

**From:** Olson, Brian@DOC <Brian.Olson@conservation.ca.gov>  
**Sent:** Wednesday, August 16, 2023 4:31 PM  
**To:** Scott Donnell  
**Cc:** OLRA@DOC; OPR State Clearinghouse; Schmidt, Anna@DOC  
**Subject:** City of Carlsbad - Housing Element Implementation and Public Safety Update

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 Housing Element Implementation and Public Safety Update  
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Hello Scott,

Thank you for providing the City's Notice of Preparation (NOP) of a Supplemental EIR for our review. This email conveys the following recommendations from CGS concerning geologic and seismic hazard issues in the provided General Plan documents:

1. Tsunami Hazards

- The EIR provides a discussion of tsunami inundation hazards within the City of Carlsbad and provides a figure depicting "Maximum Tsunami Projected Runup" zones mapped by the County of San Diego. The Supplemental EIR should also discuss and depict CGS Tsunami Hazard Areas (THAs), which are mapped along the entire California coast. 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 and map files can be found at the links below:  
<https://www.conservation.ca.gov/cgs/tsunami>  
<https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>  
[https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami\\_Hazard\\_Area\\_Map\\_San\\_Diego\\_County\\_a11y.pdf](https://www.conservation.ca.gov/cgs/Documents/Publications/Tsunami-Maps/Tsunami_Hazard_Area_Map_San_Diego_County_a11y.pdf)
- The City should also check to see if any re-zone sites are included in a Tsunami Design Zone established by the California Building Code (CBC). The CBC requires certain design standards for essential/critical or larger structures within these zones. The following website provides additional information regarding Tsunami Design Zones: <https://asce7tsunami.online/>.

Please let me know if you have any questions.



**Brian Olson, CEG**  
**Senior Engineering Geologist**  
**Seismic Hazards Program**

**13** Years of Public Service



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*"A team is not a group of people who work together.*

*A team is a group of people who trust each other." – Simon Sinek*

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## Letter A2

**COMMENTER:** Brian Olsen, Senior Engineering Geologist, California Geological Survey

**DATE:** August 16, 2023

### Response A2-1

The commenter states that the Draft SEIR includes a “Maximum Tsunami Projected Runup” zone map as mapped by the County of San Diego. The commenter states that the SEIR should discuss and depict California Geological Survey (CGS) Tsunami Hazard Areas (THA). The commenter states that the purpose of the THA is to assist agencies in identifying their exposure to hazards.

The commenter’s request has been noted and Figure 4.8-4 of the Draft SEIR has been revised to include CGS mapping. The revised Figure is included in Chapter 3, Revisions to the Draft SEIR, of this document. These revisions do not change the findings of the Draft SEIR, do not result in new or substantially more severe significant impacts, and do not constitute significant new information warranting recirculation of the Draft SEIR.

### Response A2-2

The commenter states that the city should check to see if any housing inventory sites fall within a Tsunami Design Zone established by the California Building Code (CBC).

None of the rezone sites are located in a Tsunami Design Zone established by the CBC.<sup>1</sup> Nonetheless, all specific project development would be required to comply with all regulations and requirements set forth by FEMA and the CMC, as well as policies 6-P.1 through 6-P.12 of the Public Safety Element Update which would implement and develop flood control programs and require installation of protective structures to minimize impacts of flooding.

<sup>1</sup> CBC Tsunami Design Zones: <https://asce7tsunami.online/>