	CHATFIELD WATERSHED AUTHORITY WATER QUALITY PROJECTS : 2024 - 2028								
	11/10/2022 DRAFT								
PROJECT CATEGORY	DESCRIPTION	ACTIVITY	2024	2025	2026	2027	2028	TOTAL COST	PRIORITY
WATER QUALITY PROTECTION									
1	TMAL Allocation Development	Perform calculations and analysis needed to establish revised total annual maximum loads (TMAL) for all point source dischargers in the watershed.		$50,000	$50,000			$100,000	1
2	Site-Specific Nitrogen Standard Development	Perform calculations and analysis needed to establish a site specific standard for total nitrogen in the reservoir.			$35,000	$35,000	$35,000	$105,000	1
3	Watershed Modeling	Use and upgrade the existing watershed model to: 1.Keep model current; 2. Predict the effectivenenss and potential changes in stream and reservoir inflow pollutant loads and concentrations from proposed water quality improvments; and 3. Support regulatory complience.	$30,000	$30,000	$30,000	$30,000	$30,000	$150,000	1
4	Reservoir Modeling	Contract with the CRMC to use and upgrade the existing reservoir model to: 1. Predict the effectivenenss and potential changes in reservoir water quality from constructed and proposed water quality improvments; 2. Understand the role of each pollutant source (i.e. internal loading, stream inflow loading, etc.) on reservoir water quality; 3. Understand how the reallocation project may change the needed site specific standards, and 4. Support regulatory compliance.	$35,000	$35,000	$35,000	$35,000	$35,000	$175,000	1
5	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	$15,000	$15,000	$75,000	3
6	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.	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000	3
7	Reservoir Beneficial Use Monitoring	Support 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	$5,000	$5,000	$5,000	$5,000	$25,000	3
8	Stream Management Planning	Participate in stream management plans to identify opportunites for water quality improvement projects.	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000	2
9	Landowner Engagement	Continue engament efforts with landowners abuting and/or crossing watershed streams to educate on best management practices for stream interaction and protection.	$2,000	$2,000	$2,000	$2,000	$2,000	$10,000	3
SUB-TOTAL			**$97,000**	**$147,000**	**$182,000**	**$132,000**	**$132,000**	**$690,000**	
WATER QUAILITY MONITORING									
1	Chatfield Reservoir Monitoring	Collect water quality data in the reservoir to support water quality protection measures.	$35,000	$35,000	$35,000	$35,000	$35,000	$175,000	1
2	Watershed Streams Monitoring	Collect 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.	$45,000	$45,000	$45,000	$45,000	$45,000	$225,000	1
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	$2,000	$3,000	$4,000	$5,000	$6,000	$20,000	2
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					$20,000	3
SUB-TOTAL			**$102,000**	**$83,000**	**$84,000**	**$85,000**	**$86,000**	**$440,000**	
WATER QUALITY IMPROVEMENTS									
1	Wastewater Treatment Improvements	Engage with wastwater treatment providers to assist in promoting improved treatment for continued nutrient reduction.	$2,000	$2,000	$2,000	$2,000	$2,000	$10,000	3
2	Agricultural Mitigation	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 agricutural users on state-of-the -art pratices to reduce pollutant impacts from agricultural activities.	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000	3
3	Septic Systems Mitigation	Contribute to and participate in the Implimentation of a rebate program for septic system upgrades that use new technology to reduce pollutant loads in critical stream	$4,000	$4,000	$4,000	$4,000	$4,000	$20,000	3
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	$15,000	$15,000	$15,000	$15,000	$15,000	$75,000	2
5	Stream Improvements	Contribute to and participate in the implimentation of stream improvements identified in stream management plans that improve water quality in the streams tributary to the reservoir.	$30,000	$30,000	$30,000	$30,000	$30,000	$150,000	1
6	Erosion Mitigation	Contribute to and participate in the constructionof stream reclamation along critical degraded watershed stream reaches to enhance water quality and reduce streambank erosion.	$45,000	$45,000	$45,000	$45,000	$45,000	$225,000	1
7	Grant Funding Opportunities	Partner with government and non-profit agencies to identify and apply for grant funding for implimrntation of water quality improvement projects and programs.	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000	1
SUB-TOTAL			**$106,000**	**$106,000**	**$106,000**	**$106,000**	**$106,000**	**$530,000**	
GRAND TOTAL			**$305,000**	**$336,000**	**$372,000**	**$323,000**	**$324,000**	**$1,660,000**	
							PRIORITY 1	**$1,330,000**	
							PRIORITY 2	**$120,000**	
							PRIORITY 3	**$210,000**	