



# Climate Ready North Fair Oaks Climate Risk Assessment

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Siena Youth  
Center



El Concilio de  
San Mateo Co.



**Stanford**  
ENGINEERING  
Sustainable Urban  
Systems Initiative



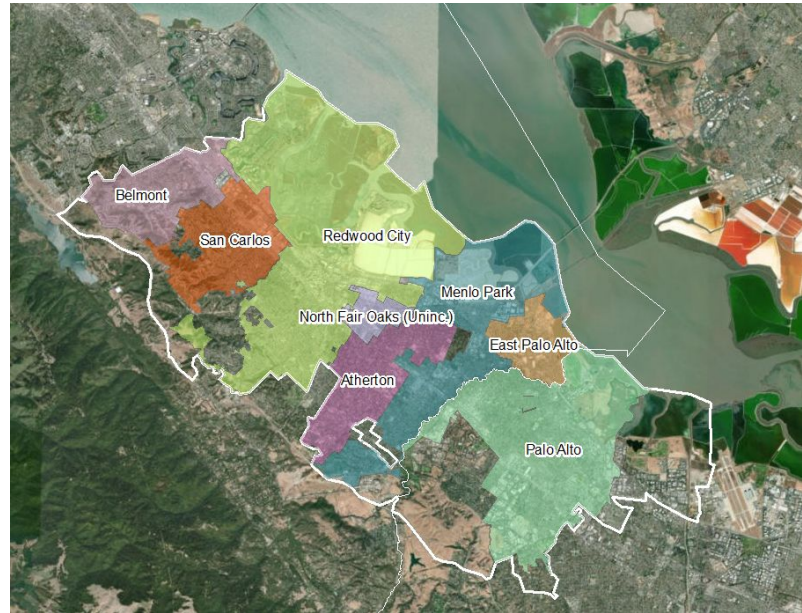
## EXECUTIVE SUMMARY

As the climate changes and sea levels rise, communities in the Bay are already experiencing the impacts of flooding today, while the magnitude and extent of flooding will only increase in the future. This report is part of an effort by Climate Ready North Fair Oaks in partnership with the Stanford Sustainable Urban Systems Initiative to investigate how North Fair Oaks and the broader region of the mid and lower peninsula are vulnerable to flooding, so that we can work towards developing more resilient communities in the face of climate change. This work is made possible by the San Mateo County Office of Sustainability Community Resilience Grants Program and will be used by a local committee of residents, business owners, and nonprofit leaders to guide community-led resilience activities from 2019-2020, including youth curriculum, family services, policy advocacy, and more.

Stanford students used several methods to examine risk and vulnerability including interviews, spatial analysis of various data in combination with regional flood maps, and field surveys. The report builds off of previous work by Stanford in partnership with the County titled [\*Economic and Social Costs of Sea Level Rise in San Mateo County\*](#). Generally, this North Fair Oaks report looks at the problem of flooding through various regional, interconnected systems. The effects of flooding in one part of the Bay can both impact people and services directly and have cascading impacts to the system as a whole.

North Fair Oaks is a historically underserved community of color and defined as a “community of concern” by the Metropolitan Transportation Commission. While the community’s official boundaries are, for the most part, not within projected flood zones for sea level rise, the effect of flooding will still impact populations that

rely on services, employment, or who travel the surrounding region. For this reason the report looks at both North Fair Oaks and a broader regional Study Area (below).



*Regional Study Area; Depicted above (from North to South) are the boundaries of Belmont, San Carlos, Redwood City, North Fair Oaks, Atherton, Menlo Park, East Palo Alto, and Palo Alto.*

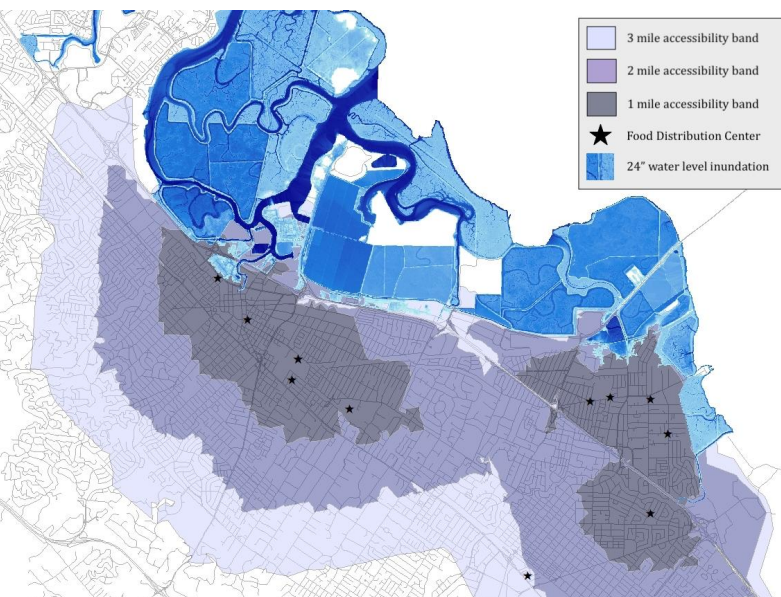
Report findings confirm the hypothesis that low-lying areas will experience significant direct economic damages. However, it is not just low-lying communities that will be impacted. The magnitude of direct economic losses are large enough that it is likely those losses could be felt throughout the region’s economy. Additionally, flooding of critical services, such as food distribution centers, could reduce access to food for the region’s most vulnerable.

Flooding will also disrupt the Bay’s transportation network, as inundated roads become blocked or increasingly congested. And, as the report shows, some of the region’s largest employment centers are located in areas that could be inundated with a total water level of 36” and higher.

The report identifies five key insights that begin to describe what these changes could look like for the various areas of impact:

- Closely tied areas to North Fair Oaks such as East Palo Alto and Redwood Shores could experience large direct economic losses, potentially impacting the local economy and regional services.
- Mobile homes may be impacted by flooding disproportionately, potentially reducing options for affordable housing.
- Accessibility to critical services like food distribution centers is multi-faceted and involves more than just proximity.
- Although it helps enrich understanding of indirect impacts, impacts on access to amenities for those in North Fair Oaks is notable, but not significant.
- Many communities that don't face direct flooding may still face indirect impacts, exacerbating existing vulnerabilities.

Given these key insights on how the region is vulnerable to flooding hazards, the report seeks to spark questions and ideas for how Climate Ready North Fair Oaks can design



interventions and community engagement efforts that promote a more resilient region. These key questions may include:

- **How can community members within these areas alleviate some of this disproportionate risk?**
- **What water levels are critical for residents for predicting displacement? Where would residents move to in the case of displacement?**
- **Are there ways to diversify food distribution centers' supply-chains and the transportation routes of those that depend on these services?**
- **What assistance programs could be developed for small businesses in the region that are both vulnerable and critical to the regional economy?**
- **What forms of support can be provided for those who are most sensitive to work commute impacts?**

Predicting impacts and designing effective interventions to those most at risk presents a daunting challenge. But by exploring key insights and questions like those above, community leaders and policy-makers can begin to create the mechanisms needed to create resiliency in North Fair Oaks, as well as in San Mateo County as a whole.

**The full report can be viewed at [bit.ly/crnfcra](https://bit.ly/crnfcra).**

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