



**Nuestra Casa**

# Combating Rising Sea Level in East Palo Alto

## Green Infrastructure, Community Awareness, and Recommendations from Residents

by Heleine Grewe, Karen Crespo Triveño, and  
Francisca Castro

Sea-level rise is the worldwide average increase in ocean water levels as our Earth continues to warm up. As our climate continues to change, the Bay Area will experience permanent flooding, or flooding where the water doesn't go back down. According to the Bay Conservation and Development Commission (BCDC), the Bay Area should be prepared to see 1 foot of sea level rise by 2030 and 3 feet by 2050. In a shoreline community like East Palo Alto, with only 3 feet under sea level, we suddenly see that all of these things that we care about become flooded, or have severely limited access. This will impact schools, churches, community services, public utilities, homes, recreational access, and more. But when could we see this 3 foot level of flooding? This is a complicated question because flooding can occur from a variety of different ways. Flooding could happen today with a very large storm, larger than the Bay Area has seen in over 50 years, or it could occur many years down



**“If flooding were to happen, we should also establish routes for emergency vehicles, police, and fire departments to use instead of figuring out at the last minute which streets can and can't be taken... they should have prepared certain streets for this disaster as well so when this does happen there will be an easier way to get to residents as well.”**

**- Alicia Mckean**



***A snapshot of Weeks Street in East Palo Alto demonstrates temporary flooding in the area. (Credit: BCDC, 2020)***

the line with 3 feet of sea level rise, which the latest science tells us could occur in the not-so-distant future, around 2050, which is within our own lifetime.

**How Can East Palo Alto Fight Sea Level Rise and Flooding?**

Green infrastructure is the cost-effective and resilient use of plants, soil systems, and porous surfaces to restore, and infiltrate contaminated stormwater and reduce flows to larger water bodies. The use of different types of green infrastructure can also provide habitat, flood protection, plus cleaner air and water while restoring natural processes. According to the U.S. Environmental Protection Agency, In other cities such as Lancaster, Pennsylvania, they are taking initiative to convert impermeable such as parking lots into permeable pavements. “By using green infrastructure to infiltrate water on site, the city estimates they will reduce flows

into their system by 700 million gallons – reaping over \$600,000 annually in savings.”\*

The need for new green infrastructure in East Palo Alto is urgent in order to help the fight to prevent flooding in major areas of the city.

Green infrastructure such as rain gardens, planter boxes, porous surfaces, and urban tree canopies are essential to the fight against flooding. These approaches can limit the amount of flooding by absorbing and cleaning the water run-off that reaches into the community.

**Is East Palo Alto Prepared for Sea-Level Rise and Flooding?**

In short, no. When interviewing East Palo Alto resident Alicia Mckean about whether or not

**\*Information from: Green Infrastructure for Climate Resiliency Fact Sheet. U.S. Environmental Protection Agency/ Office of Water. (July 2014 — EPA Publication #832F14007)**



***Alicia McKean,  
Longtime East Palo Alto Resident***

they feel as if their community feels prepared for the impacts of sea-level rise within their lifetime, she predicts that “...people are going to be looking in a hurry for those who may have the resources to get them out of the position that they may be found in.”

She reflected on her own experience with flooding in EPA when she was a child and explained, “We lived in the apartments on Clarke street by the 7/11 across the ramp. When flooding occurred, all of our parked cars got flooded. It resulted in us calling around to see if someone could come to pick us up, which made me realize that we don’t have emergency vehicles, boats, or equipment.” Alicia notes that in order for the community to feel better prepared for climate-related emergencies, emergency equipment, and resources need to be available inside the city, not stationed somewhere else outside of East Palo Alto. Emergency vehicles should already be prepared to use to get residents out of their homes in the case of an emergency, and there should be hotels for residents if flooding were

to occur. She states, “If flooding were to happen then there should also establish routes for emergency vehicles, police, and fire departments to use instead of figuring out at the last minute which streets can and can’t be taken... they should have prepared certain streets for this disaster as well so when this does happen there will be an easier way to get to residents as well.”

Violet Saena from Climate Resilient Communities (CRC) reflects on the fact that EPA residents are on the path to becoming more prepared for sea-level rise and the impacts of flooding. She states, “We are getting there.. In the process, the City of East Palo Alto is a part of the response but we also need to do our part by increasing our community resilience... we need to be increasing the awareness of the community through programs.” Nuestra Casa’s Environmental Justice Parent Academy is an example of how community resilience and



***Violet Saena,  
Founder & Executive Director of  
Climate Resilient Communities***

climate-related disaster preparedness have taken place in the past.

Mckean has participated in the EJ Parent Academy where a climate-related disaster preparedness session took place with Rev. Terriah as her cohort's facilitator. Mckean affirms the need for community awareness stating that, "I feel as though the information that Rev T gave out (such as having important documents, backpack, and a list of things to take) when something like a disaster is happening should be given out to every home in the community so that people are more prepared and information is already established, there needs to be preparation to exist in place so that people aren't running around in a rush trying to find their important items and emergency contacts."

### **Recommendations & Opportunities for Involvement**

One way to combat rising sea levels, prevent flooding, and promote green infrastructure is through change at the city level. City officials and agencies need to engage with their communities, be transparent, and be held accountable. As we are entering a time of climate-related anxiety and fear due to the realities of climate-related disasters, elected officials need to step up and collaborate with EPA residents through meaningful relationship building to ensure that they feel safe knowing that the officials they elected are doing their job in protecting East Palo Alto's residents and environmental health.

Mutual aid efforts and community educational opportunities need to be elevated by City officials, as preparation for sea-level rise and flooding needs to be a cross-collaboratory effort from both the City level and grassroots efforts. Paralleling Violet's sentiments, meaningful community engagement can be achieved through increased awareness by the residents themselves educating themselves and one another. An example of this can be found with community educational programs, especially those that center preparation for climate-related disasters, advocacy training, and leadership development.

Community educational programs like Nuestra Casa's Environmental Justice Parent Academy can be a part of the solution, as residents develop their advocacy skills while learning about previous and current existing environmental injustices in their community. The EJ Parent Academy encourages residents to critically think about their own environment and develop action-based projects to protect the health and sustainability of their community. Residents of East Palo Alto already have ideas for projects that are beneficial and address the existing issues. There needs to be more accountability at the city level because of their actions or lack thereof when it comes to green infrastructure, addressing rising sea levels, flooding preparedness.