



To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

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

Title **Resolution Approving an Intergovernmental Agreement for the Cost Sharing, Construction and Capacity Allocation of a WISE Pump Station at Parker Water & Sanitation District** *[PWSD's Rueter-Hess Water Purification Facility in Parker, Colorado]*

Executive Summary

The purpose of this memorandum is to seek Town Council approval of a resolution (**Attachment A**) for an Intergovernmental Agreement (IGA) with Parker Water & Sanitation District (PWSD), Dominion Water and Sanitation District (DWSD), and South Metro Water Supply Authority (SMWSA) for the cost sharing, construction and capacity allocation of a Water Infrastructure Supply Efficiency (WISE) pump station and associated infrastructure.

One of Castle Rock's key pieces of our renewable water supply portfolio is water from the WISE project. The WISE Program is a source of renewable and sustainable water supply for ten (10) south metropolitan water providers, including Castle Rock, DWSD and PWSD. Since 2018, Castle Rock has received approximately 4,800 AF of WISE water. In 2015, a 42-inch steel RidgeGate Line (RGL) was designed and constructed to convey WISE water from the primary WISE East-West transmission main to the RGL regional partners. At that time, the associated WISE receiving tank, pump station, and site piping were deferred and the pump station inside PWSD's existing Rueter-Hess Water Purification Facility (RHWPf) was used to pump WISE water. PWSD is now in need of its own pump station capacity within the RHWPf.

In January 2022, PWSD, Castle Rock and DWSD entered into an IGA for the design of the WISE pump station and infrastructure. HDR was selected as the top respondent with a total design fee of \$825,600 (Castle Rock's portion of the design being \$401,372.32). In June 2023, Town Council approved a change order for HDR's additional design efforts of \$228,400 (with Castle Rock's portion being \$123,336). As part of this latest Town Council consideration, HDR is requesting a design change order (additional authorization) for \$43,010 (with Castle Rock's portion being \$23,225) to cover additional procurement package submittal reviews, value engineering work, updating of the plans and specifications to meet the 2021 International Building Code as

now required by Douglas County, and additional surveying for utility locating for natural gas and liquid ammonium sulfate lines on site.

In February 2024, PWSD received construction bids for the Pump Station and infrastructure from four general contractors (Filanc, RN Civil, Glacier, and Archer Western) with bids ranging from \$14,820,380 to \$19,388,900. PWSD is recommending moving forward with a construction contract with Filanc. In addition to the general contractor's construction costs, there will be costs for HDR's engineering services during construction, third-party testing, and Xcel Energy's costs for natural gas service upgrades. The total estimated costs for Castle Rock are \$8,823,605. A breakdown of these costs is provided in the Discussion section below.

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

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on March 27, 2024, and the Castle Rock Water Commission voted unanimously 7 to 0 to recommend Town Council approval of the Resolution as presented.

See **Attachment B** for a comprehensive list of the history of the WISE and associated programs.

Discussion

The South Metro region has historically been reliant on groundwater for its water supply resources. With the WISE system coming online in 2018, the Town of Castle Rock and other WISE partners have been enjoying a renewable and sustainable water resource. The WISE system conveys flows via the East-West 54-inch pipeline along E-470 to partner's individual turnouts and to the 42-inch RGL. The RGL conveys water to the flow control vault located at PWSD's 10 million-gallon-per-day (MGD) RHWPF site, where it is introduced into the clearwell for mixing and pumped to Zone 2 of PWSD's distribution system. RGL project partners of PWSD (Castle Rock Water, DWSD, Stonegate, and Pinery) accept their WISE water deliveries via interconnects from PWSD's distribution system.

The WISE Pump Station was previously deferred due to the WISE ramp-up period from 2018-2024. During the ramp-up, individual member flowrates gradually escalate to their ultimate peak allocations available in June 2025, pending hydrologic conditions. Since 2018, the fully contracted WISE water deliveries were unavailable and the RHWPF pump station was able to meet demands of both PWSD customers and WISE project partners. However, with full WISE deliveries coming online and increasing customer demands within PWSD, the time to build the full WISE infrastructure capacity at PWSD has arrived.

The project will be located on PWSD property of the RHWPF. Key components of the IGA for construction of the WISE Pump Station include:

1. A new building to house pump equipment and controls, a new flow control vault, a wet well, a surge tank, chemical facilities, and equipment for adjustment of the chloramine residual in the water. This new facility will also include the piping to

connect to PWSD's water delivery system.

2. Four pumps that have the capacity to move 16.8 MGD of WISE water.
3. The operational flexibility to bypass water within the pump station and an interconnection to RHWPF.
4. Value engineering techniques were used during design to eliminate a permanent backup generator to feed the WISE Pump Station and ancillary equipment. Instead, in an emergency, WISE flows can be directed through the RHWPF which does have a backup generator. The RHWPF has a docking station for a temporary generator as well.
5. The construction project will be managed by PWSD staff.
6. PWSD will own and operate the facilities. Following the completion of the construction project Castle Rock and DWSD will be granted a license for their respective capacities.
7. PWSD will schedule regular meetings during construction that each party will be invited to attend. Invoicing will be sent by PWSD to each party monthly.

Following the construction of the WISE Pump Station and associated infrastructure, Castle Rock will have a total pumping capacity of 11.5 MGD. Castle Rock's pro-rata share of the construction phase is 52% based on a total capacity of 22.2 MGD (Castle Rock with 11.5 MGD or 52%, PWSD with 6.5 MGD or 29% and DWSD with 4.2 MGD or 19%).

A breakdown of the construction phase items is included in Table 1.

Table 1: WISE Pump Station Construction Phase Cost Breakdown

Project Item Description	Cost	Pro-Rata Cost Share		
		CRW	PWSD	DWSD
HDR Design Change Order	\$43,010	\$23,225	\$12,903	\$6,882
Construction Bid (Filanc)	\$14,820,380	\$7,706,598	\$4,297,910	\$2,815,872
Pipeline Cost (PWSD Only)	\$361,000	\$ - -	\$361,000	\$ - -
Amount Split Among Partners	\$14,459,380	\$7,518,878	\$4,554,220	\$2,747,282
Construction Contingency (7%)	\$1,037,427	\$526,321	\$318,795	\$192,310
Construction Engineering Services (HDR)	\$916,000	\$476,320	\$265,640	\$174,040
Third Party Testing Contract (est.)	\$100,000	\$52,000	\$29,000	\$19,000
Xcel Energy (gas system upgrades) [est.]	\$50,000	\$26,000	\$14,500	\$9,500
Total =	\$16,966,817	\$8,622,744	\$5,195,058	\$3,149,014

Construction is scheduled to start in May 2024 and work is to be completed and operational by June 2025.

Budget Impact

The cost to implement the work is estimated at \$17,377,817 which includes HDR's final design change order, Filanc's construction bid, engineering services during construction (provided by the design engineer, HDR), third-party testing, and Xcel's costs for natural upgrades. Castle Rock's requested authorization for this project is \$8,823,605.

Monies for this project will come from 211-4375-443.77-72 Water Resources, CIP – WISE Infrastructure, Project Code <WR WLI>. This account has a budget of \$10,186,050 for 2024.

Staff Recommendation

Staff and Castle Rock Water Commission recommend that Town Council approve the Agreement as presented in ***Exhibit 1***.

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:	Agreement
Attachment B:	History