

CHATFIELD WATERSHED AUTHORITY WATER QUALITY PROJECTS ROADMAP : 2025 - 2029												
4/2/2024 DRAFT - Based on Estimated \$200,000 Funding / Year from SB-267												
PROJECT CATEGORY	DESCRIPTION	ACTIVITY	2025	2026	2027	2028	2029	Beyond 2029	TOTAL COST	PRIORITY	IMPLEMENTATION COMMENTS / STRATEGY	
<b>WATER QUALITY PROTECTION</b>												
<i>"In Progress"</i>												
1	Watershed Modeling	Use and upgrade the existing watershed model to: 1. Keep model current; 2. Predict the effectiveness and potential changes in stream and reservoir inflow pollutant loads and concentrations from proposed water quality improvements; and 3. Support regulatory compliance.	\$1,000	\$4,000	\$10,000	\$30,000	\$30,000	\$75,000	\$150,000	1	Initiate planning for watershed model update.	
2	Stream Management Planning	Partner with CPW and others in stream management plans to identify opportunities for water quality improvement projects.	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$75,000	\$100,000	1	Continued Support for West Plum Creek Stream Management Plan.	
3	Wildfire Mitigation	Participate in wildfire mitigation projects to minimize and mitigate the risk and effect on water quality of future wildfires in the watershed.			\$15,000	\$15,000	\$15,000	\$30,000	\$75,000	3	Identify partner agencies and grant opportunities.	
4	Watershed Plan Update	Continue to document the progress made in improving watershed and reservoir water quality and develop and prioritize future watershed programs and projects.				\$45,000	\$50,000	\$0	\$95,000	3	Last update to the Watershed Plan was in May 2015. Plan and budget for watershed plan update.	
5	Reservoir Beneficial Use Monitoring	Partnering with CPW in collecting, monitoring, and documenting, as applicable, the quantity and quality of reservoir beneficial uses (i.e. fishery biodiversity, swimmer satisfaction, etc.) over time.					\$5,000	\$20,000	\$25,000	4	Discuss with CPW possible beneficial use metrics that can be measured and tracked.	
6	Landowner Engagement	Continue engagement efforts with landowners abutting and/or crossing watershed streams to educate on best management practices for stream interaction and protection.		\$1,000	\$1,000	\$1,000	\$1,000	\$6,000	\$10,000	3	Monitor WPCSM landowner outreach efforts and responses to inform viability of landowner outreach in other parts of the Chatfield watershed.	
<b>SUB-TOTAL</b>			<b>\$6,000</b>	<b>\$10,000</b>	<b>\$31,000</b>	<b>\$96,000</b>	<b>\$106,000</b>	<b>\$206,000</b>	<b>\$455,000</b>			
<b>WATER QUALITY MONITORING</b>												
1	Chatfield Reservoir Monitoring	Collect additional water quality data in the reservoir to support water quality protection measures.				\$15,000	\$15,000	\$15,000	\$130,000	\$175,000	2	Use "Site Specific" analysis work to inform additional parameters /data /locations for future water quality monitoring.
2	Watershed Streams Monitoring	Collect additional water quality data in the tributary watershed streams (both base flows and storm flows) to understand existing sources and magnitudes of pollutant loads and concentrations.				\$15,000	\$15,000	\$15,000	\$180,000	\$225,000	2	Analyze existing data /trends to inform need for additional parameters /data /locations for future water quality monitoring.
3	Water Quality Improvement Project Monitoring	Collect pre-project and post-project water quality data upstream and downstream of water quality projects to document their effectiveness over time in improving water quality.				\$4,000	\$6,000	\$6,000	\$24,000	\$40,000	2	Establish water quality monitoring guidelines for water quality projects.
4	Sediment Sampling and Testing	Perform watershed wide sediment testing to map and pinpoint hotspots of phosphorus rich soils for future project identification and prioritization.						\$20,000	\$0	\$20,000	3	Use previous /future CSM data/analysis and CWA monitoring data to help inform sampling locations to test for phosphorus rich soils.
<b>SUB-TOTAL</b>			<b>\$0</b>	<b>\$0</b>	<b>\$34,000</b>	<b>\$36,000</b>	<b>\$56,000</b>	<b>\$334,000</b>	<b>\$460,000</b>			
<b>WATER QUALITY IMPROVEMENTS</b>												
1	Stream Improvements	Contribute to and participate in the implementation of stream improvements identified in stream management plans that improve water quality in the streams tributary to the reservoir.	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$250,000	1	Monitor and document stream improvement plans and opportunities.	
2	Erosion Mitigation	Contribute to and participate in the construction of stream reclamation along critical degraded watershed stream reaches to enhance water quality and reduce streambank erosion.	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$325,000	\$750,000	1	Identify projected future stream reclamation projects (local governments and MHFD).	
3	Grant Funding Opportunities	Partner with CPW and other government and non-profit agencies to identify and apply for grant funding for implementation of water quality improvement projects and programs in the state park and throughout the watershed.	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0	\$50,000	1	Update and maintain a CWA qualifying list of grant opportunities. Explore actions needed to overcome restrictions to grant qualification.	
4	Non-point Source Mitigation Projects	Contribute to and participate in the construction of retrofits to existing detention ponds and other stormwater facilities to improve nutrient and pollutant reduction efficiencies.				\$5,000	\$5,000	\$5,000	\$185,000	\$200,000	2	Work with member governments to identify retrofit opportunities.
6	Mitigate Agricultural Impacts to Water Quality	1. Participate in the implementation of agricultural best management practices (BMPs) and demonstrations at Colorado Agricultural Leadership Foundation (CALF) at Lowell Ranch to educate members of the public that visit the working ranch on the water quality and cost efficiencies associated with implementing various agricultural management practices; and 2. Participate with the Douglas County Conservation District to educate agricultural users on state-of-the-art practices to reduce pollutant impacts from agricultural activities.				\$5,000	\$5,000	\$5,000	\$85,000	\$100,000	3	Reach out to CALF, JDC, and DCD to identify opportunities for educational outreach.
7	Mitigate On-site Wastewater Treatment Systems (OWTS) Impacts to Water Quality	Contribute to and participate in the implementation of a rebate program for septic system upgrades that use new technology to reduce pollutant loads in critical stream reaches.					\$1,000	\$1,000	\$48,000	\$50,000	4	Document location of OWTS. Coordinate with DCHD and JCHD on possible opportunities for promotion of improvements to aging OWTS.
8	Wastewater Treatment Improvements	Engage with wastewater treatment providers to assist in promoting improved treatment for continued nutrient reduction.					\$2,500	\$2,500	\$5,000	\$10,000	4	Monitor WQCD's activities and processes for nutrient regulations related to WWTF improvements.
9	Reservoir Improvements	Funding of Water Quality Related Improvements in Chatfield State Park	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$250,000	1	Partner with CPW to Develop Proposed Water Quality Improvement Projects in Chatfield State Park	
<b>SUB-TOTAL</b>			<b>\$195,000</b>	<b>\$195,000</b>	<b>\$205,000</b>	<b>\$208,500</b>	<b>\$208,500</b>	<b>\$648,000</b>	<b>\$1,660,000</b>			
<b>GRAND TOTAL</b>			<b>\$201,000</b>	<b>\$205,000</b>	<b>\$270,000</b>	<b>\$340,500</b>	<b>\$370,500</b>	<b>\$1,188,000</b>	<b>\$2,575,000</b>			
								<b>PRIORITY 1</b>	<b>\$1,550,000</b>			
								<b>PRIORITY 2</b>	<b>\$640,000</b>			
								<b>PRIORITY 3</b>	<b>\$300,000</b>			
								<b>PRIORITY 4</b>	<b>\$85,000</b>			