

Attachment B

2021-2025 Budget Request Summary

Department: Castle Rock W			Fund:																							
Request Description	One- Time/Recurring	Prioritization			2021			2022			2023			2024			2025			Total Expenditures	Projected Additional Revenues					Total Revenues
		Council Priority	Identified in Community Survey?	Level of Service Impact	New FTE's	New Vehicle	Amount	New FTE's	New Vehicle	Amount	New FTE's	New Vehicle	Amount	New FTE's	New Vehicle	Amount	New FTE's	New Vehicle	Amount		2021	2022	2023	2024	2025	
Total Requests: 4					-	-	663,011	-	-	282,088	-	-	294,799	-	-	308,181	-	-	322,280	1,870,359	-	-	-	-	-	-
Meter Technician	Recurring	Securing our water future	No	Yes - Maintain LOS	-	-	125,555	-	-	86,311	-	-	90,268	-	-	94,442	-	-	98,841	495,417	-	-	-	-	-	-
Stormwater Operator II	Recurring	Securing our water future	No	Yes - Increase LOS	-	-	89,417	-	-	93,427	-	-	97,645	-	-	102,087	-	-	106,770	489,346	-	-	-	-	-	-
2022 Water Plant Operator	Recurring	Securing our water future	No	Yes - Maintain LOS	-	-	98,039	-	-	102,350	-	-	106,886	-	-	111,652	-	-	116,669	535,596	-	-	-	-	-	-
Wheeled Excavator	One-time	Securing our water future	No	Yes - Maintain LOS	-	-	350,000	-	-	-	-	-	-	-	-	-	-	-	350,000	-	-	-	-	-	-	

2022-2026 Budget Request

Submitted By: Anne Glassman

Request Type

Personnel

Request Name

Meter Technician

Is the requested expenditure one-time or recurring?

Select the Strategic Priority addressed by this request:

Does this address a need in the community survey?

Does this address a level of service need?

Recurring

Securing our water future

No

If yes, please explain below

Yes - Maintain LOS

How do you classify this request? **Mandatory**

Description and Justification

Currently we have a service level that requires all meters within the Town to be read within three days. Those three days are the first three business days of the month regardless if they fall on a weekend or holiday. We are currently approaching 25,000 meters to serve and maintain. The number of accounts has grown between 3-5% over the last several years and the service area has expanded to include several extra territorial agreements that are not yet reflected in the 25,000 accounts.

With recent growth and projected growth in Castle Rock, the meter set inspection and re-inspection process has been a full time position for one technician. Approximately 1,800 meter set inspections have been performed per year over the last two years. Approximately 50% of those are re-inspections creating multiple service orders for technicians to respond to the same property. Although education and training has been conducted with the builders we are still seeing this consistent percentage of re-inspections. Non-residential meter set inspections require more time to complete which we have seen an increase in over the last few years. Currently our service level is 0-4 days which is the longest inspection turnaround time compared to other town department inspections. The team would like to be able to complete these in 2-3 days but resources do not allow this at this time, however we are meeting the 4-day level of service.

Meter Services took over the bulk hydrant program from Operations in 2019. At any one time there are approximately 50-60 active bulk hydrant meters in service. This requires the technicians to be backflow certified to conduct inspections. The bulk hydrant meters are also assembled on a dolly system which requires significant time to assemble before delivering to the customer. This does not include time to calibrate, deliver, test, move and inspect each hydrant when it changes owners or locations.

Disconnections/reconnections are conducted once a month which average 3 full days a month which takes technicians away from other maintenance service orders. As the account base grows, the amount of disconnections increases as well. For safety reasons, technicians only perform disconnections in pairs, so with four technicians, we only have two teams at most available at any one time for disconnections. This then leaves no technicians to perform other duties those 3 days of the month.

Several years ago we purchased a mobile bench testing unit to test larger meters in the field without having to replace them and send them out to test. Based on AWWA standards, 3" and larger meters are to be bench tested annually and 1.5" and 2" meters are to be bench tested every 5 years. We have yet to make any progress on this program with the limited resources. We currently have 41 meters 3" and larger and 724 meters in the 1.5" and 2" sizes combined.

Should Castle Rock Water migrate to an AMI system in the future, there are approximately 14,000 MXU's that are "R" radios that would need to be changed to "M" radios. Currently they are only being changed out as they fail. We only make traction in this area when we have used seasonal help in the summer to upgrade the MXU's. Approximately 13,000 meters of varying sizes would need to eventually be changed out also to accommodate AMI technology. Currently we have 645 open service orders, of those approximately 381 are curb stop maintenance which in many cases can be an all day job to correct. Approximately 30 of those are being put into an RFP for third party work due to the nature of the work being in concrete. In addition, our metering infrastructure is aging and several open service orders are for meter replacement or meter pit replacement. With the aging infrastructure comes more skipped reads due to MXU's needing to be replaced, etc. Technicians have to obtain the skipped reads by visiting the property and then going back to perform the maintenance during the month so they do not skip again during the next meter reading cycle.

We have averaged approximately 3,800 final reads per year for the last two years. This requires a technician to go to each property and obtain a final read for final billing.

Estimated Expenditures

Personnel

Account Number	Acct Description	2020 Actuals	2021 Budget	2022	2023	2024	2025	2026	Total
Multiple-See Below	Personnel-Multiple		\$ -	\$ 82,555	\$ 86,311	\$ 90,268	\$ 94,442	\$ 98,841	\$ 452,417
Ford F150 Truck - Estimate				\$ 43,000					\$ 43,000
									-
									-
									-
									-
									-
									-
	Total Expenditures	\$ -	\$ -	\$ 125,555	\$ 86,311	\$ 90,268	\$ 94,442	\$ 98,841	\$ 495,417

Revenue Considerations

[illegible]

2022-2026 Budget Request

Submitted By: Name, Position Title

Request Type

Request Name

Personnel

Stormwater Operator II

Is the requested expenditure one-time or recurring?

Select the Strategic Priority addressed by this request:

Does this address a need in the community survey?

Does this address a level of service need?

Recurring

Securing our water future

No

If yes, please explain below

Yes - Increase LOS

How do you classify this request?

Q Mandatory

Description and Justification

Request: The purpose of this new Full Time Employee (FTE) is to increase current service levels and meet new maintenance program levels for forecasted growth and development.

Background (Deficiency or Condition that exists):

- The Stormwater (SW) maintenance team consists of the SW Supervisor and three full time Operators. The team is currently responsible for inspecting and maintaining all Town owned ponds, catch basins, outfalls, man holes and pipe. With the anticipated growth of the Town, the outfall and pond maintenance identified during zone inspections and additional SW infrastructure, maintenance and repair requirements will continue to increase.
- Strategy 5 - Goal 1 - Tactic 4, in Castle Rock Water's Strategic Plan, states that we are going to "Evaluate the cost-benefit of adopting privately-owned stormwater facilities". While the Stormwater Maintenance team is fully committed to accepting this challenge, the team is not sufficiently staffed, to maintain additional sites. For example: there are 408 storm ponds in the Town of Castle Rock, Castle Rock Water (CR Water) is currently responsible for maintaining only 99 of these sites. One additional operator will allow the team to begin maintenance on private stormwater infrastructure, and start evaluating future staff and equipment needs.
- In 2017, Stormwater (SW) Engineering initiated a new maintenance program that divides the Town into five zones, creating a five-year cycle of maintenance for ponds and outfalls. An additional FTE is requested, in order to complete the additional repair projects identified as a result of stormwater asset inspections.
- Routine maintenance performed by the SW maintenance team includes removing debris from detention ponds, channels, outfalls and culverts. This work is required throughout the year with increased necessity after periods of high precipitation.
- New communities in the development phase, result in additional emergency maintenance, even with storms that produce a minimal amount of precipitation. Runoff and sediment from these neighborhoods have the potential to quickly fill up designated SW infrastructure and cause flooding, creating hazards to public safety.
- Under the direction of the Stormwater Engineering division, the stormwater maintenance team has been asked to manage contractors conducting repairs and maintenance on existing stormwater infrastructure, beginning in 2022. This work will include CCTV of existing pipe and managing replacement projects for corrugated metal pipe (CMP) and reinforced concrete pipe (RCP).

Program Description and Benefit to Customers:

- The additional FTE would create two crews, of two operators, safely and efficiently working on separate jobs. This will allow for multiple maintenance projects to be performed at the same time.
- This addition would provide the group with consistent safety oriented, trained and reliable support; negating the need to request staff from other Town departments.
- The additional FTE will allow the team to begin the process of assuming additional maintenance responsibilities for the Town's private Stormwater infrastructure.
- The additional FTE will provide an additional CDL driver for the Town's Snow Removal program.

Estimated Expenditures

Personnel

Account Number	Acct Description	2020 Actuals	2021 Budget	2022	2023	2024	2025	2026	Total
Multiple-See Below	Personnel-Multiple			\$ 89,417	\$ 93,427	\$ 97,645	\$ 102,087	\$ 106,770	\$ 489,346
								\$ -	-
									-
									-
									-
									-
									-
	Total Expenditures	\$ -	\$ -	\$ 89,417	\$ 93,427	\$ 97,645	\$ 102,087	\$ 106,770	\$ 489,346

Revenue Considerations

[illegible]

2022-2026 Budget Request

Submitted By: David Montgomery, Treatment Services Superintendent

Personnel

2022 Water Plant Operator IV Position

Recurring

Securing our water future

No

If yes, please explain below

Yes - Maintain LOS

? Mandatory

Please include details of the request and provide justification to support the need:

The purpose of this request is to add one Full Time Equivalent (FTE) Water Plant Operator IV position. With the recent startup of the newly constructed Advanced Treatment Plant at the Plum Creek Water Treatment Facility, staff determined that additional personnel are needed to safely operate the processes and water treatment plants(WTP), 24 hours per day, seven days per week (24/7). Furthermore, increasing demands operating additional infrastructure, such as the new Plum Creek Pump Station, additional WISE water import operations, Bell Mountain Ranch and water quality monitoring requirements, are spreading staff too thin. Additional operations staff is needed in order to ensure water quality and expand water operations management.

In 2020, plant operations began 24/7 operations. The original operating plan consisted of one operator on 2nd Shift (Swing) and one operator on 3rd Shift (Grave) which required four operators, in order to provide seven-day coverage. When Advanced Treatment Plant (ATP) at the Plum Creek Water Purification Facility (PCWPF) began operations, the Water Treatment Operations Supervisor soon recognized the complexity and scope of operating the new ATP processes: LOX, ozone, peroxide, UV and solids handling systems.

New ATP systems require staff to conduct additional sampling and lab analysis, handle chemicals, and instrument calibrations. The guidance for operating the ATP is that ALL of the advanced treatment trains must be operating to treat re-use water. The nighttime operators now make rounds through the chemical rooms, make chemical adjustments, follow up with additional sampling and lab analysis, as well as ensure that all ATP treatment trains are functioning. As, a result it soon became obvious that these duties could not be performed safely by operators working alone on the overnight shifts. Four senior operators were then reassigned, moving from days (1st Shift) to shift 2 and overlapping into third shift, to assist the nighttime operator with the extra ATP duties.

By reassigning daytime operators to the night shifts, safety was improved, but the number of daytime operators was reduced, affecting the day shift work load. Daytime work typically includes handling chemical deliveries, assisting plant maintenance staff with equipment repairs, inspecting well and pump station facilities, assisting contractors and engineering, completing water treatment plant filter backwashes, performing flux maintenance on the Pall microfiltration system and ensure that all ATP treatment trains are functioning. During the low winter demand season this shortage is manageable, but during high demand months April through October, this staff shortage is anticipated to cause problems. When the original 24/7 concept was developed, it was anticipated that the 2nd and 3rd shift would consist of a single operator, who would spend their time looking through the well, pump station, and treatment plant control screens to find problems and rebalance the water tanks levels to restore from that day's consumption and have water in place for the next day's demand. With the growth of systems, processes, equipment, technicality, and geography (two trips to Sedalia per day), staff will be hard pressed to meet the challenges at current staffing levels. This system will require constant monitoring by experienced water plant operators, in order to ensure staff safety and high water quality.

The workload facing plant operations is increasing for several reasons:

Personnel

Account Number	Acct Description	2020 Actuals	2021 Budget	2022	2023	2024	2025	2026	Total
Multiple-See Below	Personnel-Multiple			\$ 98,039	\$ 102,350	\$ 106,886	\$ 111,652	\$ 116,669	\$ 535,596
								\$	-
									-
									-
									-
									-
	Total Expenditures	\$ -	\$ -	\$ 98,039	\$ 102,350	\$ 106,886	\$ 111,652	\$ 116,669	\$ 535,596

Account Number	Acct Description	2020 Actuals	2021 Budget	2022	2023	2024	2025	2026	Total
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[illegible]

2022-2026 Budget Request

Submitted By: Name, Position Title

Other	
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Wheeled Excavator

One-time

Securing our water future

No	If yes, please explain below
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Yes - Maintain LOS

How do you classify this request? Optional

Business Case Request The purpose of this BCR is to request the purchase of a Wheeled Excavator with a Krypto Klaw bucket, to be utilized by the Field Services (FS) team, to perform maintenance and repairs of Castle Rock Water owned infrastructure.

Over the years Castle Rock Water has installed and/or purchased several miles of large diameter (>16") pipeline (Wise pipeline, Sedalia pump station line, the PCWPF alluvial well line, Mitchell Creek Force main). These pipelines are mostly PVC, or in the case of the Ravenna pipeline Fiberglass (FRP) and have areas of deep bury depths.

Pipeline excavation utilizing the backhoe and excavator

As Castle Rock Water infrastructure ages, the frequency of emergency repairs is going to rise. As repair frequency increases, so too will the complexity of repairs. The Town has allowed for narrower residential

Personnel

[illegible]

Account Number Acc

[illegible]