## **Alexandra Owens**

From: Sent: To: Cc: Subject: Olson, Brian@DOC <Brian.Olson@conservation.ca.gov> Tuesday, April 4, 2023 3:01 PM Ericksen, Cody@DOT OPR State Clearinghouse; OLRA@DOC State Route (SR) 37 Sears Point to Mare Island Improvement Project



Hi Cody,

Thank you for providing the FON-FONSI documents for the SR 37 project for review. This email conveys the following recommendation from CGS concerning geologic issues within the planning area:

- 1. <u>Tsunami Hazards</u>
  - The CGS has mapped a Tsunami Hazard Area (THA) encompassing the subject section of SR 37. The
    purpose of a THA is to assist public agencies in identifying their exposure to tsunami hazards. It is
    intended for local jurisdictional, coastal evacuation planning uses only. Additional information can be
    found at the links below:
    https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps

https://maps.conservation.ca.gov/cgs/Informationwarenouse/Index.html?map=regulatorymap https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami\_Hazard\_Area\_Map\_Napa\_County\_a11y.pdf https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami\_Hazard\_Area\_Map\_Solano\_County\_a11y.pdf https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami\_Hazard\_Area\_Map\_Solano\_County\_a11y.pdf

- The City should also check to see if the planning area includes a Tsunami Design Zone within the California Building Code (CBC). The CBC requires certain design standards for essential/critical or larger structures. The following website provides additional information regarding Tsunami Design Zones: <u>https://asce7tsunami.online/</u>.
- 2. Fault Hazards
  - The project should be sure to consider earthquake probabilities from the third Uniform California Earthquake Rupture Forecast (UCERF3). A non-technical discussion of this model is available here: <a href="https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf">https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf</a>
  - Note the 30-year probability for an M>6.7 earthquake in the San Francisco Bay Region has increased to 72%. Individual probabilities for the Hayward, Calaveras, and Northern San Andreas faults are also available.
  - The project is located south of the projection of the Rodgers Creek Fault Alquist-Priolo Earthquake Fault Zone (APEFZ). While the portion of the Rodgers Creek Fault may not have met the APEFZ zoning criteria, it is likely the fault cross SR 37. The project should consider the possibility of surface fault rupture from this fault. CGS also notes this area is currently being updated with respect to APEFZ based on new data and research. Please see the CGS website for a map APEFZs that is continually updated to see the new zones when they are released: <a href="https://maps.conservation.ca.gov/cgs/EQZApp/app/">https://maps.conservation.ca.gov/cgs/EQZApp/app/</a>

Please let me know if you have any questions.



## Brian Olson, CEG

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