



Citizens Committee to Complete the Refuge

P.O. Box 23957, San Jose, CA 95153

Tel: 650-493-5540

Email: cccrrefuge@gmail.com

www.bayrefuge.org

Sent via electronic mail only

MTC Public Information

Attn: Veronica Cummings

375 Beale Street, Suite 800

San Francisco, CA, 94105

February 13, 2025

Re: Notice of Preparation for a Draft Environmental Report for Plan Bay Area 2050+

(Regional Transportation Plan/Sustainable Communities Strategy for the Nine-County San Francisco Bay Area)

Dear Ms. Cummings,

The Citizens Committee to Complete the Refuge appreciates the opportunity to provide scoping comments for the Draft Environmental Impact Report (DEIR) for Plan Bay Area 2050+ (PBA 2050+). According to the Notice of Preparation (NOP), PBA 2050+ DEIR is meant to support the environmental review for the 2025 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the nine Bay Area counties, which focuses on transportation and land use. PBA 2050+ will also incorporate economic and environmental issues into the plan. We applaud the incorporation of updates to the Environmental Element Section, such as increasing the projected sea level rise estimate from 3' to 4.9' by 2050, but remain concerned that the measures proposed are inadequate to address the challenges and threats posed by sea level and groundwater rise for our shoreline communities and for the ecological health of the Bay. Our scoping comments are based upon the information contained in the NOP and the attachments referenced in the NOP and scoping email notification.

The Citizens Committee to Complete the Refuge (CCCR) has a long-standing interest in the protection, restoration, and acquisition of San Francisco Bay wetlands; as such the focus of our comments is on biological resources and in particular on the interface of Plan Bay Area 2050+ with lands along the edges of San Francisco Bay.

CCCR was originally formed in 1965 by a group of citizens who became alarmed at the degradation of the Bay and its wetlands. We joined together, and with the support of Congressman Don Edwards, requested that Congress establish a wildlife refuge. The process took seven long years and in 1972 legislation was passed to form the San Francisco Bay National Wildlife Refuge, the first national wildlife refuge in an urban area. In 1988, Congress authorized expansion of the refuge boundary to potentially double the original size. Our membership is approximately 1,500 people and we have the support of local and national organizations-- including open space advocates, environmental groups and hunters.

Our organization has taken an active interest in the protection of the baylands of San Francisco Bay, the health and biodiversity of San Francisco Bay ecosystems, protection of wetlands and endangered species and the habitats that support them, the watersheds that support Bay ecosystems and public education regarding the value of these resources.

CCCR has been an active stakeholder in previous iterations of Plan Bay Area, the Priority Conservation Area Program (PCA), and the San Francisco Bay Conservation and Development's (BCDC) Adapting to Rising Tides and Bay Adapt processes, and served on the Advisory Group of BCDC's development of Guidelines for the Regional Shoreline Adaptation Plan (RSAP) program.

Pertinent to the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) statement that this is a plan that "identifies a suite of integrated strategies that will enable the Bay area to accommodate future growth and make the region more equitable and resilient in the face of unexpected challenges," the critical role the region's baylands play in providing climate resilience and providing strategies that can benefit our communities and economy, must be recognized and must be incorporated into Plan Bay Area 2050+. The focus of our comments center on the analyses that may identify impacts to biological resources or climate change resilience, with a focus on the Bay shoreline.

1. Program-level Draft Environmental Impact Report (DEIR):

The NOP states, "MTC and ABAG are the joint lead agencies undertaking preparation of a program-level Draft Environmental Impact Report (DEIR) for Plan Bay Area 2050+."

- a. The PBA 2050+ DEIR should clarify the extent to which it is anticipated local planning entities and agencies will be able to "tier" off the DEIR for future California Environmental Quality Act (CEQA) environmental reviews, if at all.
- b. The DEIR should identify if there are situations under which a local planning entity or agency could rely upon the programmatic DEIR such that the public and regulatory and resource agencies might be precluded from reviewing and commenting on projects identified through the PBA 2050+ process (e.g. through the use of an exemption or EIR addendum).

2. Incorporation of BCDC's Regional Shoreline Adaptation Plan (RSAP) Guidelines Into the Identification and Analysis of Impacts, Avoidance and Minimization of Impacts and Mitigation Measures

In response to the language of Senate Bill 272, in December 2024, BCDC approved adoption of a Regional Shoreline Adaptation Plan for the San Francisco Bay Area to address the crucial need for shoreline communities to address the threats of rising sea levels and groundwater that threaten communities and natural habitats of the Bay. SB 272 requires that by 2034, all local governments submit to BCDC for approval, Subregional Shoreline Adaptation Plans (SSAPs) that identify vulnerabilities that exist or will exist for the built and natural environment of their jurisdiction, and propose strategies that will provide climate change resilience. The RSAP Guidelines provide the overarching regional and subregional framework for shoreline communities that includes consideration of the impacts of shoreline growth on the ability to provide sea level rise and groundwater rise resilience for the natural and built environment. The RSAP Guidelines require a holistic description of the built and natural shoreline environment, threats posed, and assessment of, and identification of resilience strategies. The RSAP Guidelines establish minimum standards that must be considered in adaptation planning. The required holistic review of climate resilience crosses a variety of land use and CEQA "Environmental Issue Areas" (e.g. biological, cultural, hazards, hydrology and water quality, etc.); therefore, we urge the following:

- a. The DEIR should include in the DEIR Introduction, under the section of the chapter that describes federal and state requirements, information that describes Senate Bill 272 and the RSAP Guidelines, as the RSAP sets the regional and subregional framework within which shoreline communities should develop strategies that provide resilience for the built and natural environment. The RSAP Guidelines provide an overarching framework for shoreline communities

that includes consideration of the impacts of shoreline growth on the ability to provide sea level rise and groundwater rise resilience for the natural and built environment.

- b. The DEIR description should include (summarizes) the elements to be considered in an SSAP/RSAP, Plan requirements, and the minimum standards identified for an SSAP/RSAP as these required elements will have a bearing on local government decisions regarding growth and adaptation strategies.
- c. The DEIR should describe how the PBA 2050+ will ensure consistency with BCDC's RSAP Guidelines and regional vision for sea level rise resilience for the natural and built environments.

3. **Growth Geographies Mapping**

The level of resolution available in the pdf versions of the Growth Geography mapping is insufficient.

- a. The DEIR should provide a hyperlink for the Growth Geography mapping similar to that provided by the online Plan Bay Area 2050 Growth Geographies webpage, to enable decision-makers and the public to better understand the exact locations of proposed Priority Development Areas, Primary Production Areas, Transit-Rich Areas, Transit-Rich and High-Resource Areas, etc.:
<https://opendata.mtc.ca.gov/datasets/MTC::plan-bay-area-2050-growth-geographies/explore?location=37.498436%2C-122.201465%2C13.54>
- b. The DEIR should provide information regarding the status of the Growth Geography areas identified, (e.g. in planning phase, partially developed, fully developed). This is crucial information for the identification and analysis of impacts to CEQA "Environmental Issue Areas." As an example, based upon the resolution provided on Attachment C Draft Blueprint Growth Geographies, version 5, it would appear some of the areas identified within the cities of Newark and Fremont may have been at least partially, if not fully developed.

4. **The Updated Priority Conservation Area Program Must Be Incorporated Into Plan Bay Area 2050+**

The "*Priority Conservation Area Refresh Final Report, Proposed Reforms for the PCA Planning Framework*," dated May 2024 states:

"With a refreshed PCA Framework, staff anticipate linking PCAs with Plan Bay Area 2050+ environmental strategies aimed at preserving natural and working lands, ensuring greater access to recreation and nature within cities, and adapting to climate change."

- a. The DEIR should include a hyperlink for the Priority Conservation Area Mapping Viewer to provide decision-makers and the public access to an high resolution online map that displays the PCA Eligibility Areas for each of the five categories of PCAs:
<https://experience.arcgis.com/experience/3fa00ead34c84a43bfa935164dadbd2e/page/Page/>
- b. The DEIR should identify locations where each of the Growth Geographies overlay PCA Eligibility Areas.
- c. The DEIR must identify the direct, indirect, and cumulative impacts of the overlay of Growth Geographies and PCA Eligibility Areas on pertinent CEQA "Environmental Issue Areas," as well as measures that could avoid or minimize those impacts.

5. **Biological Resources Section**

a. **Mapping and Tables:**

- i. Providing maps that depict the intersection of PDAs, PPAs, PTAs, etc. with sensitive habitats, species, connectivity corridors, etc., provides a more complete picture of the potential impacts that might arise through implementation of PBA 2050+, provides insight

into the cumulative impacts of PBA 2050+ on critical and sensitive habitats of the Bay Area, and will enable agencies and the public to provide more substantive comments.

- ii. In addition to the mapping that was provided in the DEIR for Plan Bay Area 2050, Figures 3.5-1 to 3.5-4 that depicted the location of Critical Habitat and the locations of Regional Transportation (rail, major minor road, highway and interstate), the DEIR for Plan Bay Area 2050+ should provide similar mapping for the Growth Geographies.
- iii. In addition to the information that was provided in Tables 3.5-1 through Table 3.5-12 in the DEIR for PBA 2050, the DEIR for PBA 2050+ should include information regarding the impacts of the different Growth Geographies on critical habitat.
- iv. Generalized locations of tidal wetlands should be provided in the PBA 2050+ DEIR. As was discussed earlier in this letter, preservation and the long-term sustainability of tidal wetlands is crucial to maintaining the health of the Bay and for providing functions that benefit the residents of the Bay Area. Mapping of this habitat already exists in numerous documents including the Tidal Marsh Ecosystem Recovery Plan¹, the 2015 Bay Ecosystem Habitat Goals Update² and the Adaptation Atlas³. Direct and indirect impacts of proposed growth geographies, infrastructure, transportation, and shoreline protection projects on tidal wetlands should be assessed, avoided and minimized. This can only be accomplished if the general locations of tidal wetlands with respect to the various growth geographies, PDAs, PPAs, PTAs, etc. are provided.

b. Existing Conditions:

We are encouraged by the incorporation of language into Environment Element 1 (EN1) that recognizes that habitats of the Bay are threatened by rising sea levels. We urge that the PBA 2050+ DEIR incorporates the following information regarding the state and international significance of the San Francisco Bay Estuary into the Biological Resources Existing Conditions section:

- i) PBA 2050+ must recognize that the San Francisco Bay Estuary is not just of State importance, but is of hemispheric importance and that this vitally important ecosystem is at risk from the combined effects of shoreline encroachment into former baylands and sea level rise. The San Francisco Estuary is the largest estuary on the west coast of both Americas.
- ii) San Francisco Bay has been recognized as a “Wetland of International Importance” by the Ramsar Convention. It has been identified as a Hemispheric Reserve for shorebirds by the Western Hemispheric Shorebird Reserve Network. This classification is the Network’s highest ranking and the Network states that, “San Francisco Bay holds higher proportions of the total wintering and migrating shorebirds on the U.S. Pacific coast than any other wetland.” The Bay supports hundreds of thousands of migratory waterfowl every year and has been designated an Area of Continental Significance for Waterfowl by the North American Waterfowl Conservation Plan, and an Important Bird Area by the National Audubon Society. The Bay provides Essential Fish Habitat as identified by the National Marine Fisheries Service and supports hundreds of fish and crustacean species.
- iii) Even with the vast surrounding urban development, the Bay remains one of the premier ecosystems in California. The San Francisco Bay-Delta ecosystem supports over 77% of the State’s coastal wetlands and will experience 2/3’s of the State’s socioeconomic impacts related to sea

¹ U.S. Fish and Wildlife Service. 2013. “*Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California.*” Sacramento, California. xviii + 605 pp.

² Goals Project. 2015. “*The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015.*” Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. California State Coastal Conservancy, Oakland, CA.

³ SFEI and SPUR. 2019. “*San Francisco Bay Shoreline Adaptation Atlas: Working with Nature to Plan for Sea Level Rise Using Operational Landscape Units.*” Publication #915, San Francisco Estuary Institute, Richmond, CA.

level rise. Rising sea levels will result in the drowning of the Bay's tidal wetlands habitats if wetlands can no longer keep abreast of rising seas through accretion of sediments or cannot migrate upslope due to human constructed barriers. A recent San Francisco Estuary Institute (SFEI) publication, "*Sediment for Survival*"⁴ documents the threat of drowning that Bay Area wetlands will face as sea levels continue to rise and sediment supply to the Bay continues to diminish.

- iv) Tidal wetlands provide essential ecosystem benefits that contribute to the region's biodiversity, provide benefits for our communities, contribute to the region's economy, and provide important climate resilience benefits, for example:
- (1) The California Water Quality Monitoring Council states, "Wetland vegetation works as a sediment trap and locks up nutrients and contaminants, thereby preventing concentration downstream that can result in algal blooms or human health hazards ... wetlands act as natural water purifiers, filtering and sequestering sediment and pollutants. Two-thirds or more of all the fish and most of the shellfish we consume are dependent on coastal wetlands..." (https://www.mywaterquality.ca.gov/eco_health/wetlands/extent/types/services.html#:~:text=Wetland%20vegetation%20works%20as%20a,blooms%20or%20human%20health%20hazard%20s.)
 - (2) Bay Area Water treatment plants are already being asked to upgrade their processes in order to remove more nutrients to help avoid Harmful Algal Blooms. Expanded Bay wetlands will help reduce that threat and the cost imposed on Bay Area residents to achieve that goal. Expanded wetland acreage will help grow our fishing industry as wetlands act as nurseries for many of our fisheries (fish, crabs, oysters, etc.), producing more jobs.
 - (3) Our Bay's shoreline habitats play a significant role in reducing the impacts of storm surges, acting as barriers that protect communities from flood inundation during high tides. This is why the historically conservative US Army Corps of Engineers is now advocating for the use of **Natural** and Nature Based Features (the equivalent of Solutions), "Natural and Nature Based Features are landscape features that are used to provide engineering functions relevant to flood risk management, while producing additional economic, environmental, and/or social benefits..." (<https://ewn.erdc.dren.mil/natural-nature-based-features/>).
 - (4) Tidal marsh vegetation sequesters carbon at a rate ten times greater than tropical forests⁵, thus helping in the fight against climate change and sea level rise itself. All these actions not only protect our communities but also provide immense economic benefits, reducing the need to implement other measures to address these issues.
 - (5) Tourism is one of the Bay Area's key industries and a living Bay, with seals, whales and birds, is one of the attractions that sustains this industry. Current data estimates that around 30% of tourists who visit the Bay Area take at least one ferry ride.

c) Identification and Analysis of Impacts to Biological Resources

- i) EN 5 of Attachment B "Draft Blueprint Strategy Refinements," version 5, refers to "High-Value Conservation Lands." The DEIR should discuss how "high-priority natural lands" will be identified. What criteria would be used to determine if sites are "high-priority" natural lands?
- (1) Lands identified as "Critical Habitat" for listed species should be considered "high-priority" natural lands.

⁴ Dusterhoff, S.; McKnight, K.; Grenier, L.; Kauffman, N. 2021. *Sediment for Survival: A Strategy for the Resilience of Bay Wetlands in the Lower San Francisco Estuary*. SFEI Contribution No. 1015. San Francisco Estuary Institute: Richmond, CA.

⁵ National Oceanic and Atmospheric Administration (NOAA) webpage. *Coastal Blue Carbon*. <https://oceanservice.noaa.gov/ecosystems/coastal-blue-carbon/> Accessed September 2024.

- (2) Undeveloped or lightly developed sites along the edges of the Bay that could support tidal marsh (and other baylands habitats) upslope migration should be considered “high-priority natural lands.”
- ii) The DEIR must identify and analyze the direct, indirect and cumulative impacts of the Growth Geographies on the natural habitats of the Bay (habitat degradation/loss, fragmentation, light impacts to biological resources, noise/vibration impacts to biological resources, introduction of non-native nuisance species, etc.).
- iii) The DEIR should provide worst case scenario of acreages of habitats that may be impacted by the location of Growth Geographies along the shoreline.
- iv) The DEIR should identify and analyze the direct, indirect, and cumulative impacts of shoreline Growth Geographies on the ability of baylands habitats to migrate landward as sea levels continue to rise. As an example, the adverse impacts of development, transportation, recreation and sea level rise adaptation projects can have on the ability of tidal wetlands to migrate inland as sea level rises, exacerbating and resulting in the drowning of wetlands. Seawalls and traditional levees can result in erosion of adjacent habitats.
- v) The DEIR should follow the sequence of analyzing strategies that will avoid direct, indirect and cumulative impacts of Growth Geographies on biological resources. If impacts cannot be avoided, the next strategy should be to minimize adverse impacts to biological resources.
- vi) If compensatory mitigation is proposed for potential impacts to biological resources that cannot be avoided or minimized, proposed mitigation ratios should be high enough to:
 - (1) Offset the temporal losses of wetland or riparian functions and values and to ensure “no net loss of wetlands” as required by the State’s Wetlands Conservation Policy (Executive Order W-59-93).
 - (2) Consider the limited locations in the Central and South Bay where tidal marsh (and other baylands habitats) can be created/restored, or enhanced
 - (3) Take into consideration the fact that analyses of compensatory mitigation for habitat loss have often concluded that compensatory mitigation often fails to replace lost functions or values.
 - (4) Should consider the crucial role that existing natural baylands habitats have in mitigating the impacts of climate change.
 - (5) A one-to-one mitigation ratio is setting the bar too low. The National Research Council in 1992 recommended ratios of at least three, five, or ten acres of mitigation wetlands or streams for every acre of wetland or stream destroyed depending on its functional value.

We deeply appreciate that EN-1 mentions the dedication of sufficient funds to support 100,000 acres of marsh restoration regionwide. However, without an assessment of whether shoreline-located Growth Geographies could adversely impact current baylands habitats, as well as areas that could support these habitats as sea levels continue to rise, this long-range strategy is likely to fall short.

6. Climate Change

- a. The DEIR should provide mapping of the Growth Geographies that has overlaying mapping of the 4.9’ total water levels from projected sea level rise for the identification of Growth Geographies of new development/infrastructure or redevelopment/relocation of existing development/infrastructure that would be at risk. The DEIR should also provide an analysis of impacts to the built and natural environment resulting from the location of Growth Geographies in areas that are projected to be vulnerable to flood risk due to rising sea levels, major storm events, or groundwater rise.
- b. The DEIR must identify Growth Geographies that overlay PCA Eligibility Areas for Natural Lands and Climate Adaptation.
- c. The DEIR must analyze the direct, indirect and cumulative impacts of Growth Geographies on the climate resilience of shoreline communities.

- d. We firmly support the proposed language of the “Strategy Long Descriptions” for EN1 that prioritizes the use of nature-based actions, but suggest for consistency with the terminology used in BCDC’s RSAP Guidelines, that the term be changed to “natural and nature-based solutions.”
- e. The PBA 2050+ DEIR should include and recognize climate adaptation strategies that avoid placing new development/infrastructure or redevelopment or relocation of existing infrastructure in areas that have been identified as vulnerable to existing or future flood inundation (total water level of 4.9’).

7. Alternatives for Consideration

- a. An alternative that avoids placing new development/infrastructure or redevelopment or relocated infrastructure in areas that will be inundated by 4.9’ total water levels should be included in the DEIR. The reasons for such an alternative are
 - i. Economics - the report⁶ authored by MTC-ABAG and BCDC of the anticipated \$105 billion dollar shortfall for protecting development and infrastructure that currently exists by 2050.
 - ii. The fact that placing new development/infrastructure or redevelopment/relocated infrastructure in areas that could provide migration space for baylands habitats, or areas where natural and nature-based solutions could be implemented, adversely impacts the long-term sustainability of the natural and built environment.
 - iii. Wang et al⁷ have noted “...measures to prevent flooding along an embayment shoreline in one location or subregion may increase inundation elsewhere in the system.” We are one Bay. Water displaced by raised fill pads, seawalls or levees at one location must flow elsewhere. Wang et al go on to state:

“The network of interactions occurs not only within subbasins of the Bay but also across the greater geographic extent from one end of the Bay to the other, and local jurisdiction may have either reciprocal relationships with or asymmetric impacts on one other. Importantly, the nature of the interaction network is seen to evolve with SLR: interactions are purely subregional at current sea level but with higher sea level (e.g., 1 m of SLR), not only do the subregional interdependencies strengthen but also regional interdependences emerge.”

With this in mind, the fact that a governance gap exists due to our lack of regional control over how adaptation to sea level rise differs from one shoreline community to the next increases the likelihood of indirect impacts in which distant shorelines face flooding and inundation due to hard-edged shoreline protections elsewhere in the bay. This could have consequences throughout the region as sea level inundation rates increase. Water deflected from Engineered fill pads, levees or seawalls designed to protect new development from the 100-year flood or sea level rise, has consequences for adjacent communities. As mentioned previously, these types of projects can also have significant and adverse impacts to tidal wetlands resulting in the drowning of wetlands or degradation through erosion, etc. It is the intent of BCDC’s RSAP Guidelines to avoid some of these unintended consequences of one local government adversely impacts neighboring and distant communities by insisting on a regional perspective when developing SSAPs.

⁶ Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG) and Bay Conservation and Development Commission (BCDC). “*Sea Level Rise Adaptation Funding and Investment Framework Final Report.*” July 2023.

⁷ Wang, R.-Q., Stacey, M. T., Herdman, L. M. M., Barnard, P. L., & Erikson, L. (2018). “*The influence of sea level rise on the regional interdependence of coastal infrastructure.*” *Earth's Future*, 6, 677– 688. <https://doi.org/10.1002/2017EF000742>

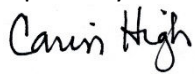
The San Francisco Bay Regional Coastal Hazards Adaptation Resiliency Group (CHARG), is “an organization of flood managers and scientists responsible for reducing flood risk in the San Francisco Bay area.” CHARG has created a series of maps for the Bay Area counties that depict “Sea Level Rise Connectivity Between Bay Area Jurisdictions” that can be viewed on their website: <https://sfbaycharg.org/our-work/jurisdiction-connectivity/> We believe this is an admirable effort, but it only addresses impacts related to identified flood control projects, not those associated with development, transportation or recreational trails. The strategies utilized to address sea level rise inundation for these other types of projects can also contribute to localized or regional exacerbation of sea level rise impacts. Thus, a moratorium restricting construction of new development in areas that are vulnerable to total water levels of 4.9’, could in fact, result in reductions of significant and adverse impacts to biological resources and residents of the Bay Area.

It is clear, therefore, that one of the DEIR alternatives must have the RSAP/SSAP incorporated into the PBA 2050+ in order to provide the regional approach to SLR impacts necessitated by the anticipated 4.9 feet of sea level rise by 2050 and the recognized impacts it will bring to shoreline communities, Bay habitats and wildlife, and to the economic and environmental benefits the Bay provides. The DEIR must analyze the negative impacts that would occur in failing to adopt such an alternative.

Conclusion:

The Environment Element of Plan Bay Area 2050 leaned heavily into the issue of environmental hazards and threats to human health and well-being. While these are certainly important concerns, we are encouraged that the information regarding updates to EN1, EN 4 and EN5, begins to describe the important role the habitats of the Bay play in supporting biodiversity, providing climate resilience for the natural and built environments, and human health and well-being. The impacts of the Growth Geographies on the natural environment need to be identified, analyzed, avoided, minimized and appropriate mitigation proposed in the DEIR. And it is imperative that BCDC RSAP Guidelines be incorporated into PBA 2050+ in a manner that will avoid conflicts and inconsistencies between the two plans. Lastly, it is important that the updated PCA program be incorporated into PBA 2050+. We appreciate the opportunity to provide Scoping comments and request that we be alerted to future opportunities for review and comment on PBA 2050+ documents.

Respectfully submitted,



Carin High
CCCR, Co-Chair



Gail Raabe
CCCR, Co-Chair