

CASTLE ROCK WATER STRATEGIC PLAN



JUNE 4, 2019



NEW 5 YEAR STRATEGIC PLAN

PREVIOUS PLAN

Strategies

- Strategy 1 – Ensure long-term water availability
- Strategy 2 – Utilize Town values to fulfill Utilities Vision and Mission
- Strategy 3 – Enhance customer satisfaction
- Strategy 4 – Maintain financial sustainability
- Strategy 5 – Optimize infrastructure performance
- Strategy 6 – Demonstrate industry leadership

	Total Tactics	Completed	Ongoing	Not Completed	Missing	Completed plus Completed and Ongoing
Overall	197	16%	58%	23%	3%	74%
Strategy 1	55	24%	36%	40%	0%	60%
Strategy 2	33	9%	85%	6%	0%	94%
Strategy 3	18	22%	39%	39%	0%	61%
Strategy 4	33	9%	58%	21%	12%	67%
Strategy 5	27	11%	85%	4%	0%	96%
Strategy 6	31	16%	58%	23%	3%	74%

Results

- Covered 2013 to 2018
- 197 tactics with 74% completed
- Created and tracked 23 key performance indicators

NEW 5 YEAR STRATEGIC PLAN

MISSION / VISION / STRATEGIES

- Vision – Be a national leader
- Mission – Provide our community with exceptional service

Strategies

- Strategy 1 – Ensure long-term water
- Strategy 2 – Support, engage and inspire our team
- Strategy 3 – Enhance customer satisfaction
- Strategy 4 – Maintain financial sustainability
- Strategy 5 – Optimize infrastructure performance
- Strategy 6 – Demonstrate industry leadership

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 1 – ENSURE LONG TERM WATER

- Goal 1 – Secure water supplies to meet our customer water demands
 - Example tactic 1-1-7 Complete expansion of Castle Rock Reservoir 2
- Goal 2 – Fully utilize groundwater and renewable supplies
- Goal 3 – Emphasize water efficiency to help reduce overall water demands
- Goal 4 – Protect our water supply sources
- Goal 5 – Develop strategic partnerships to support long term water
- 36 Tactics in all for strategy 1



Castle Rock Reservoir 1 – key component of Goal 1

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 2 – SUPPORT, ENGAGE AND INSPIRE OUR TEAM

- Goal 1 – Invest in our organization by recruiting & retaining competent, talented people
- Goal 2 – Live Town values to ensure a healthy organization that will drive high performance
- Goal 3 – Integrate health and safety into the daily functions of Castle Rock Water to systematically eliminate the root causes of deficiencies and to consistently and continuously improve safety performance
 - Example Tactic 2-3-2 Establish processes to ensure effective employee participation in the HSMS
- 18 Tactics in all for strategy 2



Safety stand down training as part of our Health & Safety goal

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 3 – ENHANCE CUSTOMER SATISFACTION

- Goal 1 – Identify and respond to stakeholder needs, perceptions and expectations through effective communication
- Goal 2 – Provide innovative and cost-effective approaches to exceptional customer service
- Goal 3 – Increase effectiveness of communication and education to our customers
 - Example Tactic 3-2-6 Implement Advanced Metering Infrastructure (AMI) solution
- 16 Tactics in all for strategy 3

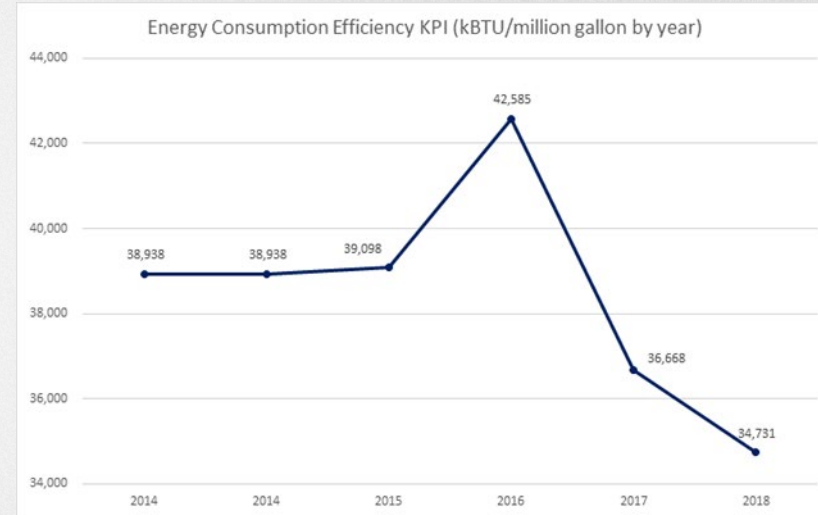


Advanced metering infrastructure communications equipment

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 4 – MAINTAIN FINANCIAL SUSTAINABILITY

- Goal 1 – Strive to maintain sustainable rates and fees, and demonstrate fiscal responsibility, accountability and transparency
 - Example Tactic 4-1-6 Evaluate the use of renewable energy, like solar power, to reduce operational costs.
- Goal 2 – Operate on a cost-of-service basis and effectively managing expenditures and revenues
- 12 Tactics in all for strategy 4



Energy consumption patterns over last 6 years – goal 1 is to improve

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 5 – OPTIMIZE INFRASTRUCTURE PERFORMANCE

- Goal 1 – Maintain and enhance infrastructure stability and performance to optimize life-cycle costs
 - Example Tactic 5-1-3 Evaluate and update procedures for identifying capital rehabilitation and replacements for water, wastewater and stormwater assets
- Goal 2 – Develop and manage infrastructure to keep pace with growth
- Goal 3 – Protect infrastructure through emergency preparedness, planning and response
- 17 Tactics in all for strategy 5



Manhole to be rehabilitated in the next year

NEW 5 YEAR STRATEGIC PLAN

GOALS STRATEGY 6 – DEMONSTRATE INDUSTRY LEADERSHIP

- Goal 1 – Strive for continuous improvement throughout the organization through the application of the principles of Deming's Quality Cycle (Plan, Do, Check, Act) in all facets of the organization
 - Goal 2 – Deliver a high-quality product and service to our community
 - Goal 3 – Be a forward-thinking organization
 - Example Tactic 6-3-1 Plan for Direct Potable Reuse (DPR) by designing systems to meet the expected regulatory requirements
 - Goal 4 – Be a recognized leader among our water utility peers
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- 19 Tactics in all for strategy 6



Our reuse water logo

NEW 5 YEAR STRATEGIC PLAN

KEY PERFORMANCE INDICATORS

- Types of indicators
 - Organizational Development
 - Business Operations
 - Customer Service
 - Water Operations
 - Wastewater Operations
 - Stormwater Operations
- Added new indicators
- 30 indicators in all
- Tracked against American Water Works Association national benchmarks

Castle Rock Water AWWA KPI Dashboard													
● Performance Improving		● Top Quartile AWWA											
● Performance Declining		● Median Quartile AWWA											
● Performance Lying about the same		● Bottom Quartile AWWA											
		Units	Frequency	2014	2015	2016	2017	2018	Quartile	Progress	AWWA Top	AWWA Median	AWWA Bottom
Organizational Development													
1.	Customer Accounts per Employee	Accounts	A	533	458	492	481	440	●	∞	609	492	367
2.	Employee Turnover Rate	Employees / Year	A	12%	19%	15%	14%	19%	●	0	5%	8%	11%
3.	Training Hours per Employee	Hours	A	31	30	35	39	32	●	0	27.1	13.9	5.9
4.	Overtime Hours per Employee	Hours	A	32	33	28	54	43	●	0			
OSHA Safety Indicators													
5.	OSHA Incident Rate	—	M	21	10	4	3	5	●	0	2.1	14.3	50.9
6.	Days without a Lost Time Injury/Illness	Days	M	187	207	573	938	48	●	0	-	-	-
7.	Total # of Incidents	Incidents	M	17	13	9	2	7	●	0	4.3	16.0	47.8
Business Operations													
8.	Debt Ratio	%	A	19%	15%	15%	13%	12%	●	∞	20%	33%	52%
9.	Operating Ratio	%	Q	33%	34%	32%	28%	31%	●	∞	46%	50%	68%
10.	Energy Consumption Efficiency (Water)	kBTU/MG/Year	A	38,938	36,098	42,585	36,668	32,946	●	0	3,924	6,123	8,766
11.	Triple-Bottom-Line Index	%	A	70%	60%	60%	60%	70%	●	0	85%	60%	50%
Customer Service													
12.	Customer Service Complaints - Don't Track	# Complaints/2,000 Accts	M	-	-	-	-	-	●	0	0.3	4.1	15.6
13.	Technical Service Complaints (WQ)	# Complaints/2,000 Accts	M	1.01	1.07	0.0001	1.2700	0.8200	●	0	2.9	8.5	22.5
14.	Cost of Residential Service (Average Monthly Bill)	\$/mo	A	\$ 102.35	\$ 103.17	\$ 108.32	\$ 116.28	\$ 126.11	●	0	\$ 70.95	\$ 88.70	\$ 120.51
Water Operations													
15.	Compliance Rate	% Days in Compliance	A	100%	100%	100%	100%	100%	●	∞	100%	100%	100%
16.	Operation Cost (\$/MGD)	\$/MGD	Q	\$ 4,254.86	\$ 4,384.00	\$ 4,307.45	\$ 4,490.17	\$ 5,213.62	●	0	\$ 1,778.00	\$ 2,425.00	\$ 3,337.00
17.	MGD/Employee	MGD/Employee	A	0.15	0.14	0.13	0.14	0.14	●	0	0.29	0.23	0.17
18.	Water Distribution System Integrity	Breaks/Leaky/200 Miles of Pipe	M	3.08	4.86	3.72	4.99	7.35	●	0	4	8	22
Nonrevenue Water													
19.	Apparent Water Loss	MG	A	32	35	38	39	42	●	∞	-	-	-
20.	Real Water Loss	MG	A	148	135	248	236	62	●	0	-	-	-
Consumption (gpcd)													
21.	Total Volume Water Produced / Total Population Served	gpcd	A	109	112	118	116	114	●	∞	-	-	-
22.	Total Volume Water Metered (Residential Customers)	KG	A	1,337,702	1,429,900	1,553,604	1,640,470	1,754,892	●	0	-	-	-
23.	Renewable Water Usage Rate (%)	%	M	13.2%	16.9%	11.0%	18.1%	29.0%	●	0	-	-	-
24.	Total Renewable Water Amount	MG	M	295,888,149	272,003,804	300,545,089	407,851,044	857,786,345	●	0	-	-	-
25.	Reversible Water Usage Rate (%)	%	M	-	-	-	-	-	●	0	-	-	-
Wastewater Operations													
26.	Sewer Overflow Rate	SSO/100 Miles of Pipe	M	-	0.79	-	-	1.07	●	∞	0.2	2.0	7.0
27.	Operational Cost (\$/MGD)	\$/MGD	Q	\$ 3,546.99	\$ 3,158.49	\$ 3,481.61	\$ 3,532.53	\$ 3,820.58	●	0	\$ 1,607.00	\$ 2,318.00	\$ 3,881.00
28.	MGD Processed / Employee	MGD/Employee	A	0.14	0.12	0.10	0.09	0.10	●	∞	0.26	0.19	0.14
Stormwater Operations													
29.	Stormwater Customer Inquiries per Total Single Family Equivalent (SFEs)	# Complaints/SFE	Q	0.0069	0.0066	0.0059	0.0053	0.0055	●	0	-	-	-
30.	Stormwater Operating Costs per Total SFEs	\$/SFE	Q	\$ 53.24	\$ 63.18	\$ 77.05	\$ 64.64	\$ 61.24	●	0	-	-	-

NEW 5 YEAR STRATEGIC PLAN

KEY TACTICS AND RECOMMENDATIONS

Key Tactics

- Advanced Metering Infrastructure,
- Direct Potable Reuse,
- Coloradoscapes,
- Apprenticeship Program,
- Renewable Energy,
- Stormwater CIP, pond ownership and excess water,
- Rehabilitation/Replacements,
- Water Quality, and
- Partnerships

Recommendations

- Water Commission
- Staff



The challenge of road salt and water quality



THANK YOU

I MOVE TO APPROVE RESOLUTION NO. 2019-065 A
RESOLUTION APPROVING THE CASTLE ROCK WATER
FIVE-YEAR STRATEGIC PLAN (2019-2023)