

CRESTLINE SANITATION DISTRICT

MEMORANDUM

DATE: 08/13/2026

TO: BOARD OF DIRECTORS
Crestline Sanitation District

FROM: DAWN GRANTHAM
General Manager

SUBJECT: PRIMARY CLARIFIER EVALUATION

I received this memo from Brandon regarding the old primary clarifier.

On Thursday July 30th Operations staff noticed water flow coming from under the Trickling-Filter dose tanks onto the Trickling Filter. Fearing a broken water line under the concrete structures they informed me and we investigated. Upon further investigation we found substantial undermining of the dirt supporting the concrete dose tanks and chose to stop digging from that angle. We turned off the fresh water to the plant and still the leak persisted. At that point we isolated the Clarifiers and started to drain them. After the water level in Clarifier 1 dropped below the point where the drain pipe penetrates the side of the clarifier the leak stopped. We investigated the drain line of Clarifier 1 and found the seal had been compromised and needed repair. The Clarifier is now currently empty as we conduct an evaluation of the Clarifier, Clarifier seals, and the integrity of the ground around the clarifiers, where the leak was finding a path through the dirt and leaking onto the Trickling filter.

My recommendation is to have an engineer evaluate the condition under the clarifier and see what they recommend to refill the void.

I believe it is in the Districts best interest to perform a structural inspection and assessment of the two original clarifiers now instead of waiting until year 2029 as described in the Master Plan.

Project No.	HC-5		
Project Name	Huston Creek Primary Clarifiers Structural Assessment		
Description	The existing Huston Creek WWTP Primary clarifiers were constructed in 1950. The existing clarifiers are at risk of failure from structural and geotechnical conditions, as the structures are over 70 years old and were constructed with thin (4") thick walls. With the new primary clarifier in service, the existing clarifiers can be shut down and dewatered to perform a structural inspection and assessment to determine the feasibility of rehabilitation of the clarifiers or if full replacement is needed. <u>Recommended Project:</u> Perform a structural inspection and assessment of the two existing primary clarifiers to determine the condition of the existing structure and equipment, and provide recommendations for rehabilitation and/or replacement.		
Priority	Mid-Term (2-6 Years)		
Project Need			
Reliability	☒	Process Performance	☒
Capacity	☒	Regulatory	☐
District Policy & Goals	☐		
Project Cost			
Construction Cost			
Estimated Construction Cost	N/A		
Soft Costs			
<i>Project Specific</i>			
Engineering & Permitting		\$	169,000
CM & ESDC		N/A	
Administration		N/A	
Soft Cost Subtotal		\$	169,000
Contingency			
Contingency	35% of engineering cost	\$	59,000
Total Project Cost		\$	228,000

Figure 1. CIP Summary Table

Project No.	Project Name	Priority	CIP Budget for Fiscal Year Ending In										Total
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034+	
HC-1	Huston Creek WWTP Retaining Wall	Immediate Works (0-2 Years)	\$ 531,000										\$ 531,000
CS-1	Collection System Flow Data Analysis and Hydraulic Model Updates	Immediate Works (0-2 Years)	\$ 135,000										\$ 135,000
SC-1	Seeley Creek WWTP Access Road Assessment	Immediate Works (0-2 Years)	\$ 95,000										\$ 95,000
SC-2	Seeley Creek WWTP Primary Clarifier Condition Assessment	Immediate Works (0-2 Years)	\$ 142,000										\$ 142,000
HC-3	Houston Creek WWTP Ongoing Facility Safety Upgrades	Immediate Works (0-2 Years)	\$ 60,000	\$ 346,000									\$ 406,000
HC-4	Houston Creek WWTP Access Road Replacement	Immediate Works (0-2 Years)	\$ 365,000	\$ 2,131,000									\$ 2,496,000
SC-7	Seeley Creek Primary Clarifier Upgrade	Immediate Works (0-2 Years)		\$ 150,000	\$ 870,000								\$ 1,020,000
SC-3	Seeley Creek WWTP Primary ODS Electrical Upgrade	Immediate Works (0-2 Years)		\$ 39,000	\$ 228,000								\$ 267,000
LS-1	Lake Gregory Wet Well Capacity Upgrade	Mid-Term (2-6 Years)			\$ 118,000	\$ 690,000							\$ 808,000
SC-5	Seeley Creek WWTP Access Road Replacement	Mid-Term (2-6 Years)			\$ 684,000	\$ 3,983,000							\$ 4,667,000
SC-4	Seeley Creek WWTP Well Construction	Mid-Term (2-6 Years)				\$ 89,000	\$ 516,000						\$ 605,000
SC-6	Seeley Creek WWTP Ancillary Systems Upgrade	Mid-Term (2-6 Years)				\$ 102,000	\$ 594,000						\$ 696,000
HC-2	Nutrient Management Study	Mid-Term (2-6 Years)					\$ 304,000						\$ 304,000
HC-5	Huston Creek Primary Clarifiers Structural Assessment	Mid-Term (2-6 Years)					\$ 228,000						\$ 228,000
HC-6	Huston Creek Primary Clarifier Replacement	Long-Term (7+ Years)						\$ 1,065,000	\$ 1,554,000	\$ 1,601,000	\$ 1,649,000	\$ 1,649,000	\$ 7,567,000
District Total			\$ 1,328,000	\$ 2,666,000	\$ 1,900,000	\$ 4,874,000	\$ 1,642,000	\$ 1,065,000	\$ 1,554,000	\$ 1,601,000	\$ 1,649,000	\$ 1,698,000	\$ 19,977,000
Cleghorn WWTP Project Recommendations (State Funded)													
CL-1	Cleghorn WWTP Concrete Structures Rehabilitation	Immediate Works (0-2 Years)	\$ 323,000										\$ 323,000
CL-2	Cleghorn WWTP Sludge Wasting and Clarifier Upgrades	Mid-Term (2-6 Years)			\$ 34,000	\$ 195,000							\$ 229,000
CL-3	Cleghorn WWTP Oxidation Ditch Upgrade	Mid-Term (2-6 Years)				\$ 144,000	\$ 839,000						\$ 983,000
CL-4	Cleghorn WWTP Headworks Upgrade	Mid-Term (2-6 Years)					\$ 444,000	\$ 2,592,000					\$ 3,036,000
CL-5	Cleghorn WWTP On-Site Generation System Upgrade	Long-Term (7+ Years)								\$ 22,000	\$ 127,000		\$ 149,000
Cleghorn Total (State Funded)			\$ 323,000	\$ -	\$ 34,000	\$ 339,000	\$ 1,283,000	\$ 2,592,000	\$ -	\$ 22,000	\$ 127,000	\$ -	\$ 4,720,000
Combined Total (State & District Funded)			\$ 1,651,000	\$ 2,666,000	\$ 1,934,000	\$ 5,213,000	\$ 2,925,000	\$ 3,657,000	\$ 1,554,000	\$ 1,623,000	\$ 1,776,000	\$ 1,698,000	\$ 24,697,000