




**AGENDA
BILL
Item 7.A**

**Sudden Valley Water Treatment Plant
Alternatives Analysis
Briefing #1**

DATE SUBMITTED:	September 17, 2020	MEETING DATE:	September 30, 2020
TO: BOARD OF COMMISSIONERS	FROM: Bill Hunter, Assist. GM/District Engineer		
GENERAL MANAGER APPROVAL			
ATTACHED DOCUMENTS	1. Draft Technical Memorandum – Pump Performance Test		
	2. Draft Technical Memorandum – Chlorine Contact Basin Coating Inspection		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL /OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

The existing Sudden Valley Water Treatment Plant (SVWTP) is located along Morning Beach Drive near the shores of Lake Whatcom and was constructed in 1972. The treatment plant utilizes chemical coagulation, flocculation, rapid media filtration, chemical pH adjustment, and gas chlorine disinfection prior to temporary storage within a 225,000-gallon reservoir also located at the site.

In July 2020, Gray & Osborne (G&O) completed a condition assessment in which engineers evaluated the SVWTP from a process, structural/architectural, mechanical, and electrical perspective. The assessment identified both high and low priority items that should be completed to maintain current and reliable function of the SVWTP into the future.

Following the condition assessment, G&O was contracted to perform an alternatives analysis to help the District select and prioritize specific short- and long-term improvements to the treatment equipment and processes currently in use. The work has been broken down by major systems. For each system, G&O will develop alternatives and document each in the form of a technical memorandum. The results from each system analysis will be presented to the Board at regularly scheduled board meetings.

All of the technical memoranda will ultimately be attached and summarized in an Alternatives Analysis Report. The Report will include comparisons and rankings, recommendation on modifications to system, cost estimates, figures to relay relative space requirements, and more.

The major systems as written in the scope of work agreement are:

- Pump Performance Test
- Chemical Systems Analysis
- Disinfection Systems Analysis
- Backwash Systems Analysis
- Filtration System Analysis
- Tier 2/3 Seismic and Structural Analysis
- Structural/Arch Workspace Analysis
- NACE III Coating Inspection

G&O has completed alternative analyses for the Pump Performance Test and 2.8 NACE III Coating Inspection systems. Draft technical memoranda are attached. The consultant will summarize their findings and recommendations in a presentation, and collect Board comments or questions.

FISCAL IMPACT

This presentation is for discussion only; it is too early in the planning process to estimate fiscal impacts of plant improvements.

RECOMMENDED BOARD ACTION

No action is recommended at this time.

PROPOSED MOTION

Not applicable.