




**AGENDA
BILL
Item 7.A**

**Sudden Valley
Water Treatment Plant
Condition Assessment**

DATE SUBMITTED:	June 17, 2020	MEETING DATE:	June 24, 2020
TO: BOARD OF COMMISSIONERS	FROM: Bill Hunter, District Engineer / Assistant General Manager		
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS	None		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL /OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

Lake Whatcom Water and Sewer District contracted with Gray & Osborne, Inc. (G&O) to perform a condition assessment for the existing Sudden Valley Water Treatment Plant (WTP). The condition assessment is the initial step (Phase 1) towards developing a 20-year facility plan. The purpose of the Phase 1 assessment is to investigate the integrity of the existing WTP facilities from a structural, electrical, mechanical, architectural, and process perspective to guide the District’s decisions on use and/or modifications at the WTP.

G&O and staff are working to finalize the Phase 1 condition assessment report, which will be published in the coming weeks. G&O and staff will provide a slide presentation at the Board meeting to summarize condition assessment findings.

The next step is to continue on with alternatives analysis, cost estimates, sequencing and scheduling to develop a 20-year Facility Improvement Plan (Phase 2). The scope of work and fee estimate is under development and will be brought to the Board for discussion and approval at a later date.

Future Phase 3 is anticipated to include design of selected alternatives.

Phase 1 Condition Assessment Summary

The existing WTP is a rapid rate direct filtration plant that uses chlorine gas for disinfection. The plant was originally constructed in 1972 and has a rated capacity of 2.0 million gallons per day (mgd). The WTP has been upgraded several times since its construction, most recently in 1992. The WTP treats surface water from Lake Whatcom and is located on Morning Beach Drive approximately 1 mile northeast of the intersection of Lake Whatcom Boulevard and Marigold Drive.

A site visit was completed on February 12, 2020 by G&O process, mechanical, electrical, and structural engineers. During the visit, G&O discussed the current operations, perceived deficiencies, and desired needs for the WTP with operations staff, and also assessed the

condition of the existing facilities at the WTP Main Building, Finished Water Pump Building, and Chlorine Contact Basin.

The condition assessment identified several items for improvement, but did not find any significant structural, electrical, mechanical, or operational issues that would prevent the WTP from successful operation into the foreseeable future. In general, the facilities are in good condition and only require minor repairs and the completion of regular maintenance items to maintain their current function. The report provides recommendations for alternatives that, if enacted, may improve the operational efficiency of the WTP.

In addition to these recommendations and the listed repairs, the assessment identifies a number of high-priority improvements that should be addressed to ensure the successful operation of the facility in the future. However, the amount of available floor space and tight spacing of equipment creates a significant challenge for any replacements, modifications, or improvements.

G&O and District staff will provide a presentation that reviews the information developed during this initial phase. The presentation will provide the Board with an understanding of the overall methodology, findings, and recommendations on what alternatives and ideas to explore in Phase 2.

The presentation will cover:

- Project Description & Purpose
- Sudden Valley WTP History
- Project Approach
- Assessment Summary
- Summary of Findings
- Summary of Recommendations
- Next Steps

FISCAL IMPACT

No fiscal impact is anticipated.

RECOMMENDED BOARD ACTION

No action is recommended at this time.

PROPOSED MOTION

None.