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Subject: Manteca General Plan Update Recirculation
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Governor's Office of Planning & Research

MAY 31 2023

STATE CLEARINGHOUSE

Hello, Lea—

Thank you for providing the City's Recirculated Draft Environmental Impact Report (EIR) and the Revised Draft General Plan for review. This email conveys the following recommendations from CGS concerning geologic and seismic hazard issues within the General Plan documents:

1. Liquefaction Hazards

- The General Plan discusses liquefaction as a potential seismic hazard and states that Figure 3.6-4 depicts "liquefaction seismic hazard zones mapped within the Planning Area"; however, CGS notes the subject figure is labeled as "Shrink-Swell Potential of Soils." The zones, ranging from Low to High Potential seem to correlate expansivity of soils when compared with the "Soils Map (Figure 3.6-3), and therefore, it seems Figure 3.6-4 does not depict liquefaction hazard/susceptibility zones as the text claims. The City should consider providing an appropriate figure depicting areas of potential liquefaction.
- For California seismic hazards, the City should consider referring readers to the CGS website for a map that is continually updated. CGS maps and data are available here:
<https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>
<https://maps.conservation.ca.gov/cgs/EQZApp/app/>

2. Earthquake Ground Motion Hazards

- The Safety Element provides a discussion of the probability of large earthquakes in the region on page 3.6-2. This discussion cites the California Geological Survey's Probabilistic Seismic Hazards program, but should be updated to use the most recent version of the National Seismic Hazard Model from the USGS at:
<https://www.usgs.gov/programs/earthquake-hazards/science/2018-united-states-lower-48-seismic-hazard-long-term-model>.
- The USGS also provides webtools to estimate earthquake ground motions for various earthquake probability levels here: <https://www.usgs.gov/programs/earthquake-hazards/design-ground-motions>

3. Fault Rupture Hazards

- The City has a map depicting the locations of Alquist-Priolo Earthquake Fault Zones (Figure 3.6-2). They should consider referring readers to the CGS website for a map that is continually updated:
<https://maps.conservation.ca.gov/cgs/EQZApp/app/>

Please let me know if you have any questions.



@CAgeosurvey

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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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