

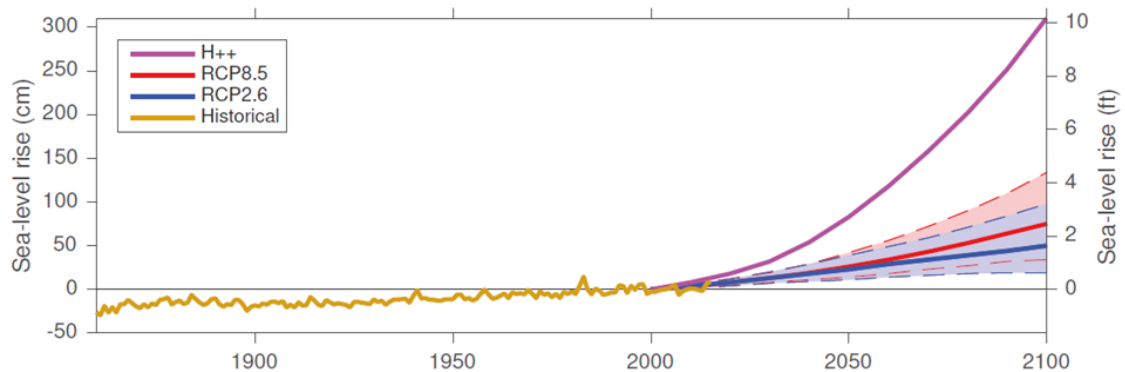
Understanding California Sea Level Rise Studies and Guidance

Smart Coast California Summit, May 2022

Key Findings and Recommendations

- The scientific projections for future sea level rise have significant uncertainty.

Relative Sea Level in San Francisco, “Rising Seas” (2017)



Source: “Rising Seas in California: An Update on Sea-Level Rise Science,”
California Ocean Protection Council Science Advisory Team Working Group, 2017.

To be useful, sea level rise projections need to be understood using probabilities. Without a clear understanding of the uncertainty involved, users may assign false precision to the estimates.

- The California Coastal Commission has developed sea level rise guidance for local planners based on state recommendations and scientific studies. While this guidance is valuable for turning theory into practice, there may be opportunities to further clarify and improve it. For example, do all users understand the level of conservatism in the selected planning targets?
- The California Coastal Commission relies on local communities to perform their own climate change vulnerability assessments. These assessments can vary significantly in their assumptions and methods. If these assessments were to be performed consistently, it may enable coordination between communities and more efficient adaptation planning. There are many opportunities for the Commission to help local communities standardize their assessment process.
- Methods to quantify residential property risk varied significantly in the vulnerability assessments. Some studies developed the costs and benefits of different adaptation strategies, including the effects on local residential property. It may be beneficial for other studies to be expanded to include a similar analysis.