

CITY OF ORLAND STAFF REPORT MEETING DATE: October 1, 2024

TO: Honorable Mayor and Orland City Council

FROM: Paul Rabo, City Engineer

Zach Barber, Director of Public Works

SUBJECT: Wastewater Treatment Plant Dredging Project (Discussion/Action)

BACKGROUND:

The City has for many decades operated a lagoon treatment system for processing its waste water by aerobic digestion, percolation and evaporation. This facility and its licensed operation are an important asset for the City to monitor and maintain.

Our wastewater treatment plant (WWTP) is licensed by the State Regional Water Quality Control Board, and operated by City Public Works employees under the direction of a licensed Level 1 WWTP Operator. Monitoring wells in the vicinity track the protection of groundwater resources.

The City in 2015 invested in "Blue Frog" aerators to help postpone the need for remediation by excavation of the first two stage ponds. Although we now realize the frogs would be more effective if spaced out across the ponds instead of clustered at the inlets, they have helped us operate the ponds in regulatory compliance.

ANALYSIS:

Despite digestion and aeration, our ponds have gathered enough sludge to require remediation. Pond 1 is in most urgent need of excavation, although our plan discussed with the commission in 2023 was to start with Pond 2. In any case, excavation requires rerouting to the next pond, air-drying of the sludge, removal and haul-away to a licensed facility that can receive this type of waste. The ponds would then need to be refilled and seeded with new aerobic digestion microbes. Our tentative plan included division of ponds and creation of a serpentine system of flow. The cost of the complete project can be significant, likely in the millions of dollars.

The Public Works & Safety Commission recently examined this issue and voted unanimously to recommend to the Council that the City proceed with a contract to engage a consultant to pursue a plan and grant funding for remediation of the City's ponds. The Commission and City staff recommend a phased project, and engaging a specialized, experienced consultant who can assist the plant operator and engineer in planning the complete project and seeking grant funding.

We have identified a consultant in our region who – as a unique service provider and thus sole-source – has the proven ability to plan and obtain grant funding for a project such as this. Most notable is their recent successful project with Hamilton City. Staff requested a project proposal from this consultant.

For more info: https://www.suspinc.org/

Attachment: Proposal from SUSP Engineering.

RECOMMENDATION:

Proceed with Phase 1 of the proposed WWTP project as proposed by Staff and endorsed by the Commission, engaging SUSP Engineering for planning and grant funding application.

FISCAL IMPACT OF RECOMMENDATION:

Not to exceed \$30,000 from the Sewer Fund which has a reserve balance of \$1.4M.