

Agenda Item

DATE: JUNE 11, 2024
TO: DOUGLAS COUNTY BOARD OF COUNTY COMMISSIONERS
THROUGH: DOUGLAS J. DEBORD, COUNTY MANAGER
FROM: DAN AVERY, SPECIAL PROJECTS MANAGER
SUBJECT: HIGHWAY 85 WASTEWATER PROJECT UPDATE

OVERVIEW AND BACKGROUND

In May of 2023, Douglas County executed ARPA funding agreements with Castle Rock Water and the Dominion Water and Sanitation District (DWSD) to fund wastewater improvements on the Highway 85 corridor. The agreements required the parties to “identify the most cost effective and beneficial means of providing wastewater treatment” to the corridor from among three alternatives, including construction of wastewater treatment near Louviers, construction of wastewater treatment at a DWSD property on the Platte River, or utilization of existing Castle Rock Water capacity in the Plum Creek Water Reclamation Authority (PCWRA) facility.

To date, the parties entered into contracts for the preliminary design of a Dominion wastewater plant, lift station and force main from Louviers, and water line to Louviers. Based on these preliminary design discussions, the parties mutually propose two separate wastewater solutions for the Highway 85 corridor. The separate proposals are described briefly below, and in greater detail in attached summaries.

Castle Rock Water – Southern Highway 85 Corridor

Castle Rock Water proposes provision of wastewater collection and treatment to a service area around Sedalia. The proposed system would include a lift station northwest of Sedalia and a force main for conveyance to PCWRA. Castle Rock Water requests \$14 million under an amended and restated ARPA agreement.

Dominion Water and Sanitation District – Northern Highway 85 Corridor

DWSD proposes provision of wastewater collection and treatment to a service area around Louviers. The proposed system would include a lift station north of Louviers, a force main for conveyance into the DWSD collection system, and construction of a wastewater treatment plant. As proposed, DWSD would be responsible for other costs associated with the wastewater plant and would also remain responsible for causing construction of a water line to Louviers. DWSD requests \$20 million under an amendment to their existing ARPA agreement.

Additional Louviers Water and Sanitation District Funding

Staff also proposes an additional allocation of \$2 million in ARPA funding to Louviers Water and Sanitation District (LWSD) for necessary water line replacement. A portion of the funds could also be used to address costs incurred by LWSD while establishing applicable water and wastewater service agreements with DWSD and the Range Metropolitan District.

ANALYSIS

Construction of two wastewater systems to serve the Highway 85 corridor is consistent with a conceptual design developed for Douglas County by Diamondback Engineering. To date, the parties have entered into contracts totaling \$1,738,400 for preliminary design of project components. Additional ARPA funds would be required to fulfill the funding proposals described above. Redirected Broadband funds could be used for this purpose. Accrued interest earned between now and the second or third quarter of next year would also be necessary to fund each of the projects in full.

NEXT STEPS

Staff is prepared to discuss both items with the Board.

ATTACHMENTS

- DWSD Revised ARPA Proposal to Douglas County
- Castle Rock Water Revised ARPA Proposal Summary



June 4, 2024

Revised ARPA Proposal to Douglas County

Dominion Water & Sanitation District (Dominion) has engaged in several years of stakeholder meetings with Douglas County, Louviers Water & Sanitation District, and Castle Rock Water in order to construct a regional wastewater system along the E-85 as well as a renewable water line to Louviers. Through the process of engineering these solutions it became apparent to follow the recommendations of the County's consultant Diamondback - to split wastewater flows at Sedalia, such that wastewater flows in Sedalia travel south and the area north of Sedalia would travel north to Louviers and ultimately Dominion's wastewater treatment facility (Chatfield Basin Water Reclamation Facility / CBWRF). This updated ARPA proposal includes:

1. Dominion receiving \$20,000,000 from American Rescue Plan Act (ARPA) funds in return for designing and constructing the following infrastructure:
 - a. A lift station and forcemain from Louviers' sewer lagoon, to include decommissioning of the lagoon, to the Sterling Ranch Community Authority Board (CAB) infrastructure at Moore Road currently estimated at \$7,000,000.
 - b. A potable water line to connect to CAB infrastructure at Moore Road and a master meter vault to be located near Louvier's existing water tank currently estimated to be \$4,200,000.
 - c. A wastewater treatment plant currently estimated to be \$28 million located at Dominion's CBWRF site that will serve the existing 2,400 occupied homes in Sterling Ranch as well as the 124 homes in Louviers, provide redundancy to the 3,000+ homes in Roxborough, and keep 0.2 MGD of County wastewater capacity for future growth along E-85.
2. Dominion will be taking cost over-run risk for these improvements and reserves the right at its sole discretion to condition new development to offset the costs associated with the additional infrastructure.
3. Dominion commits to have the CBWRF completed by 2028, with the Louviers lift station, forcemain and waterline by 2031, unless fees collected from new development is sufficient to advance those projects, while spending the ARPA funding within the December 2026 timeframe.
4. A cost comparison to illustrate Dominion's proposal and Castle Rock's wastewater and Dominion's proposal of the water/wastewater solution:



ARPA Proposal Summary

Wastewater

	Castle Rock	Dominion	
Lift Station & Forcemain Capacity	0.5	0.2	MGD
Lift Station & Forcemain Costs	\$14,000,000	\$7,000,000	
Plant Costs	To be paid later	\$9,000,000	
Summary Wastewater	\$14,000,000	\$16,000,000	

***Note Dominion's plant is more than \$28,000,000. The \$9,000,000 is an allocation. In addition, this capacity is more expensive, due to the nature of constructing a new plant.**

ARPA Proposal Summary

Water

	Castle Rock	Dominion	
Water Line to Louviers	N/A	\$4,180,000	
Summary Water	\$0	\$4,180,000	

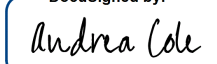
Total Water and Wastewater	\$14,000,000	\$20,180,000	
-----------------------------------	--------------	--------------	--

***Note Dominion's most shovel ready project is the Wastewater Treatment Plant and on a cash flow basis, the \$20,000,000 will be applied to the Plant, while Dominion will remain committed to construct the other improvements.**

By providing Dominion with funding of \$20,000,000 from the Douglas County ARPA funds, Douglas County is ensuring that existing and future communities along the Highway 85 Corridor will have safe treatment of their wastewater which improves existing environmental conditions. This project will allow for the replacement of currently outdated wastewater facilities including lagoons within the Highway 85 corridor, eliminating the discharge of contaminants through the alluvial to Plum Creek and ultimately Chatfield Reservoir.

In summary, Dominion is committed to Douglas County and the Community of Louviers (Louviers), in that Dominion will design and construct a lift station and forcemain that decommissions the Louviers lagoon and connects the Community to safe and reliable wastewater treatment well into the future. Dominion is also committed to design and construct a waterline to connect Louviers to safe, reliable and renewable water supplies. Upon completion of the waterline, Louviers will have access to potable water supplies after facing a CDPHE enforcement order due to elevated radionuclides in groundwater supplies for some time.

Andrea Cole,

DocuSigned by:

24537AB811BD46E...
General Manager

Dominion Water & Sanitation District

June 7, 2024

Attention: Doug DeBord
Douglas County
100 Third Street
Castle Rock, CO 80104

RE: Revised ARPA Proposal to Douglas County

Dear Doug,

Castle Rock Water has engaged in several years of stakeholder meetings with Douglas County, Louviers Water & Sanitation District, Dominion Water and Sanitation District and other regional stakeholders (including potential new development, Douglas County Schools, CORE and Sedalia) in order to construct a regional wastewater system along the E-85 corridor. Through the process of engineering these solutions and investing approximately \$1.2M of the American Rescue Plan Act (ARPA) funding on the Chatfield Basin Water Reclamation Facility (CBWRF) and the Louvier's Lift Station, the recommendations of the County's consultant, Diamondback, were reconsidered. As a result, Castle Rock Water has provided an option for a lift station in Sedalia, such that wastewater flows in the service area could travel south to Castle Rock Water's capacity in the Plum Creek Water Reclamation Authority (PCWRA) treatment facility providing more options and flexibility than the previous option with just a lift station in Louviers feeding the CBWRF.

Castle Rock Water believes that the current option for some level of division of wastewater flows and capacity provides for a reasonable investment and plan for wastewater flows near term, but that final flow of wastewater across the service area should be market based with future development having the opportunity to utilize Douglas County's available capacity going in either direction based on actual estimated costs to connect and availability to provide maximum flexibility and most efficient utilization. This updated ARPA proposal includes:

1. Castle Rock investing up to \$14M of Douglas County's ARPA funding to design and construct a lift station in Sedalia and a force main from that lift station to PCWRA's treatment plant south of Sedalia capable of carrying approximately 600,000 gallons per day of wastewater.
2. Castle Rock making available to customers in the corridor an equivalent amount of treatment capacity, 600,000 gallons per day of wastewater, at the cost of \$4,458 per single family equivalent (SFE) with an estimated 2,727 SFEs available.
3. Castle Rock Water will complete the lift station and force main by the end of 2026. Castle Rock Water already has capacity available in the PCWRA treatment plant so complete wastewater service would be available by the end of 2026.
4. Castle Rock Water is committed to being the retail wastewater provider for any customers which connect to the system, and will also evaluate retail renewable water service availability on a case by case basis. Castle Rock Water will charge a 10% extraterritorial fee on all system development fees (SDFs) and service fees.
5. Castle Rock Water will collect SDFs based on pro-rated costs of capacity in the lift station and force main from new development (Castle Rock Water assumes existing development will not pay SDF for lift station and force main) that connects to the infrastructure and return that to Douglas County for either reinvestment into the wastewater collection and treatment system or other purposes as defined by

Douglas County. Based on an estimated cost of \$14M, Castle Rock Water would return a SDF of \$6,159 per single family equivalent to Douglas County.

6. Douglas County will own all of the capacity in the lift station and force main and make all decisions regarding service availability and land use until customers connect at which point the capacity will transfer to Castle Rock Water.

Current estimated costs for the project are summarized below:

Item	Estimated Cost (0.6 MGD of Capacity)	Estimated Cost per SFE (Assuming 220 Gallons per SFE)
Sedalia Lift Station and Force Main (paid with ARPA funds)	\$14,000,000	\$6,778 per SFE (\$616 includes Extraterritorial Charges)*
PCWRA Treatment Capacity (paid with in-kind reuse water from customer or cash from customer)	\$12,158,181**	\$0 or \$4,458 per SFE**
Total Estimated Costs	\$26,158,181	\$6,778 to \$11,236 per SFE**

**Castle Rock Water assumes this SDF will be waived for existing development in the service area by Douglas County. This fee includes a 10% Extraterritorial surcharge that Castle Rock Water will keep with the remainder of the SDF returned to Douglas County.*

***To be paid by customer or Douglas County could use system development fee reimbursements from new development for existing residents in corridor. For customers with reusable water supplies, this cost would be completely offset by dedication of the reusable water to Castle Rock Water.*

The partnership between Douglas County and Castle Rock Water will provide 1) environmental benefits and water quality improvements to the watershed and Chatfield Reservoir by eliminating failing septic tank systems, 2) economic opportunities for new development and redevelopment in the region, 3) the ability to fully capture and reuse water supplies, 4) economies of scale to provide competitive water and wastewater service in the region into the future, and 5) support for the ability of a significant local employer to expand. If you have questions, please feel free to call me at 720-733-6001.

Sincerely,

Mark Marlowe, PE
Director of Castle Rock Water