

DUDEK



Coastal Hazards Response Plan

San Simeon Community Services District

PRESENTED BY DUDEK

OCTOBER 11, 2022

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01

Introductions

Dudek Project Team

Dudek Team



JOHN DAVIS IV
Project Manager, Principal, Senior
Coastal Ecologist



MIKE METTS
Principal Engineer



CAROLYN GROVES
Coastal Planner

02

Schedule

CHRP Grant Schedule

Schedule of Deliverables and Public Outreach 2022

2.4: Stakeholder In-Person Meeting No.1 - Alternatives	Week of November 7th
2.5: Public Outreach	Through 4/30/2023
Outcomes/Deliverables:	
a. Stakeholder List	a. 10/17/2022
b. Public Outreach Plan	b. 10/17/2022
c. Coordination/Stakeholder Meeting Materials (e.g., agendas, minutes, action items)	c. Through 4/30/2023
Task 3. Coastal Hazards Response Plan	Through 4/30/2023
3.1: Evaluate Existing Conditions and Identify Constraints	11/15/2022
3.2: Alternatives Analysis	
a. Alternatives Selection (up to 4)	a. 11/18/2022
b. Alternatives Analysis (up to 4)	b. 12/16/2022
3.3: Identification of a Preferred Site or Alternative	1/17/2023
Stakeholder In-Person Meeting No. 2 - Preferred Alternative	Week of January 30 th

03

Public Outreach

Stakeholders List and Outreach Plan

Public Outreach, Education, and Input

- Public outreach will target all interested members of the public, including all San Simeon residents, local non-profits and community organizations, and stakeholders from the broader region
- Purpose of outreach is proactive and meaningful engagement in development of the CHRP
- Community engagement meetings will be held virtually and in-person, and will cover alternative site selection, wastewater treatment plant design options, the economics of moving the plant, and finally the draft CHRP
- Updates on the CHRP will continue to be provided at Board Meetings and on the project website
- Submit feedback in writing to admin@sansimeoncsd.org

04

Alternative Sites

Alternative Sites

SSCSD

- A, E, D, and X

Other Possible Sites

- Cambria CSD
- State Parks

Additional considerations

- WWTP Technology
- Possible discharge of brine
- Possible removal of the ocean outfall



05

Wastewater Treatment Technologies

Existing Sewer System Map



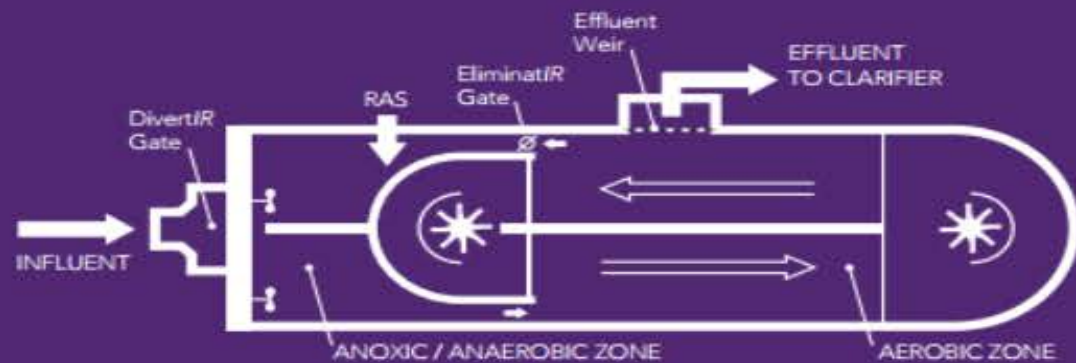
Alternative Treatment Technologies (Activated Sludge)

MAXIMUM TREATMENT, MINIMUM EFFORT

Meet Stringent Nutrient Limits

Reduce Chemical and Energy Usage

Construct, Operate and Maintain Easily



Alternative Treatment Technologies (Activated Sludge)

Activated Sludge Process Provides Nutrient Removal with High Quality Treatment and Energy Savings



The rectangular layout of the SEQUOX Process results in a smaller footprint and easy expansion.

SEQUOX Process

- **Biological nutrient removal**
- **Ability to handle up to 4:1 sustained peak flows with ClarAtor clarifier technology**
- **Continuous clarification with sequencing aeration**
- **Operator friendly, low maintenance**
- **Selector tank promotes better settling characteristics**
- **Dedicated nitrification tank**
- **Sequencing without stopping blowers**
- **No moving parts below the water surface**
- **Superior effluent quality**

Alternative Treatment Technologies (Membrane BioReactor)

► Plant description



Mechanical pre-screening with 3 mm perforated plate or 1 mm bar spacing plus grit/grease trap



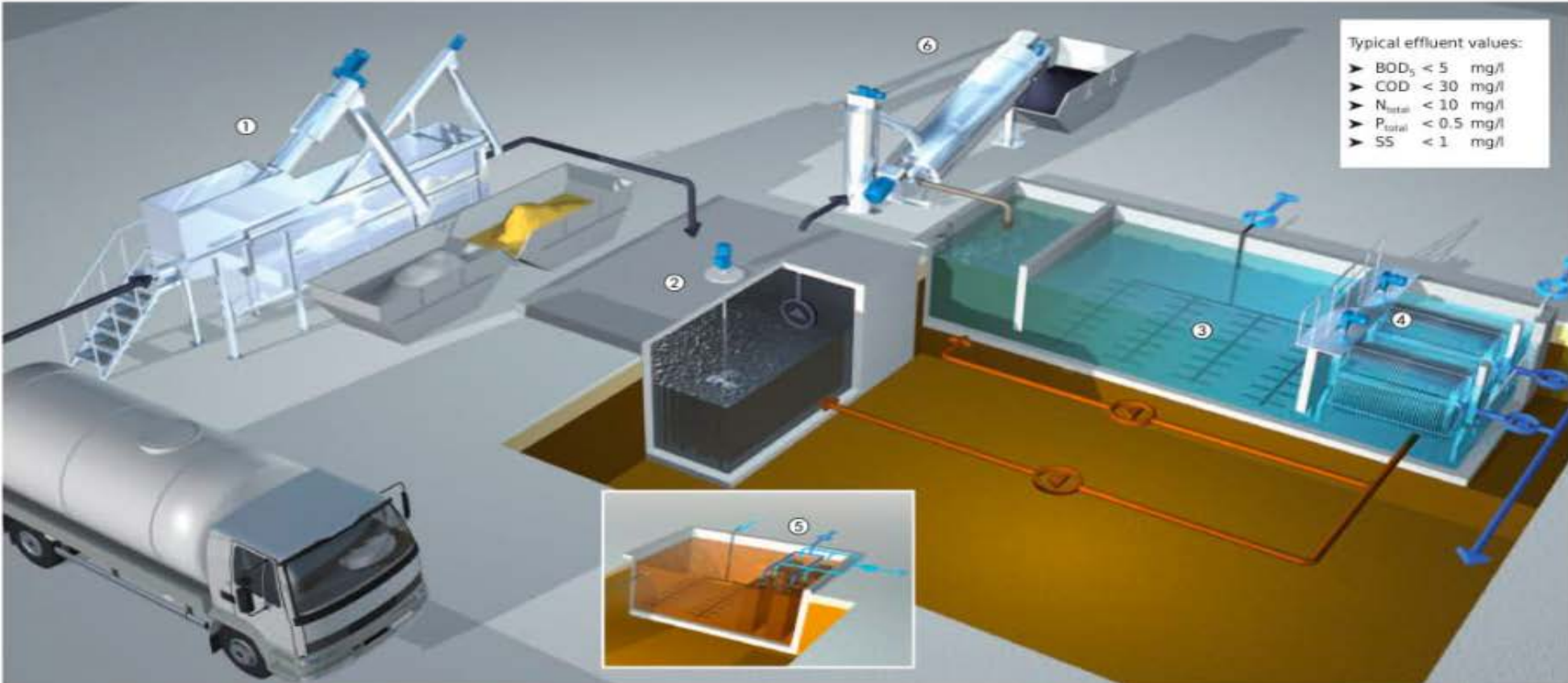
Buffer tank for a regular flow even with hydraulic peaks and varying loads, with simple aeration or with stirrer



MBR bio-tank with fine bubble aeration individually calculated for the project



Huber VRM® filtration unit, 0.038 µm pore size, retaining bacteria, viruses and germs, wastewater diffusion through pump-generated underpressure

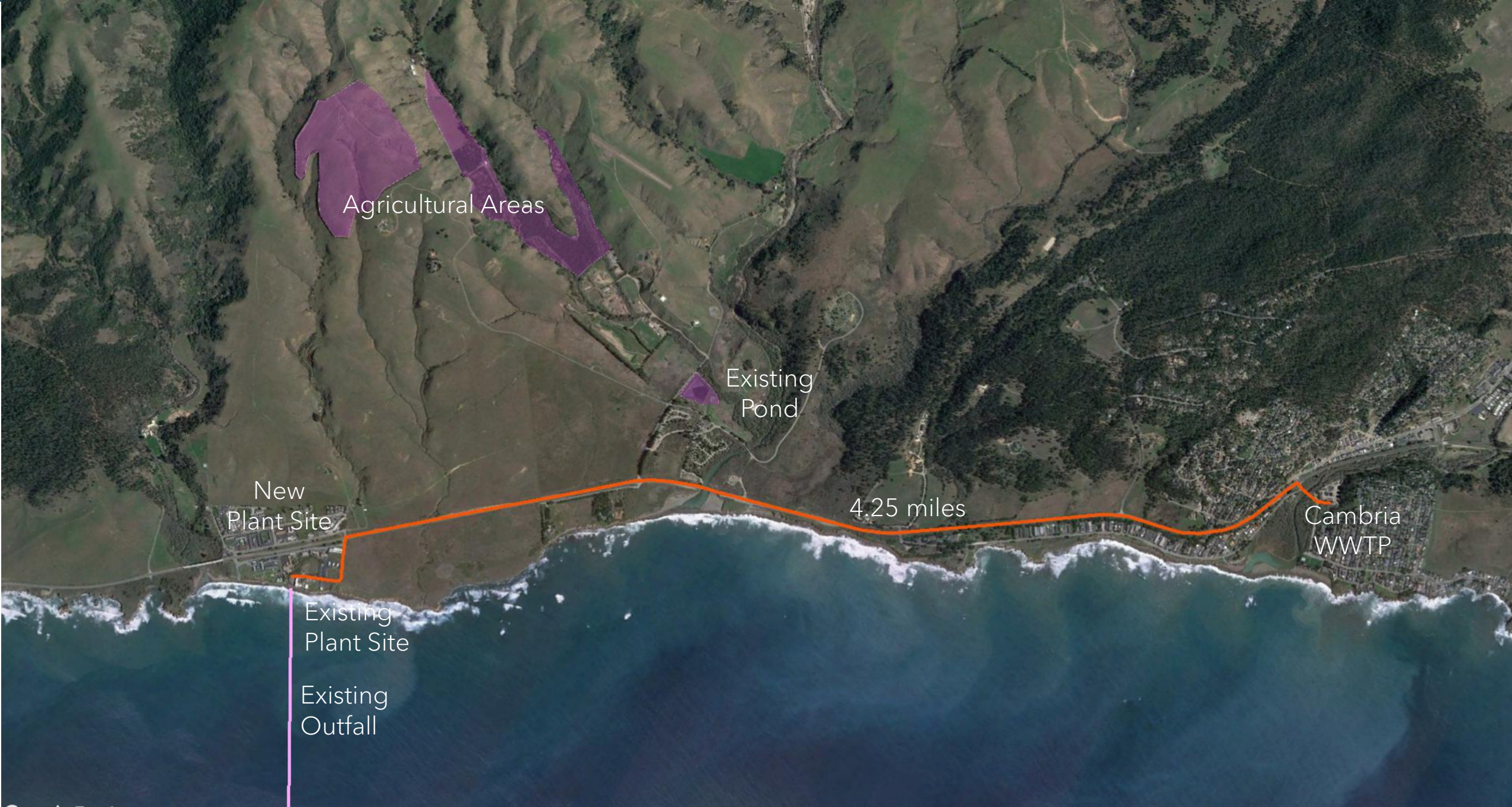


HUBER BioMem® filtration unit installed in a container as a decentralised solution



Sludge dewatering for surplus sludge treatment, > 18 % DS

Other Alternatives for Evaluation



Questions