PG&E AND PORT OF SAN FRANCISCO PIERS 39 – 43 ½ SEDIMENT REMEDIATION PROJECT

PASCALE SOUMOY
SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION
COMMISSION VOTE
NOVEMBER 21, 2024



PG&E SEDIMENT REMEDIATION PROJECT PIERS 39-43 ½

- PG&E and Port of San Francisco co-applicants
- Remediation of PAH impacted sediment around, under the piers
- Improves water quality
- Uses "sediment pins" to stabilize dredged slopes
- Supports habitat recolonization
- Repairs shoreline revetment
- Project length 5-7 years
 - Begins 2025



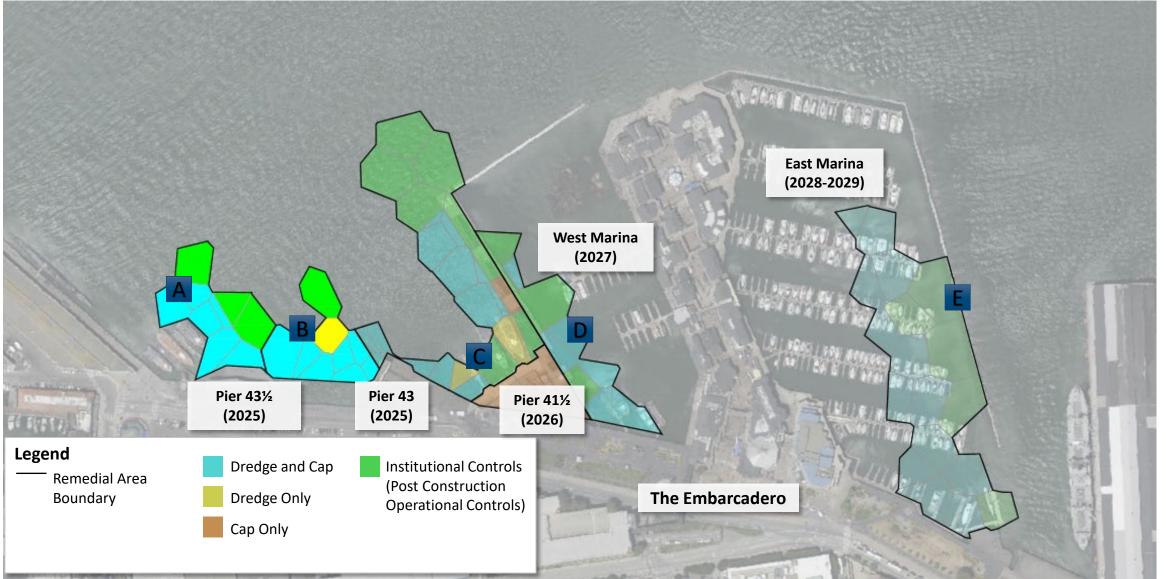


TEMPORARY RELOCATION OF RED & WHITE FLEET



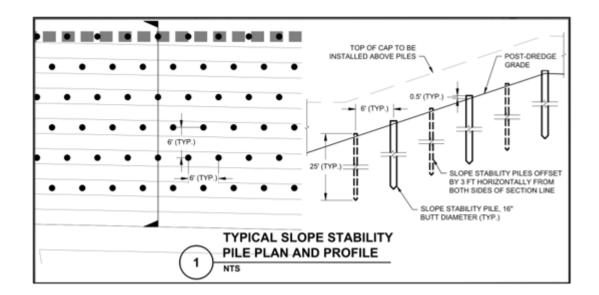


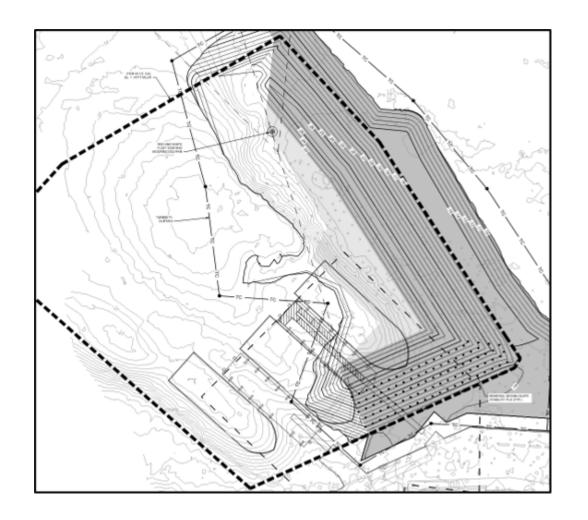
REMEDIAL RESPONSE AREAS



SEDIMENT PIN PILE INSTALLATION

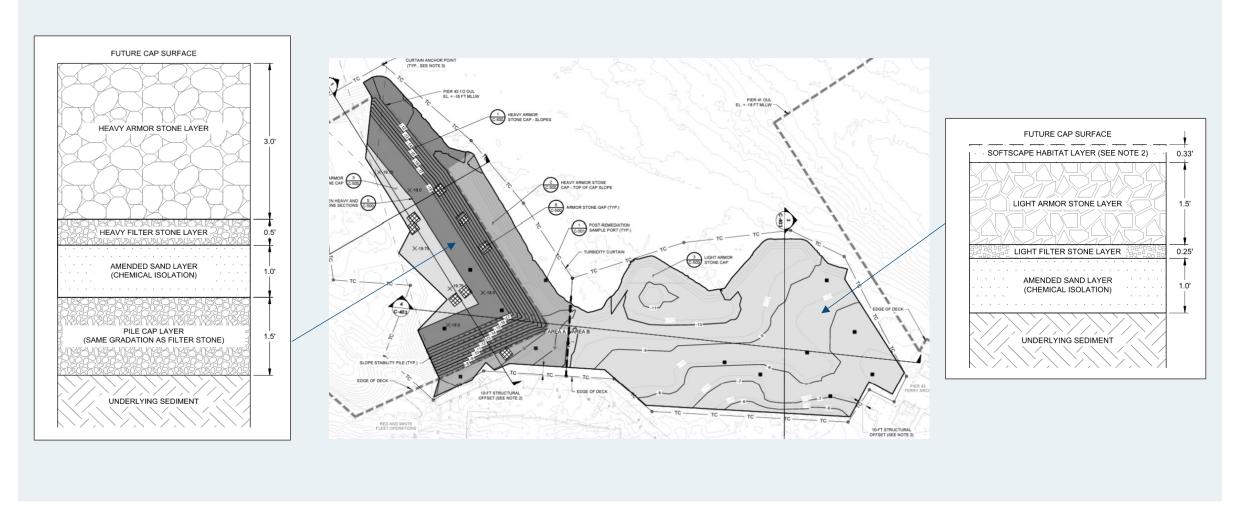
- Total of 1,600 piles
- 16-inch diameter wood piles, 25-feet long
- 6-inch overlap with 1.5 foot thick pile cap







CAP INSTALLATION IN AREAS A & B



ISSUES RAISED BY PROJECT

- 1. Whether it is consistent with the Commission's McAteer Petris Act and San Francisco Bay Plan (Bay Plan) policies, including those related to fill, water quality, safety of fills, natural resources, and sea level rise.
- 2. Whether the removal of contaminated sediments would be conducted in a manner that is protective of the Bay, native and threatened fish species, marine and recreational facilities, public infrastructure, and the public.
- 3. Whether the public engagement was sufficient to address the Bay Plan environmental justice policies.
- 4. Whether the proposed public access is the maximum feasible consistent with the project, and otherwise consistent with the Commission's Bay Plan policies related to public access, recreation, and scenic views.
- 5. Whether the proposed mitigation is appropriate given the amount of Bay fill necessary to complete the project.



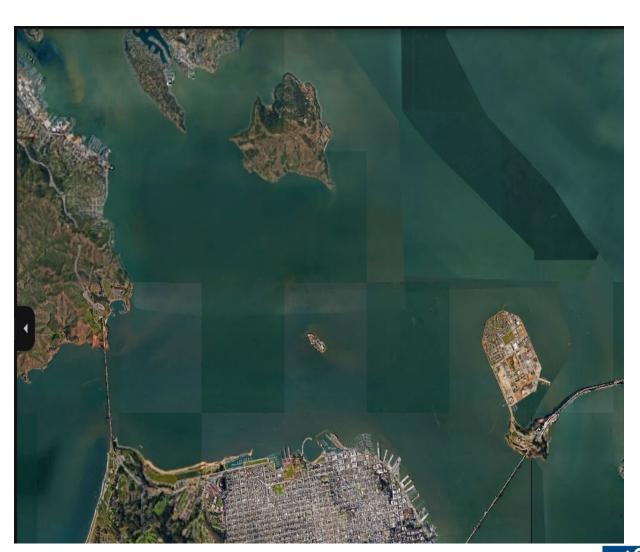


Water Quality

- Silt curtains, and environmental buckets
- Adhere to the Water Board's clean up order

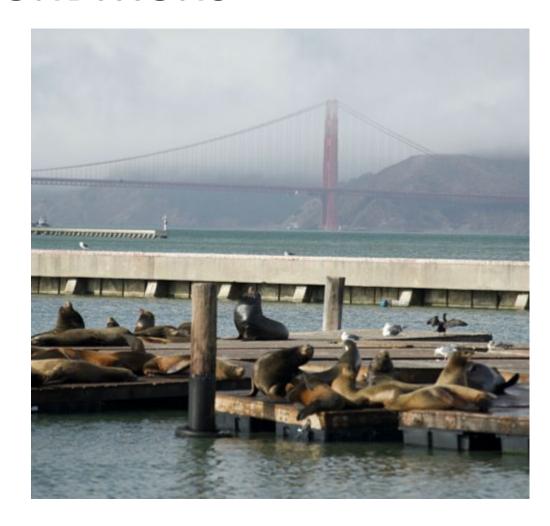
Fill and Safety of Fills

- Sediment pin piles installed to provide slope stability
- Caps of sand, gravel and stone



Natural Resources

- Work during environmental work windows protective of fish, marine mammals
- Silt and bubble curtains
- Vibratory hammer, limited use of impact hammer
- Marine mammal monitoring





Subtidal Areas

- Methods of dredging, pile driving to minimize impacts
- Cap design and materials to isolate PAHs

Public Access

Public access improvement approved before
 Area E (Pier 39 East)



- Communication plan approved before Area A (Pier 43 ½)
- Interpretive and directional signs installed

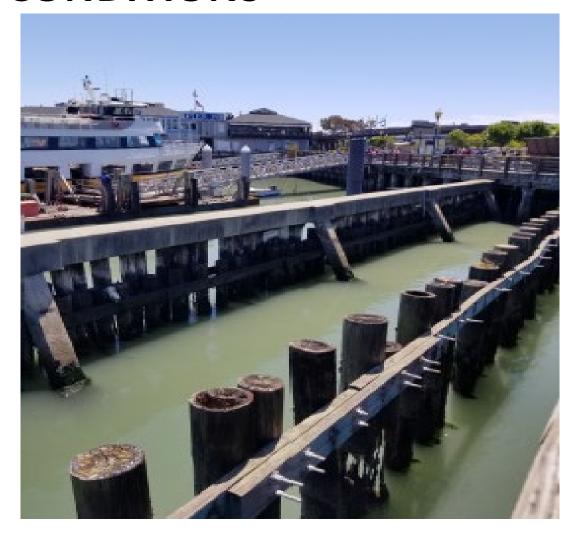


Shoreline Protection

- Stability pin piles under the caps
- Riprap in between newly capped areas and existing revetement

Mitigation

- Remove debris from 10.8-acre remediation area, and from 0.44-acre surrounding area
- Install hardscape and softscape to benefit fish, benthic communities
- Provide 4.9 acres of longfin smelt habitat





CHANGES TO STAFF RECOMMENDATION

Page 9, Special Condition C. Pile Removal and Driving

1.c. "Remove 16 piles anchoring the Red and White docks and gangways, including 8, 24-inch and 8, 36-inch wooden steel piles and drive 20 wooden steel piles (10, 24-inch, 8, 30-inch, and 2, 36-inch) to anchor the temporarily relocated docks and boarding facilities at Pier 45 (Exhibit E)."

Page 10, Special Condition C. Pile Removal and Driving

3.d. "Hydroacoustic Monitoring. Prior to pile driving in Areas A and B, and potentially C, D and E, PG&E shall install hydroacoustic test piles to monitor and collect sound wave information..."

Change to:

"Hydroacoustic Monitoring. Prior to pile driving in Area E, PG&E shall install hydroacoustic test piles in Areas A, B, C, or D to monitor and collect sound wave information..."



STAFF RECOMMENDATION

Staff recommends that the San Francisco Bay Conservation and Development Commission (Commission) conditionally approve the Pacific Gas & Electric Company and the Port of San Francisco's proposed (BCDC Permit No. 2022.002.00) Pier 39-43 ½ sediment remediation project, as follows and described in the staff recommendation:

- 1. Temporarily relocate Red and White Fleet ferry and boat facilities to access the contaminated areas.
- 2. Dredge up to 102,900 cubic yards (cy) of sediment contaminated with polycyclic aromatic hydrocarbon (PAH) and debris from five remediation areas across 8.7 acres of subtidal lands over 5-7 years.
- 3. Install 1,600 wooden sediment stability pin piles in the dredged area landward side slopes.
- 4. Fill the dredged areas with 77,700 cy of sand, gravel, and rock, and cap with either sand or mixed stone to improve of benthic and fish habitat over 10.8 acres.
- 5. Install 3,450 cy of riprap along the existing shoreline revetement to prevent sediment erosion.
- 6. Transport the dredged sediment to a rehandling facility in Collinsville for dewatering, and truck to an appropriate landfill.
- 7. Incorporate the avoidance, minimization, mitigation, and monitoring measures as provided in the Special Conditions section for the staff recommendation.
- 8. Allow staff to make minor, non-substantial changes as needed.



Thank you

