

NOTICIAS

WHAT IS SHALLOW GROUNDWATER RISE?

Shallow groundwater is water from rainfall that is stored in soils near the ground surface. As sea level rises, salty water from the bay migrates inland, pushing groundwater to the surface. We don't know everything about how this will affect us now and in the future. But, we do know that flooding will be more widespread than previously thought due to climate change and this will impact both infrastructure and public health.

HOW WILL GROUNDWATER RISE AFFECT MY COMMUNITY?

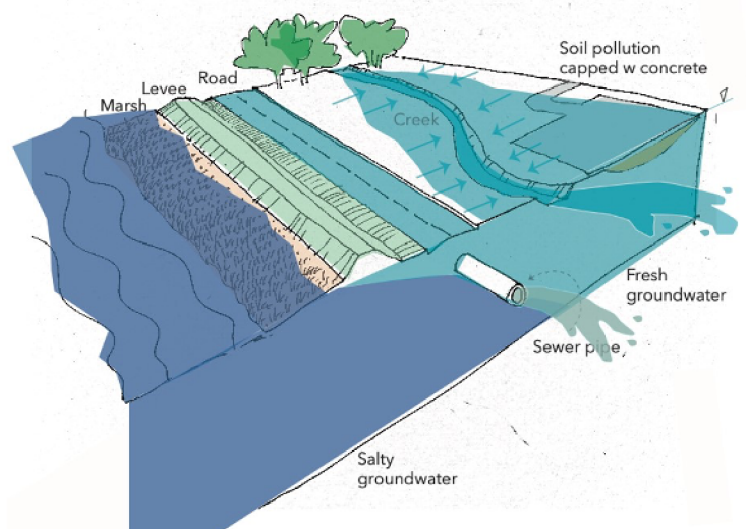
Groundwater rise is likely to lead to various impacts on low-lying communities along the San Francisco Bayshore. Impacts may include:

- **Increased flooding during wet winters** could lead to difficulties moving about and accessing services in parts of East Palo Alto, Belle Haven, & Redwood City.
- **More frequent stormwater and sewer overflows.** Pipes for rain and sewage cannot handle high groundwater levels, especially during heavy rainfall events. Overflows can impact public health and Bay ecosystem health.
- **Damage to building and home foundations.** Foundations of buildings wear out faster if regularly in contact with salty water. Fixing foundations can be expensive for owners.
- **Corrosion of roads and underground infrastructure like drinking water pipes.** Infrastructure may need to be upgraded to

protect against groundwater infiltration and corrosion by groundwater. Infrastructure upgrades are costly and costs could be passed to the local customers if the City, State, or Federal government does not fund them.

- **Some contaminants left in soils on legacy industrial sites can travel into floodwaters and cracked storm and sewer pipes.** This can occur on industrial sites that have undergone remediation and on those that have not yet been cleaned. Within Redwood City, Belle Haven, and East Palo Alto, there are about 200 contaminated sites that could be affected by groundwater and sea level rise.

Image of Groundwater Rise Impacts



Source: Drawing by Dr. Kristina Hill. Bay Conservation and Development Commission (BCDC) Adapting to Rising Tides. <https://www.adaptingtorisingtides.org/portfolio/shallow-groundwater-rise/>

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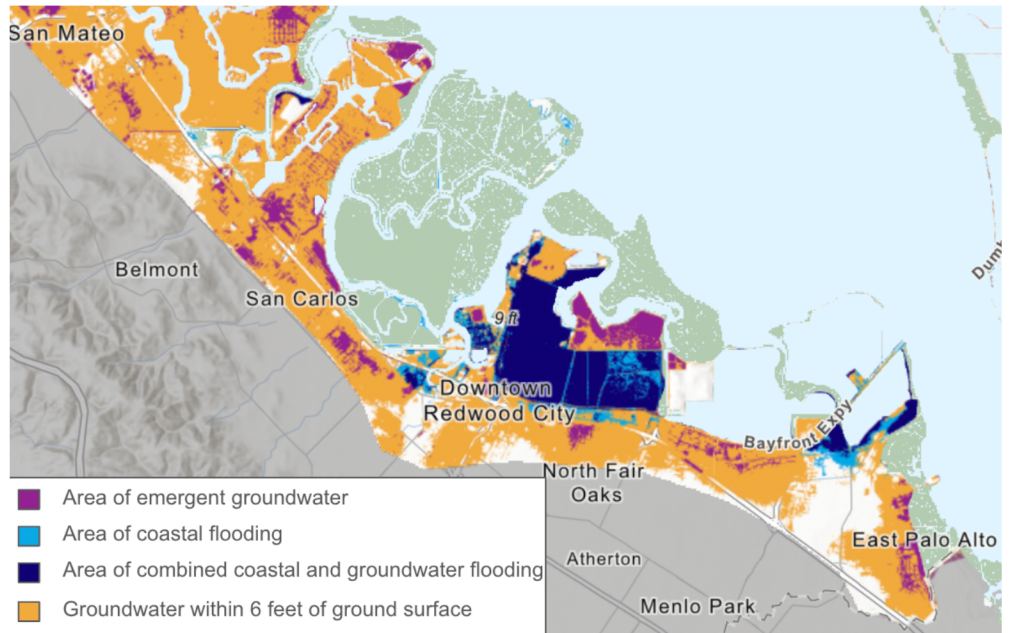
The California Ocean Protection Council estimates that sea level in the San Francisco Bay Area could rise by about **1 foot to 2 feet by the year 2060** (under intermediate to “worst case” climate change scenarios).

At **2-feet of sea level rise**, low-lying areas of Belle Haven, East Palo Alto (east of Pulgas Avenue), and Redwood City (a quarter mile of the Bayshore east of Highway 101) will likely experience consistent flooding from groundwater if no adaptation actions are taken. The map shows where this flooding would occur under this scenario.

Groundwater & Coastal Flooding with 2 Feet of Sea-Level Rise

Map of groundwater levels under **2 feet of sea level rise scenario**.

Dark blue, purple, and light blue show areas of flooding due to sea level and groundwater rise. Emergent groundwater (purple) refers to groundwater levels that are above ground (i.e. pooling on roads or other low-lying areas).



*Source: Screenshot taken from Pathways Climate Institute & San Francisco Estuary Institute (2022) web-based maps.

HOW CAN I GET INVOLVED?

Nuestra Casa is monitoring groundwater rise and its impact on our community. With your support, we will be educating and working with our local policymakers to determine effective adaptation solutions.

Some ways you can take action now:

- Join our Environmental Justice Academy
- Share this Noticia with your family and friends
- Contact environmentaljustice@nuestracasa.org for more information

GET INVOLVED & STAY UPDATED!

FOR MORE INFORMATION:
environmentaljustice@nuestracasa.org



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