



Heavy Lift Terminal Development Concerns

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- Fishermen are not opposed to renewable energy
- However, fishermen are extremely concerned about resulting cumulative environmental damage by OSW industrialization to the Humboldt Bay Estuary
- And those impacts, like the windmills themselves, are really big



Humboldt Bay Estuary Background

- 2nd largest in California
- 25 square miles of surface area at high tide
- Critical part of the California current marine ecosystem
- Spawning and rearing habitat for commercially important fish, crustaceans and mollusks
- Second only to San Francisco Bay of migrating and overwintering birds
- Home to largest mariculture production in CA



Destruction of the estuary by white settlers after genocidal removal of the Wiyot Tribe

- The destruction of forests, watersheds, and river habitats of Humboldt Bay
- Only 900 acres of salt marsh remaining, reduced from 10,000
- Now there are less than 4000 acres of eelgrass beds
- Most of Central/Mid bay shoreline are abandoned industrial sites and brownfield sites, many still require cleanup



Plans to re-industrialize Humboldt Bay – via Heavy Lift Terminal Project and "wet" turbine storage

Dredging in the Estuary

Heavy Lift Terminal will immediately require removal of 5 million cubic yards of materials

1100 football fields covered in 3 feet of mud

Does not include spoils from 3 additional wet storage sites, federal channel widening and deepening (another 5-10 million cubic yards), and maintenance dredging for the next 50 years.

The proposed site (never before disturbed) likely contains PCB's, dioxin and other dangerous chemicals in the sediment left from past industrial uses.

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Dredging Impacts

- Increased tidal prism/increased current resulting in treacherous bar conditions
- Channel bank sloughing eroding eelgrass beds clear to Mad River channel
- Years of anoxic dredge turbidity events resulting in low O2 and light attenuation
- Impacts from turbidity to fish and all the way down to bay phytoplankton
- Impacts from turbidity to bay shellfish growers and the planned Nordic Aquafarms Mariculture facility adjacent to the terminal site





Pollution from Antifoulant Biocide Paints

Developers and Moffet and Nichol Engineering advocate for 20 turbine units, 2- 400' x 400' assembly platforms and 2- 400' barges in bay waters

Total surface submerged surface area = 59 square acres

All require antifouling biocide paint

Using industrial application guidelines for biocide coatings, 17,313

Gallons of paint covering are required to cover 59 square acres of painted surface



What is in this Antifoulant Biocide Paint?

- Zinc Pyrithione
- Lead
- Arsenic
- Cybutryne Dcoit
- Tralopyric
- Tributyltin
- Cuprous Oxide



Who gets to bioaccumulate all these toxic chemical compounds?

789 species of fish, bird, mollusks, crustaceans and invertebrates living in the estuary

partial species list on the Humboldt Bay Harbor Recreation and Conservation District website at http://humboldtbay.org/sites/humboldtbay.org/files/documents/hbmp2007/Appendix F Species List.pdf

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Who else? Us, humans who eat anything raised and harvested as food in the estuary including oysters, mussels, crabs, and farmed fish from the proposed Nordic Aquafarm



What other impacts are we aware of?

- Blocking and shadowing of sunlight on 21.2 acres for docks, platforms, turbines
- Project lifetime, stormwater runoff pollution from platforms, turbines and upland areas.
- Light pollution planned onsite "high mast" lighting visible 19 miles offshore
- In bay bird strikes by "stored" turbine units.
- Demolition and transport/disposal of all hazardous waste piling and dock components (creosote timbers)



What other impacts are we aware of?

- Fossil fuel air pollution impacting south Eureka social justice communities created by the demolition, dredging, construction and 50-year operations
- Industrial dust pollution from both construction platforms and industrialized upland areas
- Mining of river gravels and fill to raise the level of the entire upland site
- Damage to coastal viewsheds
- Harbor District downgrading of protective environmental zoning language in the Humboldt Area plan

"Can we ever imagine a scenario where a project is denied by California regulatory agencies due to environmental damage to California's second largest marine estuary?"

(S. Scheiblauer, Alliance of Communities for Sustainable Fisheries, November 10, 2024)



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Thank you for your time and kind attention Ken Bates, Executive Director, CFRA

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