues	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE

Sun	Mon	Tues	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY

Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER

Sun	Mon	Tues	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

The Town of Castle Rock is committed to the wise development and use of its water resources. Our goal is to create a community culture that embraces water efficiency with smart water management techniques, promotes the use of efficient irrigation equipment, and encourages the use of ColoradoScape design principles. Water efficiency can save the Town and its rate payers millions of dollars in infrastructure, help stabilize future rate increases, protect property owners' investment, and most importantly, extend the life of the aquifers.

One tool in our water use management program is a watering schedule. This demand management tool allows us to manage adequate volume and pressures within the water distribution system during landscape irrigation season.

Watering schedules

This watering schedule is in effect May 1st – September 30th.

- Non-residential properties must adhere to a fixed three-day per week watering schedule
- Properties west of I-25 are designated Monday, Wednesday, and Friday
- Properties east of I-25 are designated Tuesday, Thursday, and Saturday
- Designated watering hours shall begin no earlier than 10 p.m. on the assigned day and be completed no later than 6 a.m. the following day.

Rebates

Check out the SmartScape renovation rebate where you can receive \$1.10 per square foot for removing healthy, high water use plant material and replacing it with low or no water alternatives. The maximum amount allowed per account is \$15,000 and is available on a first come, first served basis. Visit CRconserve.com/rebates for program eligibility requirements.

Irrigation exemptions

When installing a new landscape, an irrigation exemption allows any day watering, as needed for sod for 21 days and 30 days for seed or other plant material. This exemption does not give you any more water; it simply removes the three-day per week schedule during the exemption period. Watering is not permitted between the hours of 6 a.m. and 10 p.m. Irrigation exemptions will not be issued or applicable during the month of July. Soil inspections must be completed before issuance. An \$8 fee will be assessed to the water billing account.

ColoradoScape

We encourage non-residential properties to incorporate ColoradoScape designs. These designs use low to very-low water use plant material which blends in with the native Castle Rock landscapes, incorporating hardscape and other materials, which provide a variety of colors, textures, sizes, shapes, and seasonal interest. Returning this summer, a Parade of ColoradoScapes and landscape make-over contest. Watch for more details!

New installation

All non-residential areas and open spaces are restricted from using Kentucky Bluegrass. New or renovated streetscapes (islands, medians, roundabouts, easements, planting strips) cannot have turf grass and plant material must be limited to 10" of water per growing season.

We appreciate your continued commitment to saving water to ensure a strong future. We look forward to working with you throughout the irrigation season and welcome any comments or questions.



Residential Temporary Irrigation Permit

Application

To apply for a temporary irrigation exemption, please complete the form.

Exemption Period

The exemption period for new sod is up to 21 days and seed up to 30 days from the date of installation for the identified property and locations. You will receive your placard within approximately five business days. Place this placard in a location clearly visible from the street during the exemption period. This exemption does not give you any more water, just more time to apply the water. A temporary irrigation permit allows for daily watering between the standard schedule hours of before 8 a.m. and after 8 p.m.

During the exemption period, Tier 4 Conservation Surcharges will not apply. Exemptions requested after the installation of new sod or other plant material will be effective from the date of installation, and only be retroactive to the previous or most recent billing period.

First Name **Last Name**

Address of Property Requiring Exemption*

City* **State*** **Zip Code***

Phone Number **Email Address**

Mailing Address (if different from above)

City **State** **Zip Code**

Reason for Exemption Request	Location	Date sod / seed installed:*
<input type="checkbox"/> New sod	<input type="checkbox"/> Front	<input type="text"/>
<input type="checkbox"/> New seed	<input type="checkbox"/> Back	
<input type="checkbox"/> Other plant materials (such as trees, shrubs)	<input type="checkbox"/> Side	
	Check all that apply:	

Is sod being installed by the builder?
 Yes No

Automatic irrigation system
 Yes No

Type of soil preparation materials used.

This material should be tilled to a minimum 6-inch depth.

Notes

Non-residential Temporary Irrigation Exemption

[Sign In to Save Progress](#)

Application

To apply for a temporary irrigation exemption, please complete the form below.

The exemption period for new sod is up to 21 days and seed and other plant material up to 30 days from the date of installation.

An \$8 fee will be assessed on the water billing account associated with this property address. However, exemptions will not be issued or applicable in the month of July.

Property Address Requiring Exemption:*

Company Name*

Company Phone*

xxx-xxx-xxxx

Company Email

Registered Landscaper*

Registration Number*

Reason for Exemption Request*

- New sod
- New seed
- Other plant materials (e.g. trees, shrubs)

Total square footage

Type of soil preparation materials used. This material should be tilled to a minimum 6" depth.*

Soil Inspection Date*

Date sod/seed installed:*

Backflow prevention test date (if applicable)*

If irrigation system was builder/developer installed, please list Building/Irrigation Permit #

Hydro-seed installation requires "Special Schedule Submittal". Please call 720-733-2306.

Acknowledgement

I understand this is a "temporary" exemption that allows daily watering for the identified property, between the standard schedule hours of 10 p.m. to 6 a.m. during the identified exemption period. I understand this exemption will not increase the amount of the monthly water budget. I understand that I will abide by the Water Use Management Plan and all applicable watering restrictions.



TEMPORARY IRRIGATION EXEMPTION

Address/Location: _____

5/1-5/20

WATERING HOURS

Residential before 8 a.m. or after 8 p.m. Non-residential midnight - 8 a.m.

Irrigation, as needed, is allowed for the property and location as described in the exemption application. This placard shall be posted in a location which is visible from the street. Upon expiration of the exemption, please follow all restrictions currently in place. This exemption will not increase the amount of your monthly water budget. Conservation Surcharges will not apply during the exemption period only. Water waste is not allowed during the exemption period, and may be subject to a violation. Exemptions will not be issued or applicable during the month of July.



NOTICE: This exemption is issued pursuant to the provisions of Chapter 13.15 of the Municipal Code of the Town of Castle Rock, and is subject to revocation should conditions require.

Approved: _____ Date: _____

Authorized Staff Signature

General guidelines to establish a new lawn

- Week 1: Water 2-3 times per night
- Week 2: Water 1-2 times per night
- Week 3: Water every other night
- Week 4: Adjust according to Town watering schedule or every third day

These guidelines may need to be adjusted based on current weather conditions.

If establishing a new lawn during the restriction period, May through September, daytime watering between 8:00am and 8:00pm is **NOT** allowed. Hand watering can take place at any time.

Exemptions will not be issued or applicable during the month of July.

It's important to note, during the establishment period, with an irrigation exemption, your individual water budget is not increased. You are responsible for all water used during the establishment period. The irrigation exemption allows for watering as needed and will waive any conservation surcharges.

Water your lawn during evening, overnight, or early morning hours. Between 8pm and 8am there is less wind, lower temperatures, and higher humidity. These conditions allow for more effective application of water and reduced evaporation.

Use the cycle and soak method to prevent runoff. Multiple short cycles, with time in between, will allow water to soak into the root system without running off.



April 1, 2022

RE: FOUNDERS VILLAGE SPECIAL SCHEDULE AREA

This year's Watering Schedule was mailed to you during the first week of April. As many of you long-time Founders area residents know, each year you receive a "special watering schedule" assignment for your address.

The addresses in your area end in similar numbers, so the normal assignment, as indicated by the last digit in your address could create low pressure problems if watering is done on the same day. As we have done in the past, your watering day symbol has been assigned to an alternate watering day.

Please locate your address on the enclosed list and note the "special" assignment. Irrigation is allowed on the day that corresponds to the assigned symbol as shown on the attachment.

Watering is allowed on your assigned day before 8 a.m. or after 8 p.m. when watering is more efficient due to reduced evaporation, cooler temperatures, and less winds. These hours will help you take advantage of watering when it is most effective.

Thank you for your cooperation. If you have any questions regarding this special schedule, please, contact us at 720-733-2306.

Sincerely,

Rick Schultz
Water Conservation Specialist

Founders Area Special Watering Schedule

Exhibit 6b



Locate your address and note the assigned symbol which specifies your designated watering day.

<p><u>Aspen Ave.</u> 5220 = ○ Circle 5240 = ◆ Diamond 5241 = ◆ Diamond 5261 = ○ Circle 5280 = ○ Circle 5300 = ◆ Diamond 5301 = ◆ Diamond 5321 = ○ Circle 5340 = ○ Circle 5360 = ◆ Diamond 5361 = ◆ Diamond 5400 = ○ Circle 5401 = ○ Circle</p> <p><u>Bristol St.</u> 15 = ○ Circle 25 = □ Square 34 = □ Square 35 = ◆ Diamond 44 = ◆ Diamond 55 = □ Square 75 = ◆ Diamond 104 = ◆ Diamond 105 = □ Square 135 = ◆ Diamond 144 = □ Square 174 = ◆ Diamond 195 = □ Square 205 = ◆ Diamond 214 = □ Square 235 = □ Square 244 = ◆ Diamond 245 = ◆ Diamond</p> <p><u>S. Carlton St.</u> 815 = ◆ Diamond</p> <p><u>Cherry St.</u> 157 = □ Square 176 = ◆ Diamond 177 = ○ Circle 217 = ○ Circle 236 = ◆ Diamond 237 = ○ Circle 256 = □ Square 267 = □ Square</p>	<p><u>Cherry St. – cont.</u> 277 = ○ Circle 296 = ◆ Diamond 306 = □ Square 307 = □ Square 327 = ○ Circle 346 = ◆ Diamond 367 = □ Square</p> <p><u>E. Hamilton Ave.</u> 5126 = □ Square 5166 = ◆ Diamond 5186 = □ Square 5216 = ◆ Diamond 5226 = □ Square 5246 = ◆ Diamond 5256 = □ Square 5276 = ◆ Diamond 5286 = □ Square 5306 = ◆ Diamond 5326 = □ Square 5366 = ◆ Diamond 5386 = □ Square</p> <p><u>Holcomb St.</u> 5270 = ◆ Diamond 5271 = ◆ Diamond 5290 = ○ Circle 5291 = ○ Circle 5301 = ◆ Diamond 5321 = ◆ Diamond 5340 = ○ Circle 5341 = ○ Circle</p> <p><u>N. Holcomb St.</u> 110 = ○ Circle</p> <p><u>E. Howe St.</u> 5256 = □ Square 5276 = ◆ Diamond 5279 = ○ Circle 5306 = □ Square 5326 = ◆ Diamond 5329 = ○ Circle 5349 = □ Square 5366 = □ Square</p>	<p><u>E. Kensington Ave.</u> 5233 = ○ Circle 5245 = ◆ Diamond 5257 = ○ Circle 5270 = ○ Circle 5290 = ◆ Diamond 5293 = ○ Circle 5305 = ◆ Diamond 5317 = □ Square 5330 = ○ Circle 5341 = ○ Circle 5350 = ◆ Diamond 5371 = ○ Circle 5390 = ○ Circle 5391 = ◆ Diamond</p> <p><u>E. Manchester Dr.</u> 5359 = ○ Circle 5379 = □ Square 5407 = ○ Circle</p> <p><u>Ponderosa St.</u> 154 = ◆ Diamond 155 = □ Square 174 = □ Square 195 = ◆ Diamond 214 = ◆ Diamond 215 = □ Square 234 = □ Square 255 = ◆ Diamond 274 = ◆ Diamond 275 = □ Square 295 = ◆ Diamond</p> <p><u>Sandpiper Ave.</u> 5242 = ○ Circle 5262 = ◆ Diamond 5263 = ◆ Diamond 5283 = ○ Circle 5302 = ○ Circle 5322 = ◆ Diamond 5323 = ◆ Diamond 5343 = ○ Circle 5362 = ○ Circle</p>	<p><u>Spruce Ave.</u> 5248 = ○ Circle 5257 = □ Square 5258 = □ Square 5277 = ○ Circle 5287 = □ Square 5317 = ○ Circle 5357 = □ Square 5358 = ○ Circle 5397 = □ Square 5441 = ◆ Diamond 5461 = ○ Circle 5462 = ◆ Diamond 5501 = ◆ Diamond 5502 = ○ Circle 5521 = ○ Circle 5532 = ◆ Diamond 5561 = ◆ Diamond</p> <p><u>E. Weston Ave.</u> 5343 = ◆ Diamond 5353 = ○ Circle 5373 = ◆ Diamond 5383 = ○ Circle 5374 = □ Square</p> <p><u>Willow Ct.</u> 5304 = ◆ Diamond 5305 = □ Square 5324 = □ Square 5325 = ◆ Diamond 5364 = ◆ Diamond 5365 = □ Square</p> <p><u>Willow St.</u> 34 = □ Square 54 = ◆ Diamond 94 = □ Square 114 = ◆ Diamond 174 = □ Square 194 = ◆ Diamond 234 = □ Square 254 = ◆ Diamond 294 = □ Square 314 = ◆ Diamond 344 = □ Square 364 = ◆ Diamond 394 = □ Square</p>
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Program Background

- Water resource information
- Program history
- Overview of implementation policy contents

General Employee Information

- Personnel guideline distribution
- Employee identification (attire, identification card)
- Care of Town equipment (flashlights/video/photo equipment/laptops/tablets, etc.)
- Use of Town vehicles
- Interaction with other Town employees

General Duties

- Public education
- Violation logging

Safety

- Vehicle operation
- Driving hazards
- Customer contact

Customer Service/Public Outreach

- Logging customer issues and concerns for management review
- Calendar dissemination
- Water conserving landscaping fact sheets (CRconserve.com)
- Automatic sprinkler system operation
- General water conservation information
- Rebate program information
- FAQs from CRconserve website
- Supervisory referrals

Information/Data Management

- Logging all customer contacts
- Logging of violations
- Violation processing

Irrigation System Training

- Identification of automatic system components
- Use of hoses

Types of Irrigation Schedules

- Regular residential and non-residential areas
- Water Wiser every-third-day exemptions
- Exemptions

Exemptions

- How to obtain
- Reasons to obtain (new plant material, disease mitigation, fertilization, hydro-seeding)
- Placard display and information

Special Water Uses

- Low pressure areas (Founders Village special schedule)
- Hand watering
- Water for entertainment
- Car washing

- Fountains
- Irrigation system check and repair
- Water waste criteria

Non-residential Areas/Special Schedules

- Town managed properties
- HOA/District managed properties

Date: Time: Account #

Efficient water use is part of living in Castle Rock's semi-arid, high desert climate where every drop of water counts - whether it's pumped fresh from a well or saved through reduced lawn irrigation.

Wise water use is something we value at the Town. It's the small, everyday decisions that add up to long term water savings.

We observed at your location, the following:

This year's watering schedule was distributed by mail at the beginning of the irrigation season. For additional copies or tips on how to conserve, visit CRconserve.com.

Your cooperation is greatly appreciated.

Castle Rock Water 175 Kellogg Ct., Castle Rock, CO 80109

Questions? Call 720-733-2306



Date: _____ Time: _____ Account # _____

Address: _____

Location: _____

Please be advised the above information constitutes a violation of the *Town of Castle Rock Municipal Code Chapter 13.15: Water Restrictions*. The information below indicates the amount your water bill will be surcharged. Subsequent violations will result in additional enforcement actions, including surcharges and potential termination of water service.

Water Violation Number _____

Surcharge Amount \$ _____

Requests for appeal must be received in writing at the address shown below within ten business days of the date of this notice.

(per Town of Castle Rock Municipal Code Chapter 13.14.080)

Castle Rock Water 175 Kellogg Ct., Castle Rock, CO 80109

Questions? Call 720-733-2306





COLORADO
 Division of Water Resources
 Department of Natural Resources

Colorado Division of Water Resources
 1313 Sherman Street, Suite 821
 Denver, Colorado 80203
 www.water.state.co.us
 303-866-3581
 September 2016

Rainwater Collection Information Table

Pursuant to legislation passed in 2016 (House Bill 16-1005), many Colorado residents are able to collect rainwater in up to two rain barrels with a combined storage capacity not to exceed 110 gallons for outdoor uses. But did you know that residents with certain types of water wells may *also* be able to collect rainwater for the uses allowed on their well permit? These residents may be able to have *additional* rain barrels pursuant to Senate Bill 09-080.

The table below provides examples of how different residences in Colorado may be able to collect rainwater. Additional information about rainwater collection in Colorado can be found on page 3 of this document and on Division of Water Resources' (DWR) website at www.water.state.co.us/SurfaceWater/RainwaterCollection.

Your water supply scenario:	Can I use rain barrels as allowed under HB16-1005*? (Limit of two rain barrels with a combined storage capacity not to exceed 110 gal.)	Can I have <i>additional</i> rain barrels in accordance with SB09-080**? (Note that a Precipitation Collection Permit is required before you start collecting water in these additional rain barrels!)
A single family house on tap water	Yes	No
2 to 4 unit multi-family building (apartments or condominiums) with tap water	Yes, 110 gallons per building	No
5 or more unit multi-family building (apartments or condominiums) with tap water	No	No
Townhome (one residence in a row of residences joined by common side walls) on tap water	Yes, 110 gallons per residence	No

Your water supply scenario (continued):	Can I use rain barrels as allowed under HB16-1005*? (Limit of two rain barrels with a combined storage capacity not to exceed 110 gal.)	Can I have <i>additional</i> rain barrels in accordance with SB09-080**? (Note that a Precipitation Collection Permit is required before you start collecting water in these additional rain barrels!)
A single family house on an exempt/small capacity domestic well that has a permit for some combination of: inside uses in up to three single-family dwellings, up to one acre of residential lawn and garden, domestic animal watering (such as horses), and livestock watering	Yes	Yes, additional rainwater may be captured for those outdoor <i>and</i> indoor uses that are allowed on the well permit *
A single family house on an exempt/small capacity household use only well	Yes	Yes, additional rain barrels are allowed to capture water for household purposes <i>inside</i> the dwelling. However, only the 110 gallons allowed under HB16-1005 may be collected for outdoor uses*
A single family house on tap water- there is an old exempt/small capacity well (drilled prior to May 8, 1972) that we still use to water the lawn	Yes	No
A single family house on a well that is operated pursuant to a Plan for Augmentation (non-exempt/large capacity well)	Yes	No
A single-family house with an unpermitted well that has been in use since prior to May 8, 1972. The well continues to be used for the house and yard.	Yes	Maybe. You will need to apply to register your well first. If DWR is able to approve a residential well permit, and you are not in a water service area, you could capture water for purposes allowed by your new well permit*
A single-family house with a residential well but the permit number or permit type is unknown	Yes	Maybe. It will depend on the well permit and other sources of water supply. You can look up your well permit through DWR's Well Permit Search . If you're having trouble finding your permit please contact DWR via the information on page 3.

Rainwater Collection Information Table: Additional Information

Exempt Wells versus Non-Exempt Wells

The table on pages 1 and 2 reference “exempt/small capacity wells” and “non-exempt/large capacity wells”. *What is an exempt/small capacity well versus a non-exempt/large capacity well and which type do I have?*

- Exempt/small capacity wells are often residential wells that serve no more than three single family dwellings. Exempt/small capacity wells typically have a five or six digit permit number and do not have a suffix (other than “-A” in the case of replacement wells).
- Non-exempt/large capacity wells often have a “-F” and/or “-R” at the end of the permit number.
- See the [Guide to Well Permits, Water Rights, and Water Administration](#) for more details on exempt/small capacity and non-exempt/large capacity wells.

***HB16-1005: Concerning the use of rain barrels to collect precipitation from a residential rooftop for nonpotable outdoor uses (effective August 10, 2016)**

- Who can collect water under this law: Any single family residence or multi-family residence with 4 or fewer units. Each home in a row of homes joined by common side walls, such as duplexes, triplexes, or townhomes, is considered a single family residence.
- Do I need a permit through DWR before I start collecting precipitation? No permit or other approval is required for capture and use of precipitation in rain barrels with a combined storage capacity of 110 gallons in accordance with HB 16-1005.
- Where can I collect the water from: From the roof of a building that is used primarily as a residence.
- How much water can I collect: You can fill and refill two rain barrels with a combined storage capacity up to 110 gallons throughout the year.
- What can I collect the water in: Water must be collected in rain barrels (up to 110 gallon total capacity) with sealable lids
- What can I use the water for: Outdoor uses, such as lawn and garden irrigation, on the property where the water was collected. Though the rainwater can legally be used for a variety of outdoor uses (car washing, livestock watering, hot tub filling, irrigation, etc.) rainwater users should evaluate the quality of the collected rainwater to ensure it is appropriate for the proposed outdoor use. The water cannot be used for drinking water or indoor household purposes.
- Will standing water in the rain barrels create a mosquito problem? Rain barrels must have sealable lids to prevent insects or other pests from using the stored water. See the [Colorado Department of Public Health and Safety](#)'s website for more information.

****SB09-080: Concerning limited exemptions for water collected from certain residential rooftops**

- Who can collect water under this law (SB 09-080): Any residence that has, or can qualify for, an exempt residential well permit through DWR. This law operates independently of HB16-1005.
- If I do not have a well or well permit, how do I know if my property qualifies for a well permit: This will be determined by the Division of Water Resources when you apply for the required precipitation collection permit.
- Do I need a permit through DWR before I start collecting precipitation? Yes, before you begin to collect precipitation in connection with an exempt well permit, you need to obtain a rooftop precipitation collection permit. Check out the [Rainwater Collection on Properties with Residential Wells Fact Sheet](#) and the [Application for Rooftop Precipitation Collection System Permit](#) for more information.
- Where can I collect the water from: From the roof of a building that is used primarily as a residence.
- How much water can I collect: There is no limit to the amount of water you can collect, so long as you are collecting the water from the roof of a building that is used primarily as your residence.
- What can I collect the water in: Rain barrels or other types of water storage structures. Be sure to still follow best practices for mosquito management.
- What can I use the water for: Those residential uses that are allowed on the exempt well permit, which may include both indoor and outdoor uses, depending on the well permit.
- Other important information:
 - If the residence is served by a water system (such as a water tap from a municipal provider or a shared well) that supplies more than three single family dwellings, then precipitation collection is not allowed under this law.
 - Please review the above information on SB09-080 before completing and submitting an [Application for a Rooftop Precipitation Collection System Permit](#). If your well has not been registered, you will also need to [Register an Existing Well](#) before applying.

Have additional questions? Send an [AskDWR](#) request or call DWR's Ground Water Information Desk between 9am and 4pm Monday through Friday at (303) 866-3587.

2022 WUMP Summary of Changes

1.3 Definitions

Updated Drought response, Program Administrator, and Residential definitions.

2.1

Clarification to include verbiage that is already used in the Water Wiser program application (each participant must sign the application before participation is complete): One of the primary educational opportunities for residential customers is the Water Wiser workshop. This program focuses on landscape preparation, efficient irrigation, water management, and indoor efficiency. The goal of the Water Wiser program is to provide the tools necessary to maintain a healthy landscape, while using less water. After completion of this workshop, residents are exempt from the every-third-day watering schedule. This exemption provides residents with the opportunity to take advantage of the weather and water only when necessary, not just because it's their scheduled watering day. Water consumption may be tracked through utility bills and program participants are expected to adhere to the program. The Town, at its discretion, reserves the right to return Water Wiser participants to the every-third-day watering schedule, at which time participants will be subject to enforcement as provided in the Town Municipal Code and Water Use Management Plan.

3.2.1.3.d/e:

Combined d. "The watering schedule shall be published on CRconserve.com and in the official notice section of CRgov.com/notices." with e. "The watering schedule and a general outline of the policy on the Town's website." To now read "The watering schedule and the general outline of the policy shall be published on CRconserve.com and in the official notice section of CRgov.com/notices."

3.2.2.3

Clarified "Application Rates: Total water application, during peak summer temperatures, shall not exceed one and one-half (1 ½) inches per week, per irrigation zone. Irrigation application during cooler spring and fall months shall be seasonally adjusted to lower levels."

3.3.1.7

Removed "Special Schedules for Non-Residential Properties: Special schedules for non-residential

properties may be granted based on a demonstrated hardship at the discretion of the Program Administrator. Castle Rock Water registered landscape contractors shall implement special schedules. See Section 2 of the Landscape and Irrigation Criteria Manual for information regarding registration of landscape professionals.”

3.3.1.7.a

Removed the special schedule option for residential customers that are “going on vacation.”

3.4.5.2

Removed “Town may request owner/operator of facility to obtain a letter from the Tri-County Health Department requiring cleaning of prescribed areas. A copy of such shall be submitted to Castle Rock Water, and a copy shall be posted on-site.”

3.4.5.3

Removed “by homeowners”.

3.4.8.1.a

(Residential) Added “It is the responsibility of the account holder to ensure all irrigation system components are properly maintained and fully operational. This includes but is not limited to replacement of batteries in controllers and rain sensors.”

3.4.8.2.a

(Non-residential) Added “It is the responsibility of the account holder to ensure all irrigation system components are properly maintained and fully operational. This includes but is not limited to flow sensors, master valves, and replacement of batteries in controllers and rain sensors.”

2021 Violation Summary: 5 month season, 2 water monitors

1st Residential Watering Violation: violations 1,731
2nd Residential Watering Violation: 255 violations, \$5,900.00
3rd Residential Watering Violation: 49 violations, \$2,250.00
4th Residential Watering Violation: 13 violations, \$1,200.00
5th Residential Watering Violation: 4 violations, \$800.00
Subsequent Residential Watering Violations: 4 violations, \$600.00
Total residential violations: 2,056 violations, \$10,750.00

1st Non-Residential Watering Violation: 171 violations
2nd Non-Residential Watering Violation: 60 violations, \$5,900.00
3rd Non-Residential Watering Violation: 34 violations, \$6,800.00
4th Non-Residential Watering Violation: 16 violations, \$6,400.00
5th Non-Residential Watering Violation: 7 violations, \$5,600.00
Subsequent Non-Residential Watering Violation: 17 violations, \$13,600.00
Total non-residential violations: 305 violations, \$38,300.00
Grand total: 2,361 violations, \$49,050.00

2020 Violation Summary: 5 month season, 4 water monitors

1st Residential Watering Violation: violations 3,278
2nd Residential Watering Violation: 641 violations, \$15,050.00
3rd Residential Watering Violation: 121 violations, \$5,500.00
4th Residential Watering Violation: 29 violations, \$2,600.00
5th Residential Watering Violation: 9 violations, \$1,600.00
Subsequent Residential Watering Violations: 0 violations, \$0.00
Total residential violations: 4,078 violations, \$24,750.00

1st Non-Residential Watering Violation: 218 violations
2nd Non-Residential Watering Violation: 103 violations, \$10,200.00
3rd Non-Residential Watering Violation: 51 violations, \$10,000.00
4th Non-Residential Watering Violation: 32 violations, \$12,000.00
5th Non-Residential Watering Violation: 21 violations, \$16,000.00
Subsequent Non-Residential Watering Violation: 35 violations, \$28,000.00
Total non-residential violations: 425 violations, \$76,200.00
2020 Grand total: 4,503 violations, \$100,950.00

2019 Violation Summary: 5 month season, 5 water monitors

1st Residential Watering Violation: violations 2,357
2nd Residential Watering Violation: 433 violations, \$10,825.00
3rd Residential Watering Violation: 100 violations, \$5,000.00
4th Residential Watering Violation: 36 violations, \$3,600.00
5th Residential Watering Violation: 13 violations, \$2,600.00
Subsequent Residential Watering Violation: 21 violations, \$4,200.00
Total residential violations: 2,960 violations, \$26,225.00

1st Non-Residential Watering Violation: 232 violations
2nd Non-Residential Watering Violation: 120 violations, \$12,000.00
3rd Non-Residential Watering Violation: 55 violations, \$11,000.00
4th Non-Residential Watering Violation: 37 violations, \$14,800.00
5th Non-Residential Watering Violation: 18 violations, \$14,400.00
Subsequent Non-Residential Watering Violation: 15 violations, \$12,000.00
Total non-residential violations: 477 violations, \$64,200.00
2019 Grand total: 3,437 violations, \$90,425.00

2018 Violations Summary: 3 month season, 4 water monitors, non-residential surcharges increased

1st Residential Watering Violation: violations 1,791
2nd Residential Watering Violation: 234 violations, \$5,300.00
3rd Residential Watering Violation: 34 violations, \$1,600.00
4th Residential Watering Violation: 8 violations, \$700.00
5th Residential Watering Violation: 1 violation, \$200.00
Total residential violations: 2,068 violations, \$7,800.00

1st Non-Residential Watering Violation: 154 violations
2nd Non-Residential Watering Violation: 61 violations, \$6,100.00
3rd Non-Residential Watering Violation: 20 violations, \$4,000.00
4th Non-Residential Watering Violation: 10 violations, \$4,000.00
5th Non-Residential Watering Violation: 6 violations, \$4,800.00
Subsequent Non-Residential Watering Violation: 10 violations, \$7,600.00
Total non-residential violations: 261 violations, \$26,500.00
2018 Grand total: 2,329 violations, \$34,300.00

2017 Violations Summary: 3 month season, 4 water monitors

1st Residential Watering Violation: violations 1,608

2nd Residential Watering Violation: 186 violations, \$4,425.00

3rd Residential Watering Violation: 15 violations, \$700.00

4th Residential Watering Violation: 2 violations, \$200.00

Total residential violations: 1,811 violations, \$5,325.00

1st Non-Residential Watering Violation: 153 violations

2nd Non-Residential Watering Violation: 48 violations, \$2,350.00

3rd Non-Residential Watering Violation: 16 violations, \$1,600.00

4th Non-Residential Watering Violation: 6 violations, \$1,200.00

5th Non-Residential Watering Violation: 3 violations, \$1,200.00

Total non-residential violations: 226 violations, \$6,350.00

2017 Grand total: 2,037 violations, \$11,675.00



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 5. **File #:** TMP 2022-027

To: Members of the Castle Rock Water Commission

From: Mark Marlowe, P.E., Director of Castle Rock Water
Greg Kropkowski, Business Solutions Manager
Paul Rementer, Enterprise Fund Analyst

Ordinance Authorizing the Issuance and Sale of Water and Sewer Enterprise Revenue Bonds, Series 2022, Payable Solely Out of the Net Pledged Revenues to Be Derived from the Operation of the Town's Water and Sewer Enterprise; Providing Other Details Concerning the Bonds, Including, Without Limitation, Covenants and Agreements in Connection Therewith; Providing Other Matters Relating Thereto; and Providing for its Emergency Adoption on Second and Final Reading (Second Reading - Approved on First Reading on January 4, 2022, by a vote 7-0) [Entire Town Service Area]

Town Council Agenda Date: January 18, 2022

Executive Summary

Attached is a copy of the Council Memo for the above referenced project for your information.

Attachments

Attachment A: TC Memo Ordinance WR Debt Issuance (2nd Reading)



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/18/2022

Item #: 8. **File #:** ORD 2022-001

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

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

Ordinance Authorizing the Issuance and Sale of Water and Sewer Enterprise Revenue Bonds, Series 2022, Payable Solely Out of the Net Pledged Revenues to Be Derived from the Operation of the Town's Water and Sewer Enterprise; Providing Other Details Concerning the Bonds, Including, Without Limitation, Covenants and Agreements in Connection Therewith; Providing Other Matters Relating Thereto; and Providing for its Emergency Adoption on Second and Final Reading (Second Reading - Approved on First Reading on January 4, 2022, by a vote 7-0) [Entire Town Service Area]

Executive Summary

The purpose of this memorandum is to seek Council approval and to provide for its Emergency Adoption on second and final reading of an ordinance (**See Attachment A**) approving the sale of water and sewer enterprise revenue bonds in an amount of \$30,000,000. This memo will outline our current debt position, and provide a case for issuing additional debt to address future capital needs.

Future Capital Needs

During the 2022 budget process and the annual 2021 Rates and Fees Study, Castle Rock Water (CRW) updated the long term renewable water capital plan. The plan was updated to respond to current market conditions for water rights and water infrastructure construction as well as the higher than expected growth occurring in the community. The revised long term renewable water capital plan anticipates long term investments of \$523M. This is a significant increase over the 2020 Rates and Fees Study, which projected long term investments of \$477M. In addition, the timing of capital investments has been pushed forward. The long term renewable water capital plan now calls for increases of approximately \$32M by 2025 and approximately \$65M by 2040. The updated capital plan for 2041-2060 shows decreases of approximately \$20M as a result of CRW's strategy to move plans forward.

Castle Rock Water (CRW), as part of the annual budget process, has presented a plan to Council with 3% annual increases from 2022 through 2026 as part of the response to these capital needs. In addition, system development fees were increased by 40.1% in the Plum Creek Basin and 39.0% in the Cherry Creek Basin. Despite these actions and due to future capital demands, rate models

indicated the need for large rate increases beyond the 2022 through 2026 increases, beginning in 2029. In order to mitigate significant impact on the rate payers, CRW has created a model that solves for the large rate increases through both the issuance of debt in 2022 and marginal rate increases through 2044.

Current Borrowing Market

CRW met with Hilltop Securities to discuss debt options on October 13, 2021. Hilltop Securities confirmed that current interest rates are low and that it would be advantageous for CRW to issue new debt sooner rather than later. Hilltop Securities indicated their current timeline would allow for a February 2022 bond issuance date. Hilltop Securities expects that CRW would be able to obtain an interest rate equal to or below 2.5% unless market conditions change significantly in the coming month.

Proposed Debt Issuance

CRW is proposing to issue \$30M in water and sewer revenue bonds in order to mitigate future rate impacts associated with the implementation of the long term renewable water plan. This debt issuance was modelled at a 2.39% interest rate with a 20-year term. A negotiated sale and competitive sale are being considered, and a final recommendation will be made at second reading. The Town and CRW have current ratings by the S&P and Moody's of AA+ and AA2, indicating that we should receive a good interest rate. Annual payments would be on the order of \$1.8M, and total borrowing costs are estimated at \$325,350. With issuance of this debt, the model runs resulted in potential rate increases in the future being smoothed to a maximum of 3.50% through 2060.

Projects to Be Funded with Debt

Projects we would anticipate funding from bond proceeds include:

- A pipeline through Parker Water and Sanitation District to support additional conveyance capacity for water we receive as part of the Water Infrastructure Supply Efficiency (WISE) project. The cost of the pipeline is estimated at \$13M.
- A new 822-acre-foot reservoir to be located on property in Sedalia, Colorado, for an estimated cost of \$11.5M.
- A new pipeline and pump station (the Newlin Gulch Pipeline and Pump Station) to move raw water owned by Castle Rock from the Plum Creek Basin up to Rueter-Hess Reservoir for storage at an estimated cost of \$10M.
- Other long term renewable water projects as funding is available including the expansion of the Plum Creek Advanced Water Purification Facility from 6 million gallons per day to 12 million gallons per day.

Notification and Outreach Efforts

No specific outreach efforts are necessary for this item.

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

Castle Rock Water (CRW) Commission was briefed on the case for issuing \$30,000,000 in additional debt to support the long term renewable water plan on October 27, 2021. General consensus of the CRW Commission was to proceed with the debt issuance.

Discussion

The rates and fees models developed for the 2021 rate study indicated that a potential large rate increase would be needed in 2029 in the Water Resources Fund, assuming implementation of the full capital plan proposed. The 2021 capital plan (through 2060) for the Water Resources Enterprise includes approximately \$523M in investments. There are several options for addressing the potential large rate increase in 2029, including retiming of capital investments through deferment of some of the projects, cancellation of some of the projects to reduce the long term expected investments, utilization of debt to spread the needed rate impacts out over a longer period, and a combination of these options.

One of the options CRW wanted to explore was issuance of additional debt. The model that was created to evaluate using debt to solve for the large projected rate increases in 2029 calls for additional rate increases beyond 2029. Beginning in 2027, the model proposes annual rate increases of 3.5% through 2032 and increases of 3% from 2033 through 2044. In addition to rate increases, the model assumes the issuance of debt of \$30M in 2022, \$52M in 2030 and \$42M in 2045.

This model using debt allows CRW to avoid large rate increases to the rate payers in 2029 while maintaining a Debt Ratio that falls within the AWWA top quartile for lowest debt to asset ratio over the long term.

Current Debt Ratio

Debt Ratio measures the ratio of total liabilities to total assets and is a benchmarking Key Performance Indicator (KPI) in the AWWA Utility Benchmarking Program. Following is a summary of the current AWWA Debt Ratio benchmarking.

	75th Percentile	Median	25th Percentile
Debt Ratio	23%	39%	55%

Our goal is to be in the top 25% of the utilities who participate in the AWWA Benchmarking Survey. The table below summarizes CRW's annual Debt Ratio for 2015 through 2021 Q3. CRW consistently

remains in the top 25% of utilities for this KPI and performance has continued to improve annually.

	2015	2016	2017	2018	2019	2020	2021 *
Debt Ratio	15%	15%	13%	12%	11%	10%	9%

- Through Q3 YTD

Financial Management Plan

The CRW Financial Management Plan (FMP) is set in place to outline the main financial policies, procedures and financial performance for past, present and future. FMP goals were derived based upon CRW’s main vision to become a national leader in the water industry and our mission to provide our community with exceptional service. The first two FMP goals are as follows:

1. To minimize future rates at or below the 2013 Hybrid Model levels
2. To minimize debt carrying costs at or below industry standards (the above tables indicate that CRW is achieving this goal)

CRW’s current Debt Ratio performance to the benchmarking standards demonstrates that there is opportunity to issue additional debt while still being an industry leader in this KPI. The ability to issue more debt is complicated and depends on a number of factors including current market conditions, interest rates, bond coverage ratios, reliability of revenue streams, ability to increase rates, and agency ratings, among others. Below is a table showing our current debt position, along with the amount of additional debt we are able to take on and still remain in the top quartile of lowest debt ratios among our peers.

	Q3 2021 YTD	75th Percentile	Median	25th Percentile
Liabilities	68,297,639	173,721,315	294,570,925	415,420,535
Assets	765,028,205	755,310,064	755,310,064	755,310,064
Debt Ratio	9%	23%	39%	55%
Theoretical Debt Capacity Based on KPI		106,361,784	227,211,394	348,061,004

Current Debt Portfolio

The current debt portfolio for CRW primarily contains revenue bonds for water, wastewater, and water resources and a bank loan dedicated to the Stormwater Enterprise. Following is a summary of the current CRW debt portfolio.

Debt Obligations	Remaining Principal YE 2020	Interest Rate	Maturity Date
Water and Sewer Revenue Refunding Bonds, Series 2012	\$3,795,000	2.60%	2023
Water and Sewer Revenue Refunding Bonds, Series 2015	\$3,535,000	2.79%	2026
2016 Refunding of COP Bonds	\$40,510,000	2.51%	2034
2019 Stormwater Enterprise Revenue Loan	\$9,000,000	1.92%	2030
Total	\$56,840,000	2.44%	

Budget Impact

The annual impact to the budget would be approximately \$1.8M in additional debt carrying costs. In addition, borrowing costs would include \$325,250. A first quarter budget amendment will be necessary to adjust the revenue and expense budgets for CRW in accordance with the resulting debt issuance.

Staff Recommendation

Staff recommends proceeding with the debt issuance as outlined in this memo.

Proposed Motion

"I move to approve the ordinance as introduced by title."

Alternative Motions

"I move to approve the ordinance 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: Ordinance



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 6. **File #:** TMP 2021-1011

To: Members of the Castle Rock Water Commission

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

Resolution Approving a Service Agreement Between the Town of Castle Rock and Muller engineering Company, Inc., 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: January 4, 2022

Executive Summary

Attached is a copy of the Council Memo for the above referenced project for your information.

Attachments

Attachment A: TC Memo McMurdo Gulch Stream Reclamation Priority 3 Project



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/4/2022

Item #: File #: TMP 2021-997

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

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

Resolution Approving a Service Agreement Between the Town of Castle Rock and Muller Engineering Company, Inc., for the McMurdo Gulch Stream Reclamation Priority 3 Project. [McMurdo Gulch south of the intersection of Castle Oaks Drive and Autumn Sage Street]

Executive Summary

Castle Rock Water is seeking Town Council approval of a Resolution (**Attachment A**) awarding a Services Agreement with Muller Engineering Company, Inc., (Muller) for the McMurdo Gulch Stream Reclamation Priority 3 Project in the amount of \$499,803 plus a 10% Town-managed contingency in the amount of \$49,980 for a total authorization of \$549,783. The project is located adjacent to Castle Oaks Drive; at four sites south of the intersection of Castle Oaks Drive and Autumn Sage Street, see Project Site Map (**Attachment B**).

The scope of work generally includes engineering design for restorative grade control structures, bank protection, channel grading, trails coordination and existing Civilian Conservation Corps (CCC) drop structure rehabilitation.

This project will be funded through the Stormwater Enterprise Fund, a developer contribution and through a Participation Agreement from the Cherry Creek Basin Water Quality Authority (Authority) with a project budget as follows:

Funding Source	Engineering Design	Engineering Construction Services	Construction	Total Project Cost
Developer Contribution	\$ 225,000	\$ 0	\$ 1,545,250	\$ 1,770,250
Cherry Creek Basin Water Quality Authority (25%)	\$ 170,121	\$ 82,443	\$ 824,431	\$ 1,076,995
Town of Castle Rock Stormwater	\$ 285,362	\$ 247,330	\$ 928,043	\$ 1,460,735

Item #: File #: TMP 2021-997

TOTAL	\$ 680,483	\$ 329,773	\$ 3,297,724	\$ 4,307,979
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Design and permitting are scheduled to be complete in summer of 2023 and construction will be complete in spring of 2024.

Notification and Outreach Efforts

The project is generally located within Town owned open space and vacant land owned by Starwood Land Ventures. Town staff will work with the developer to obtain the necessary easements to construct the project. Three adjacent residential lots in unincorporated Douglas County and one HOA parcel may require additional easements and will be evaluated as part of this scope. Alternatives will be evaluated to eliminate and/or minimize the need for additional easements. If additional easements are required, Town staff will follow appropriate Town policy for acquisition. Project details and updates are also provided on the Town website, CRgov.com.

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

Town Council approved a Subdivision Improvement Agreement with Stratus Terrain, LLC for the Terrain North Basin on October 8, 2021, which obligated funds for design of this project in the amount of \$225,000.

The Cherry Creek Basin Water Quality Authority approved their 2022 Budget on November 18, 2021, which included an allocation of funds under their capital plan for design of this project in the amount of \$170,121.

Castle Rock Water staff will present this design contract to the Castle Rock Water Commission at their meeting to be held on January 26, 2022.

Discussion

McMurdo Gulch is a western tributary to Cherry Creek, extending along the eastern edge of the Town. The entire McMurdo Gulch channel is approximately 6.7 miles long from the headwaters to the confluence with Cherry Creek and encompasses a tributary area of approximately 6.5 square miles.

The Authority has been a funding partner with the Town on McMurdo Gulch since 2011. The original project in 2011 totaled approximately \$1.5 million of which the Authority contributed \$630,000. Those improvements showed tremendous success and demonstrated a measurable improvement to nutrient concentrations through the Authority's annual monitoring program. In 2017, the Town conducted a stream assessment following significant growth in the upper headwaters of McMurdo Gulch.

In 2020, the Town completed the Priority 1 Improvements at four locations where the channel was experiencing stream degradation. The total length of these four areas was approximately two thousand lineal feet at a project cost totaling approximately \$1.677 million of which the Authority contributed \$420,000.

Priority 2 Improvements are currently under construction and includes four locations (approximate length of 3,100 lineal feet) where the channel was experiencing stream degradation. This project is estimated to cost \$2.227 million of which the Authority will contribute up to \$615,000.

The Town issued a Request for Proposals (RFP) for design of the McMurdo Gulch Priority 3 Project on October 27, 2021, on the Town's Rocky Mountain Bid Net site. Four consultants attended the pre-proposal meeting, and one (1) proposal was received from Muller Engineering Company, Inc. Town staff reviewed the proposal and found Muller qualified based on the set of criteria included in the RFP. Following the qualification-based selection process, the fee schedule was opened and reviewed. Review found the fee to be reasonable for the proposed scope included in the fee proposal. Muller's fee was \$499,803.

To aid in evaluating Muller's proposed design fee since only one proposal was received, Muller's 2021 Priority 3 design fee (\$499,803) was compared to the 2021 project construction budget (\$3,297,724) as a percentage (15.2%). Muller's 2019 Priority 2 design fee (\$329,008) was compared to the 2019 project construction engineer's estimate (\$2,130,364) as a percentage (15.4%). Muller's 2018 design fee (\$183,822) was compared to the 2018 construction low bid cost (\$1,054,973) as a percentage (17.3%). Based on this evaluation Muller's proposed Priority 3 design fee was found to be a consistent value for the project size and scope. Muller's proposal and fee combination represented the best value for the Town in terms of project approach and understanding, technical expertise and scope of services provided.

Budget Impact

Funds for this Services Agreement will be charged to the Stormwater capital account below. Sufficient stormwater funds for this project are included in the 2022 budget. Additionally, the Town has received funds from Stratus Terrain, LLC in the amount of \$225,000 and has requested engineering design funding from the Authority in the amount of \$171,000. It is anticipated that the Authority Board will review and approve this funding through the Participation Agreement at their January 20, 2022 Board meeting.

<i>Fund Description</i>	<i>Account Number</i>	<i>Amount</i>	<i>Contingency</i>	<i>Total</i>	<i>2022 Budget</i>
<i>McMurdo Gulch Stream Stbl</i>	<i>212-4475-444.75-51</i>	<i>\$499,803</i>	<i>\$49,980</i>	<i>\$549,783</i>	<i>\$680,483</i>

Staff Recommendation

Staff recommends Town Council approval of a Resolution awarding a Services Agreement with Muller Engineering Company, Inc., for the McMurdo Gulch Stream Reclamation Priority 3 Project at a cost of **\$499,803** plus a 10% Town-managed contingency in the amount of \$49,980 for a total authorization in the amount of \$549,783.

Proposed Motion

Item #: File #: TMP 2021-997

"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: Services Agreement
Attachment B: Project Site Map



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 7. **File #:** TMP 2022-011

To: Members of the Castle Rock Water Commission

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

**Resolution Approving a Construction Contract with 53 Corporation, LLC for the
Omni Tributary - Prairie Hawk Drive to Red Hawk Drive Project** *[1662 Marsh Hawk
Drive and 1551 Prairie Hawk Drive]*

Town Council Agenda Date: January 18, 2022

Executive Summary

Attached is a copy of the Council Memo for the above referenced project for your information.

Attachments

Attachment A: TC Memo Omni Tributary Project



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/18/2022

Item #: 14. File #: TMP 2021-1009

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

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

Resolution Approving a Construction Contract with 53 Corporation, LLC for the Omni Tributary - Prairie Hawk Drive to Red Hawk Drive Project [1662 Marsh Hawk Drive and 1551 Prairie hawk Drive]

Executive Summary

Castle Rock Water is seeking Town Council approval of a Resolution (**Attachment A**) awarding a Construction Contract (**Exhibit 1**) to 53 Corporation, LLC, for the Omni Tributary - Prairie Hawk Drive to Red Hawk Drive Project. The contract amount is \$1,337,740.00, plus staff requests a 10% Town-managed contingency in the amount of \$133,774.00, for a total project authorization of \$1,471,514.00. This project will be funded through the Stormwater Fund, and is located within Town owned open space between Prairie Hawk Drive and Red Hawk Drive (see **Attachment B**). This project will install stream stabilization improvements within the Omni Tributary drainageway and an Unnamed Tributary minor drainageway. This segment of tributary is significantly degraded, and if stabilization is not performed in the next several years, there is the risk of continued degradation which will impact water quality, private property, and public infrastructure. The project is scheduled to be completed by September 2022.

Notification and Outreach Efforts

All of the proposed improvements will be constructed within Town owned Open Space. Property owners adjacent to the drainageway will be notified in advance of the start of construction and informed of the project's scope and duration. Periodic construction updates will be provided for the project's duration. Temporary traffic modifications (lane closures, trucks and equipment entering/exiting the project site) and construction noise during normal working hours will occur during the project's duration.

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

This item will be presented to the Castle Rock Water Commission on January 26, 2022.

Discussion

Item #: 14. File #: TMP 2021-1009

This project implements improvements recommended for Omni Tributary between Red Hawk Drive and Prairie Hawk Drive and on Unnamed Tributary in the Omni, Industrial and Westfield Watershed Master Plan (January 2011). The primary objectives of this project are to restore the drainageway channel to pre-development conditions, reduce flood risk to adjacent residential properties, decrease sediment transport downstream and preserve existing vegetation and trees to the maximum extent possible. This will be accomplished by raising the channel with earth fill material, constructing a series of grouted boulder drop structures, installing riprap to prevent channel bank erosion and restoring existing culvert riprap protection at two locations. Also, an existing triple culvert crossing of a neighborhood concrete trail will be replaced on Unnamed Tributary to enhance pedestrian safety. Additionally, maintenance access to the drainageway will be improved by constructing an aggregate surface maintenance path along the length of the project.

The Town solicited construction bids via Rocky Mountain BidNet. Bids were received from ten (10) contractors and are shown below:

<u>Contractor</u>	<u>Bid Price</u>
53 Corporation, LLC Civil Specialties, Inc.	\$1,337,740.00
SaBell's Civil and Landscape LLC L & M Enterprises, Inc. Concrete Express, Inc. (dba CEI) American West Construction, LLC Frontier Environmental Services, LLC	\$1,443,858.74
Hudick Excavating, Inc. (dba HEI Civil)	\$1,445,228.05
Summers Construction, Inc. Meridiam Partners, LLC	\$1,978,319.00
<i>Engineer's Estimate</i>	\$1,997,843.40
	\$2,095,468.00
	\$2,239,830.00
	\$2,365,006.50
	\$2,580,895.50
	Incomplete Bid
	\$1,700,000.00

53 Corporation, LLC is the confirmed lowest bidder, and has demonstrated that they are qualified to perform the proposed work under the contract, having successfully constructed previous similar projects for the Town and other local clients.

Budget Impact

This project was identified as a Legacy project under the bank loan approved by Council in 2019 and will be funded by Castle Rock Water through the Stormwater Enterprise capital accounts shown below. The shortfall in funds will be covered through the first quarter budget amendment utilizing unspent funds in the Stormwater Capital account 212-4475-444.77-28 from 2021 which has a remaining balance of \$1.4 million.

Fund	Account Number	Amount	Cont.	Total	2022 Budget
Omni Trib Stabilization	212-4475-444.75-76	\$1,337,740.00	\$133,774.00	\$1,471,514.00	\$ 784,000

Item #: 14. File #: TMP 2021-1009

Staff Recommendation

Staff recommends Town Council approval of a Resolution awarding a Construction Contract to 53 Corporation, LLC for the Omni Tributary - Prairie Hawk Drive to Red Hawk Drive Project in the amount of \$1,337,740.00, plus staff requests a 10% Town-managed contingency in the amount of \$133,774.00, for a total project authorization of \$1,471,514.00.

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: Construction Contract
Attachment B: Site Map



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 8. **File #:** TMP 2022-023

To: Members of the Castle Rock Water Commission

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

Update on Water Commission By-Laws
Town Council Agenda Date: NA

Executive Summary

This will be an information only item.



Town of Castle Rock

Agenda Memorandum

Agenda Date: 1/26/2022

Item #: 9. **File #:** TMP 2022-017

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 the month include:

There are no items at this time.