

IMPACT STATEMENT

Legislation title: Accept the report on status of the CBWTP Lagoon Reconstruction Phase 3&4, BES Project E07146 from the Chief Engineer (Report)

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Purpose of proposed legislation and background information:

The purpose of the legislation is to update council on the status of the construction contract with Stellar J Construction, Inc., the lowest responsive bidder for the CBWTP Lagoon Reconstruction Phase 3&4, BES Project Number E07146.

The solids lagoon was built in the 1970's and remains an integral part of the wastewater treatment plant which provides:

- Operational flexibility in the biosolids treatment process, reducing capital investments in other treatment processes and increasing overall reliability;
- Increased biosolids stabilization and improved dewaterability, thus reducing operating costs for dewatering and hauling;
- Recycle stream treatment and equalization, reducing operational risks and treatment requirements in the liquid stream treatment processes;
- Emergency storage of solids.

The Project is a continuation of the CBWTP lagoon reconstruction program, initiated to construct individually lined cells in the 37-acre lagoon. The program will dispose of legacy biosolids, protect groundwater, maintain plant reliability, and improve solids processing operability. Phases 1 and 2 of the reconstruction have previously been approved by Council. The phases of the lagoon reconstruction program include:

- Phase 1 (BES Project No. E07144) - construction of a middle dike to separate the north and south cells of the lagoon, was completed in 2002.
- Phases 2 (BES Project No. E07145) - construction of groundwater control in the south cell, build dike 4, air dry solids, install liner in monofill, start filling monofill, install liner in cells 3/4. Completed in 2015.
- Phase 3&4 (BES Project No. E07146) - air dry solids from cell 1, place in monofill, and dispose of excess solids off-site. Construct dike 1, install liner in cells 1 and 2. Close the monofill with a permanent cover.
- Phase 5 (BES Project No. E07147) - environmental enhancements and landscaping, mainly adjacent to the public trail, and final plantings on the monofill cover.

In Phase 2 of the project, the bureau discovered there was considerable variation in the consistency of the biosolids in the lagoon and the depth of the bottom of the lagoon. Phases 3 and 4 of the program were combined as a result of a Value Engineering effort. Lessons learned during construction Phase 2 which has similar scope elements, were incorporated into the Phase 3&4 Bid Book. In the presentation to council for the authorizing ordinance which occurred in June of 2015, the bureau described the expected variability and notified council that anticipate construction cost could vary from \$9.3M to \$13.6M and gave an engineer's estimate of \$11 million. The contract was awarded December of 2015 for \$9.9M. The bureau and the contractor have worked together in the ensuing year and the current value of the contract is approximately \$11.5M, or 16% over the base contract. A little less than two years have been added to the contract. Some variability is still anticipated in total quantity of biosolids to be removed.

Financial and budgetary impacts:

The estimated construction cost is between \$11.5M and \$13.6M. The bureau will prepare an ordinance for council approval if costs exceed 25% over original contract value as required by Code.

While construction is ongoing, biosolids dredging from the north lagoon has been halted. As a result, the project is estimated to reduce biosolids contract hauling expenses by approximately 20% for at least 2 years, or about \$500,000 a year. These are not considered deferred expenses, as the new lagoon cells require acclimation and stabilization time to reach normal operation.

The project provides improvements to a currently operating facility. It is not anticipated that positions will be created, eliminated, or reclassified in future years as a result of this legislation.

Community impacts and community involvement:

The CBWTP has a longstanding Citizen Advisory Committee (CAC). The CAC is provided with updates at its quarterly meetings on Bureau projects occurring within or near the Plant campus. The CAC has been provided updates previously on this project and will continue to be updated as the project continues. In addition, the surrounding neighborhoods, including Kenton and Portsmouth, will be updated on the status of the project through the Plant’s annual newsletter. Users of the nearby public trail will be notified of periodic trail closures required for specific construction activities via signage at specified trail access points.

Budgetary Impact Worksheet

Does this action change appropriations?

- ☐ **YES:** Please complete the information below.
- ☒ **NO:** Skip this section

Fund	Fund Center	Commitment Item	Functional Area	Funded Program	Grant	Sponsored Program	Amount