

CASTLE ROCK WATER

RESOLUTION APPROVING TOWN OF CASTLE ROCK 2023 WATER MASTER PLAN

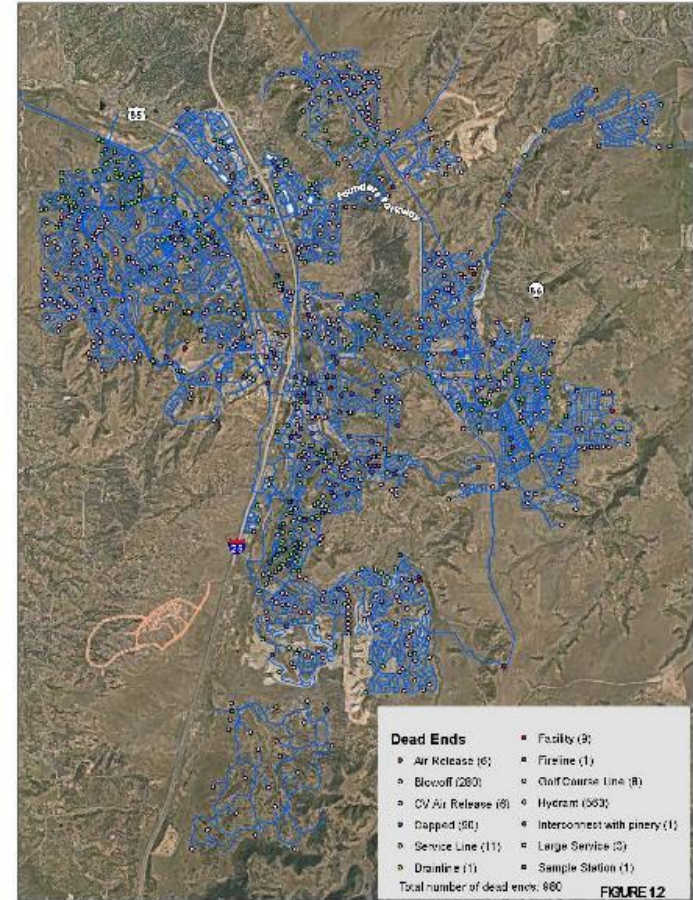
MAY 2, 2023



2023 WATER MASTER PLAN

HYDRAULIC MODELING

- Growth Projections
- Demands
 - ✓ Demands re-calculated based on new Landscape Ordinance
 - ✓ 100-135 gpcd based on water conservation
 - ✓ Base case uses 118 gcpd
- Re-evaluate the hydraulic model
 - ✓ Provides recommendations on capital projects
 - ✓ Helps determine needed rates and fees



2023 WATER MASTER PLAN

KEY WATER MASTER PLAN RECOMMENDATIONS – STRATEGIC

- Continue to investigate direct potable reuse (DPR)
- Expansion of PCWPF from 6MGD to 12MGD with an estimated cost of \$60 plus Million
- Advance regional projects and partnerships
- Increase reusable supplies and supporting infrastructure
- Support state and local efforts to reduce nutrients in our water
- Defend our groundwater water rights against harmful regulatory changes
- Identify and implement projects to improve overall sustainability
- Additional Denver Basin groundwater wells



Plum Creek Water Purification Facility

2023 WATER MASTER PLAN

KEY WATER MASTER PLAN RECOMMENDATIONS – WATER QUALITY

- Evaluate water quality health advisories and regulations continuously
- Programs to ensure raw water quality in reservoirs



Castle Rock Reservoir 1

2023 WATER MASTER PLAN

WATER MASTER PLAN RECOMMENDATIONS – DISTRIBUTION SYSTEM

- Complete Advanced Metering Infrastructure (AMI)
- Ramp up the Rehab and Replacement plan budget constraints of \$2 Million/year (2% of system annually)
- Utilize interconnect with Pinery to bring CCPWA renewable water back to Ray Waterman for blending and distribution with an estimated cost of \$10,000,000
- Integrate Bell Mountain into the Castle Rock Water service area improving their system and utilizing combined resources
- Construction of Tank 11B, a new 2.3 MG tank with an estimated cost of \$6,600,000
- Replacement of the aging Tank 3 with an estimated cost of \$2,200,000



Inside a Water Tank

2023 WATER MASTER PLAN

WATER MASTER PLAN RECOMMENDATIONS - OPERATIONS

- Execute the SCADA Master Plan with a focus on continuing to improve our cybersecurity
- Full system inspections annually



Pressure Reducing Valve Vault

2023 WATER MASTER PLAN

RATES AND FEES

- Annual Rates and Fees Study
 - ✓ Review cost of service models
 - ✓ Evaluate Capital Plan
 - ✓ Revisit cost estimates
 - ✓ Avoid Rate Shock
- Long-term capital plan of \$416 Million through 2066
 - ✓ Increase of \$113 Million from previous plan
 - ✓ Includes enhanced Rehab and Replacement and new water treatment plant in Crystal Valley Ranch
- Rates - planned increases from 3.0 to 4.5 percent from 2023 rates for 2024 through 2028
- System Development Fees – adopted 2023 increases for the water fund were 10%, we re-evaluate this every year based on growth and actual capital needs

2023 WATER MASTER PLAN

RECOMMENDATIONS

- Staff
- Castle Rock Water Commission

Questions?

2023 WATER MASTER PLAN

MOTION OPTIONS

PROPOSED MOTION:

“I move to approve the Resolution 2023-058 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).”