

# San Francisco Bay Conservation and Development Commission

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Via Email: [Projects@OneShoreline.org](mailto:Projects@OneShoreline.org)

**SUBJECT: BCDC Comments on the Millbrae & Burlingame Shoreline Area Protection and Enhancement Project and Notice of Preparation of an Environmental Impact Report; BCDC Inquiry File No. MC.MC.7415.26**

Dear Ms. Wong:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) for the Millbrae and Burlingame Shoreline Area Protection and Enhancement Project (Project), received by our office via email on October 10, 2023.

The San Francisco Bay Conservation and Development Commission (BCDC) staff is providing the following comments on the Project as a CEQA responsible agency for which a discretionary approval is necessary from BCDC, as described below. BCDC will rely on the Final EIR, among other reports, when considering a permit application for the project, and we appreciate this opportunity to comment on information and analyses to be included in the scope of the EIR. While the description of the Project in the NOP is not specific enough for BCDC staff to comment on every potential issue that could be raised with respect to BCDC's laws and policies, staff has prepared the following comments outlining issues under BCDC's jurisdiction that we would like to see addressed.

**Based on our current understanding of the project, staff have serious concerns about the proposed alternative for an offshore barrier and its potential impacts and staff's ability to find the project consistent with the Commission's *San Francisco Bay Plan* policies, including those on water surface area, volume, and circulation, fill in the Bay, Water Quality, and regional climate adaptation planning.**

Please note that the following comments are based on BCDC staff review of the NOP, the McAteer-Petris Act (Title 7.2 of the California Government Code), and the *San Francisco Bay Plan* (Bay Plan). Furthermore, while BCDC acknowledges receipt of the project technical reports released to the public on OneShoreline's web site partway through the NOP comment period, we were not able to review them in detail due to the limited time available.



BCDC is a State planning and regulatory agency with permitting authority over San Francisco Bay, the Bay shoreline, and Suisun Marsh, as established in the McAteer-Petris Act and the Suisun Marsh Preservation Act, respectively. Per the McAteer-Petris Act, BCDC is responsible for granting or denying permits for any proposed fill; extraction of materials; or substantial changes in use of any water, land, or structure within the Commission's jurisdiction (Government Code Section 66632). Additionally, BCDC establishes land use policies for the Bay as a resource and for development of the Bay and shoreline in the Bay Plan, which provides the basis for the Commission's review and actions on proposed projects.

Based on the NOP, the majority of the Project would be located within at least two areas of BCDC's permitting jurisdiction:

- In the San Francisco Bay, being all areas subject to tidal action, including the marshlands lying between mean high tide and five feet above mean sea level; tidelands (land lying between mean high tide and mean low tide); and submerged lands (Government Code Section 66610(a)); and
- In the shoreline band, consisting of all territory located between the shoreline of the Bay, as defined above, and 100 feet landward of and parallel with the shoreline (Government Code Section 66610(b)).

In addition, portions of the Project are located within Bay Plan-designated "Waterfront Park, Beach" priority use areas. Within the Commission's jurisdiction, projects proposed within these priority use areas must be consistent with the Bay Plan's Recreation policies and any relevant policies specified in Bay Plan Maps 5 and 6.

BCDC requests that OneShoreline include mapping of BCDC's jurisdiction in the forthcoming EIR and pay particular attention to potential project impacts that may occur in these areas as they relate to the Commission's policies. The EIR project description should also clearly detail where each component of the project would take place relative to the Commission's jurisdiction. BCDC staff is available to review any mapping or draft language to ensure that our agency's jurisdiction is accurately depicted and described.

## PROJECT UNDERSTANDING

Based on information provided in the NOP and accompanying technical documents, we understand the Project to include a combination of in-Bay and shoreline features that would create a tidal lagoon capable of controlling Bay water levels offshore of the cities of Burlingame and Millbrae (and possibly San Mateo) in San Mateo County. The Project would involve the filling of San Francisco Bay to construct an offshore barrier that would extend either approximately 2.65 miles across the water from San Francisco International Airport to southeastern Burlingame, or 2.71 miles from the airport to Coyote Point in the City of San Mateo. The barrier would be composed both of engineered materials such as concrete and/or steel walls and hardened natural materials designed to be a "living shoreline" and the barrier



may also accommodate a pedestrian pathway for public access. The dimensions of the barrier itself are not yet known, but would be a sufficient height, possibly up to an elevation of 22 feet NAVD88, to protect the shoreline from future sea levels and a sufficient width to support any proposed habitat and recreational features. The barrier would be constructed with tide gates and a large pump station to manage water levels in the lagoon and allow the lagoon to be connected to the Bay when tide levels allow. The Project may also involve a number of shoreline features, such as trails, beaches, habitat creation, levees, seawalls, bridges, tide gates, and pump stations.

Additionally, BCDC understands that the Project and EIR alternatives analysis will be based on the following objectives:

1. Protect areas within the cities of Millbrae and Burlingame along the Bay shoreline, creeks, and lagoons against current coastal hazards and future sea level rise as defined by OneShoreline's Bay Protection Standard of the FEMA Base Flood Elevation (BFE) plus 6 feet.
2. Enhance recreation and trails.
3. Promote healthy and sustainable ecosystems proximate to the Bay shoreline.

## CRITICAL POLICY ISSUES

### Planning for Offshore Barriers

The Water Surface Area and Volume Policy 1 of the Bay Plan states the following:

- 1) The surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action. Filling and diking that reduce surface area and water volume should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative.

This policy requires that the project proponent demonstrate that no reasonable alternatives to the barrier exist. To address this requirement, a thorough and detailed alternatives analysis report should be prepared. If requested by OneShoreline, BCDC staff can review and comment on the alternatives analysis report, potentially in consultation with BCDC's Engineering Criteria Review Board (ECRB). This process may be lengthy and we are able to begin this process with OneShoreline whenever requested, ideally prior to preparation of the EIR and prior to submittal of a permit application to BCDC for the proposed Project.

The Water Surface Area and Volume Policy 2 of the Bay Plan states the following:

- 2) Water circulation in the Bay should be maintained, and improved as much as possible. Any proposed fills, dikes, or piers should be thoroughly evaluated to determine their effects upon water circulation and then modified as necessary to improve circulation or at least to minimize any harmful effects.



To be consistent with this policy, the Project will require modeling of the Bay to assess impacts of the proposed project barrier and pumping systems on present and future water circulation, including such impacts as salinity, tides, shoaling, wave reflection, and their relevance to ecological impacts. Because the intention of this effort is to analyze and minimize impacts to the extent possible, BCDC recommends performing this work prior to preparation of the EIR and also prior to submittal of a permit application to BCDC for the proposed Project. Again, this process may be lengthy and we are able to initiate this process with OneShoreline whenever requested.

During the permit application process, BCDC staff will likely request that the ECRB review other modeling efforts to confirm the project complies with BCDC's Safety of Fills policies. Modeling of shoreline protection projects that include pumping systems will need to demonstrate that the conceptual design of the pump station will adequately meet the project objectives under a variety of current and future scenarios. Since the review of the project's engineering design may overlap with the necessary Bay circulation modeling study, we recommend those technical efforts proceed in coordination with each other.

Regarding in-Bay barriers generally, Bay Plan Water Surface Area and Volume Policy 3 states the following:

"Because further study is needed before any barrier proposal to improve water circulation can be considered acceptable, the Bay Plan does not include any barriers. Before any proposal for a barrier is adopted in the future, the Commission will be required to replan all of the affected shoreline and water area."

Thus, if the Project were to move forward, it would also require the Commission to first approve a Bay Plan amendment prior to consideration of a BCDC permit, to replan the affected shoreline and water area. The affected areas may extend beyond the diked area. The Bay Plan amendment process is described in Chapter 10 of BCDC's Regulations (California Code of Regulations Title 14, Division 5, Chapter 10, Article 1). In summary, the Regulations require that the entity applying for a Bay Plan amendment complete the application form and enter into a contract with BCDC to fully fund the work involved in processing and acting on the proposed Bay Plan amendments. Amending the Bay Plan requires a public process involving a staff preliminary recommendation, environmental assessment pursuant to CEQA, public hearing, and two-thirds Commission approval.

Since a barrier of the type proposed could have far-reaching impacts throughout the Bay system, staff anticipates that such a Bay Plan amendment would require a significant public process to evaluate and many years to complete.

We strongly recommend that OneShoreline work closely with BCDC through the development and evaluation of this project prior to preparation of the EIR, as proceeding with the Project as proposed would likely require an unprecedented review process which may necessitate



changes to the Project in order to be able to be found consistent with the Water Surface Area and Volume policies of the Bay Plan. The October 2023 Conceptual Alternatives Feasibility Analysis for the Project by Schaaf & Wheeler (the 2023 Alternatives Analysis) estimated two years for regulatory permitting of the Offshore Barrier Alternative (Table 5-2 of the 2023 Alternatives Analysis) and does not appear to include the above-identified regulatory requirements. Staff can work with you to develop a more realistic estimated timeline.

### **Bay Fill and Environmental Impacts Mitigation**

Section 66605 of the McAteer-Petris Act sets forth the criteria necessary to authorize placement of new fill in the Bay and certain waterways. It states:

- (a) That further filling of San Francisco Bay and certain waterways specified in subdivision (e) of Section 66610 should be authorized only when public benefits from fill clearly exceed public detriment from the loss of the water areas and should be limited to water-oriented uses (such as ports, water-related industry, airports, bridges, wildlife refuges, water-oriented recreation, and public assembly, water intake and discharge lines for desalinization plants and power generating plants requiring large amounts of water for cooling purposes) or minor fill for improving shoreline appearance or public access to the bay;
- (b) That fill in the bay and certain waterways specified in subdivision (e) of Section 66610 for any purpose should be authorized only when no alternative upland location is available for such purpose;
- (c) That the water area authorized to be filled should be the minimum necessary to achieve the purpose of the fill;
- (d) That the nature, location, and extent of any fill should be such that it will minimize harmful effects to the bay area, such as, the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment, as defined in Section 21060.5 of the Public Resources Code;
- (e) That public health, safety, and welfare require that fill be constructed in accordance with sound safety standards which will afford reasonable protection to persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters;
- (f) That fill should be authorized when the filling would, to the maximum extent feasible, establish a permanent shoreline; and
- (g) That fill should be authorized when the applicant has such valid title to the properties in question that he or she may fill them in the manner and for the uses to be approved.

Bay Plan policies on Mitigation require projects to be designed to avoid adverse environmental impacts. Where they cannot be avoided, they should be minimized to the greatest extent practicable, and finally, “measures to compensate for unavoidable adverse impacts to the natural resources of the Bay...” are required. The project in this case is to provide for flood protection and related purposes as described above, not to create a tidal lagoon, thus avoidance includes alternative methods to provide flood control. The policies provide specific criteria for how compensatory mitigation projects should be sited and designed, community involvement in providing compensatory mitigation, when compensatory mitigation should occur relative to the impacts, and how to determine whether banking or in-lieu fee programs are acceptable. The policies also state that “Mitigation programs should be coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.”

The NOP project description does not quantify the amount of Bay fill proposed for the project, but it is anticipated to be unprecedented in size. The barrier, if 2.65 miles long and assuming a 100-foot width, could fill 32 acres. The lagoon created by the project, may be as much as 670 acres (Table 4-11, 2023 Alternatives Analysis).

Mitigation may potentially be required to compensate for both hydrodynamic and ecological impacts in order to be able to find the Project consistent with section 66605 of the McAteer-Petris Act. BCDC recommends that a detailed understanding of impacts and the development of acceptable compensatory mitigation be developed by coordinating with all affected agencies prior to preparing the EIR so that any potential impacts of any necessary compensatory mitigation project are analyzed as well.

### **Environmental Justice and Community Engagement**

As a requirement of the BCDC permitting process, equitable and culturally-relevant community outreach and engagement should be conducted for nearby communities. Policy No. 2 of the Bay Plan Environmental Justice and Social Equity chapter states “...the Commission should support, encourage, and request local governments to include environmental justice and social equity in their general plans, zoning ordinances, and in their discretionary approval processes.” Policy No. 3 says “[e]quitable, culturally-relevant community outreach and engagement should be conducted by local governments and project applicants to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented and/or identified vulnerable and/or disadvantaged communities... Evidence of how community concerns were addressed should be provided.” Policy No. 4 states “[i]f a project is proposed within an underrepresented and/or identified vulnerable and/or disadvantaged community, potential disproportionate impacts should be identified in collaboration with the potentially impacted communities.” Public Access Policy No. 5 states “[p]ublic access that substantially changes the use or character of the site should be sited, designed, and managed based on meaningful community involvement to create public access that is inclusive and welcoming to all and embraces local multicultural and indigenous history and presence...” The policies go





further to state that public access improvements should not only be consistent with the project, but also incorporate the culture(s) of the local community, and provide "...barrier free access for persons with disabilities, for people of all income levels, and for people of all cultures."

The environmental review process should incorporate culturally-relevant community outreach and engagement efforts, identify whether the Project is in a vulnerable community, and if so, should identify potential disproportionate impacts. If necessary, the environmental review process should incorporate community involvement to determine how public access provided as part of the Project will be sited, designed, and managed, and how it will ensure that the access is inclusive and welcoming to all.

Project proponents should conduct such outreach during their planning and design phases of the project and this should not wait until the BCDC permitting process. If there has not been meaningful outreach and community engagement by the time a project applicant applies for a BCDC permit, then additional outreach or engagement may be required prior to Commission action in order for Commission staff to be able to find the project consistent with BCDC's Bay Plan Environmental Justice and Social Equity policies. We encourage OneShoreline and the Cities of Burlingame, Millbrae and San Mateo, to begin this engagement as soon as possible and throughout the project planning and to keep BCDC staff apprised of these efforts. If any assistance is needed identifying ways to undertake meaningful community outreach and engagement, please contact BCDC staff and we can provide guidance and tools to assist with this.

We also encourage the Cities and OneShoreline to also consider Mitigation Policy 3, which states "[f]or major and appropriate minor projects that require compensatory mitigation, communities surrounding both the project and the compensatory mitigation site should be meaningfully involved in an equitable and culturally-relevant manner. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. This should include consultation with the community in the identification and prioritization of potential projects, and in the monitoring and programming of a mitigation site. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action." As any mitigation options are developed for the project, the proponents should undertake community outreach related to any vulnerable, disadvantaged, and/or underrepresented communities located near the Project site and those communities that are located near the compensatory mitigation site.

### **Climate Change and Regional Sea Level Rise Planning**

Planning large projects that reduce the risk of sea level rise and other forms of coastal flooding, while also balancing numerous other interests, benefit from a regional collaborative approach, where stakeholders such as residents, cities, environmental groups, and land owners such as San Francisco International Airport, Caltrans and others can work together to share their particular needs and long-term plans, and arrive at a project that balances the needs and values of the community. Both the cities of Burlingame and Millbrae have prepared sea level rise adaptation plans (ESA 2019 and Climate Ready San Mateo County 2020), neither of which



include the proposed project as an alternative. The City of Burlingame passed an ordinance in late 2021 requiring levees be constructed along the City shoreline, and this work has already begun, pursuant to permits issued by BCDC. A locally-driven public process that takes many stakeholders into account is time consuming, but the effort allows the consideration of different project components depending on the risks presented. Regional frameworks such as the Adaptation Atlas (SFEI 2019), Baylands Subtidal Goals (2010) and Ecosystem Habitat Goals Update (2015), Adapting to Rising Tides Bay Area (BCDC, 2020), the Bay Adapt Joint Platform (BCDC, 2021) and BCDC's Adaptation Roadmap: A Practitioners Guide (2022) provide important regional context and guidance, particularly around nature-based approaches and equitable engagement practices. Through BCDC's Regional Shoreline Adaptation Plan effort currently underway (<https://www.bayadapt.org/regional-shoreline-adaptation-plan/>), the Commission is also developing guidelines for local governments to develop subregional sea level rise adaptation plans in furtherance of SB 272 (Laird, 2023), which will be completed by the end of 2024. Staff is happy to work with One Shoreline to provide advice and alignment on adaptation planning.

The State of California Sea Level Rise Guidance document ([http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20180314/Item3\\_Exhibit-A OPC\\_SLR\\_Guidance-rd3.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A OPC_SLR_Guidance-rd3.pdf)), which is currently being revised by the Ocean Protection Council, recommends that project proponents decide which sea-level rise projection to select and the necessary adaptation pathways and contingency plans to ensure resilience to sea level rise. These determinations are based on a variety of factors, including location, lifespan of the project, adaptive capacity and risk tolerance/aversion. It recommends project proponents consider the risks associated with various sea-level rise projections and determine tolerance for, or aversion to, those risks when planning for the future. The Guidance also promotes an "adaptation pathway" as a planning approach to address the uncertainty and challenges of climate change decision-making. Finally, given that future sea-level rise is uncertain, the Guidance enables consideration of multiple possible futures and allows analysis of the robustness and flexibility of various adaptation approaches across those multiple futures.

As required by Bay Plan Climate Change policies, the environmental documentation should undergo an analysis of the appropriate risk aversion criteria for the Project based on the high public safety risks associated with flooding. The environmental study should evaluate the total water level of flooding for the site, including wave action. Factors such as additional water from storm surges and seasonally high tides, as well as groundwater rise, should also be considered. The environmental review process should include a discussion of how the Project has been designed to adapt to, tolerate, and/or manage sea level rise and shoreline flooding at the site to ensure the Project is resilient to mid-century sea level rise projections, and how it can adapt to end of the century projections. An adaptation plan for the project should include a framework for evaluating the project over time to accommodate updates in sea level rise science, guidance, and planning. OneShoreline should also consider the adaptability of the Project over time. For example, the study should consider whether the existing shoreline or fill components of the Project could sustain the loads associated with raising the shoreline protection system or





incorporating other adaptation measures. If necessary, an adaptation plan should indicate whether adaptation strategies would have the potential to adversely affect public access areas and wildlife habitat, and methods for minimizing these effects.

## GENERAL NOP COMMENTS

### Bay Plan Policies Overview

The 2023 Alternatives Analysis correctly references the following Bay Plan policies relevant to the project:

- Water Surface Area and Volume
- Tidal Marshes and Tidal Flats
- Fresh Water Inflows
- Subtidal Areas
- Climate Change
- Shoreline Protection

The following additional Bay Plan policies are likely to be relevant to this project:

- Safety of Fills
- Airports
- Public Access
- Recreation
- Appearance, Design and Scenic Views
- Fish, Other Aquatic Organisms and Wildlife
- Mitigation
- Environmental Justice and Social Equity
- Public Trust
- Water Quality

### Preapplication Reviews

BCDC staff generally recommends that project proponents begin preapplication consultations on projects, particularly large and/or complex projects, as early as possible. This is especially necessary in projects, such as this one, that would require a Bay Plan Amendment. This allows for early identification of potential legal or policy concerns and coordination on design issues that will factor into the staff's recommendation on any forthcoming permit application.

Additionally, the Bay Plan includes policies that require some projects to conduct reviews with the Commission's advisory boards:

- The Commission has appointed the Engineering Criteria Review Board (ECRB) to review proposed Bay fill projects for the adequacy of their specific safety provisions and make recommendations concerning these provisions. Based on the size and complexity of the Project as described in the NOP, the Project should be reviewed by the ECRB.
- The Commission has also appointed the Design Review Board (DRB) to review, evaluate, and advise the Commission on the proposed design of developments that affect the appearance of the Bay in accordance with the Bay Plan findings and policies on Public Access; on Appearance, Design, and Scenic Views; and the Public Access Design Guidelines, as well as advise on the adequacy of proposed public access. Based on the Project's inclusion of public access components and its need to interface with the overall public access network across a broad area, the Project should be reviewed by the DRB.

These reviews are typically more effective earlier in the design process because the boards may provide recommendations that will result in changes to the project. Staff generally recommends that the reviews occur before any formal permit application is submitted so that changes can be incorporated into the early phases of the project design and planning. Please coordinate with BCDC staff to ensure timely review of the Project by BCDC's advisory boards.

## ENVIRONMENTAL ANALYSIS

Below is a list of environmental topics from the NOP and a description of how they overlap with BCDC policy areas that staff will use to evaluate the Project for any submitted permit application. Including these analyses in the EIR and addressing any related impacts with mitigation measures will support staff in developing relevant conditions and necessary findings to include in the permit staff recommendation. Note that this is not meant to be a complete description of topics or policies to be analyzed in the EIR and is only based on the limited information provided in the NOP.

### Aesthetics

Given the nature of the Project, it would substantially change the visual character of the Burlingame and Millbrae shorelines and could create significant view obstructions between the shoreline and the open Bay. The Bay Plan includes a policy section on Appearance, Design, and Scenic Views upon which the Commission will base its findings for the Project's visual impacts on the Bay. In defining the significance of the Project's aesthetic impacts, please consider the findings and policies in this section, and acknowledge these policies in the regulatory setting of the analysis. BCDC provides additional guidance on the interpretation of these policies in the Public Access Design Guidelines for Shoreline Spaces, particularly in the sections related to

Visual Access, Visual Quality, and Bay Setting. Please consider the Guidelines in your evaluation of the Project's potential effects on scenic vistas and scenic resources. The Guidelines are available on BCDC's website (<https://www.bcdc.ca.gov/planning/SPLG.pdf>).

### Biological Resources

The Bay Plan includes a number of policy sections related to biological resources, including Fish, Other Aquatic Organisms and Wildlife; Tidal Marshes and Tidal Flats; Freshwater Inflow; Subtidal Areas; and Mitigation. Please review the policies and findings in these sections and acknowledge them in the regulatory setting for this analysis.

As proposed, the Project would isolate a large part of the Bay and is likely to permanently impact the creek, tidal, and subtidal habitats behind the barrier. In addition, the Project has the potential to impact the movement and exchange of freshwater flows, oxygen and other nutrients, sediment, and plant and animal species between the created lagoon and greater Bay, and affect wave action and other hydrodynamics both at the Project site and in other parts of the Bay Area in a manner that could adversely affect sensitive species and habitats. All of these potential impacts should be addressed as part of this environmental analysis. Furthermore, it is essential that the study area for the biological resources analysis sufficiently captures the realistic extent of probable direct and indirect impacts based on the Bay's hydrology. A discussion of how the study area was determined should be included in the methodology for this analysis.

The Bay Plan's Mitigation policies provide direction for mitigating impacts to Bay natural resources (such as water surface area, volume, or circulation; aquatic organisms and habitat; subtidal areas; and tidal marshes and flats) that cannot be avoided. In further developing the Project description and designing potential mitigation measures in response to identified impacts, please consider these policies and engage with BCDC staff to ensure that any mitigation measures proposed will be consistent the Bay Plan. Please note BCDC's expectations for approaching mitigation as established in Mitigation Policy No. 1:

"Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act."

### Geology and Soils

The analysis in the EIR's geology and soils section relates to issue areas that BCDC will consider in the permit application process for the Project, including the safety and stability of the site in light of the significant size of the Project and its potential to affect soil stability and exacerbate

seismic hazards along San Mateo County shoreline; implications for the long-term stability, safety, and usability of the proposed public access amenities; and the potential for any erosion to affect biological resources and/or water quality in riparian, wetland, and Bay habitats present in the Project area. Based on our understanding of the project, the Project could result in a substantial risk of loss, injury, or death in the event of seismically induced failure of the proposed barrier or its systems. Thus, the EIR analysis should disclose the potential for failure, all necessary measures that must be in place in order to avoid or mitigate failure, and the potential effects of failure as the result of seismic events such as ground shaking or ground failure. These geology and soils issues would come to light through staff's determination of project consistency with the Bay Plan Safety of Fills policies and the ECRB process.

### **Hazards and Hazardous Materials**

Bay Plan Airports Policy No. 5 states that "to enable airports to operate without additional Bay filling, tall buildings and residential areas should be kept from interfering with aircraft operations. The Commission should prevent incompatible developments within its area of jurisdiction around the shoreline." In creating a lagoon and introducing habitat features at the Project site, the Project may attract birds that may then present an aviation hazard for San Francisco International Airport. Thus, the Project could constitute an incompatible development. The EIR analysis should include a discussion of the potential for the Project to create an aviation hazard. Should the project include hazardous materials such a diesel fuel tank for backup power for the pump station, this should be included as well.

### **Hydrology and Water Quality**

The Bay Plan includes policy sections for Water Quality, Water Surface Area and Volume, and Climate Change that are relevant to the EIR's hydrology and water quality analysis. Please review these findings and policies and acknowledge them in the regulatory setting for this issue area. As part of the setting and analysis, please clearly identify the water quality standards, plans, and/or discharge requirements applicable to the Project site.

Because the Project is being proposed as sea level rise adaptation, the analysis of its operational impacts on hydrology and water quality would not be complete without the evaluation of each significance criterion under future sea level rise scenarios. This analysis should, at minimum, be conducted to the same standards prescribed by Bay Plan Climate Change Policy No. 2 for sea level rise risk assessments required as part of the permitting process:

"When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of sea level rise

projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer.

The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.”

Thus, please ensure that the analysis conducted for the EIR is prepared by a qualified engineer and assesses impacts for the years 2050 and 2100, based on the Ocean Protection Council’s 2018 State of California Sea-Level Rise Guidance (currently under revision). The Project warrants an analysis at the State Guidance’s medium-high risk level at a minimum, which is appropriate to provide “a precautionary protection that can be used for less adaptive, more vulnerable projects or populations that will experience medium to high consequences as a result of underestimating sea level rise,” and using the high emissions assumption. Please ensure that all analyses use the NAVD88 datum.

Figure 4-20 in the 2023 Alternatives Analysis shows that the Project location and its upland areas are vulnerable to groundwater rise at with sea level rise. The Project has the potential to alter groundwater hydrology in a way that could decrease fresh groundwater supplies or recharge through such means as blocking groundwater flows or creating interference through the pumping required to maintain the proposed lagoon’s water levels. Therefore, EIR analysis should include comprehensive groundwater modeling to assess groundwater impacts from the Project under future sea level rise scenarios.

The EIR analysis should disclose the potential consequences of Project failure due to emergency events including flood, tsunami, or seiche events and the potential for subsequent flooding to mobilize pollutants in the vicinity of the project.

### Land Use and Planning

The Bay Plan should be considered a land use plan adopted for the purpose of avoiding or mitigating an environmental effect, and the EIR land use planning section should include an analysis of the Project’s consistency with the Bay Plan’s policies. In particular, please note that Part V of the Bay Plan includes land use policies specifically related to locations near the Project site. Policies 17, 18, and 19 of Plan Map 6 are as follows:

- **Plan Map Policy No. 17.** Coyote Point Recreation Area – Provide full-service public marina. Preserve beach and launching ramp; expand marina. Some fill may be needed. Preserve and improve swimming, windsurfing, picnic, family gathering, museum, interpretive facilities and playgrounds. Allow appropriate concessions. Stabilize shoreline. Potential water trail campsite. Improve access for non-motorized small boats. Protect harbor seal haul-out and pupping site where harbor seals rest, give birth and nurse their young. Projects allowed only if protective of harbor seals and other sensitive wildlife.



- **Plan Map Policy No. 18.** Bayside Park – Retain lagoon as open water.
- **Plan Map Policy No. 19.** San Francisco Airport – Further expansion into Bay only if clear need is shown by regional airport system study. Keep runway approach and takeoff areas free from tall structures and incompatible uses.

Please ensure that the EIR assesses the potential for the Project to interfere with the implementation of these policies, and note that any conflict would constitute a significant impact.

### Public Services and Recreation

Sections 66602 and 66632.4 of the McAteer-Petris Act require that every project shall provide maximum feasible public access, consistent with the proposed project, to the Bay and shoreline. In addition, Bay Plan Public Access Policy No. 2 states that “maximum feasible access to and along the waterfront and on any permitting fills should be provided in and through every new development in the Bay or on the shoreline.” Thus, the EIR should note that in order to be permitted by BCDC, the Project will likely be required to construct or expand recreational facilities.

Additionally, please note that the Bay itself functions as a recreational facility in the Project’s vicinity, as indicated by Plan Map Policy No. 17, quoted above. The EIR should document the recreational uses of the Bay in and around the Project site and evaluate whether the use of the site for the Project would result in a deterioration of the area’s ability to continue to support those uses. If so, and if those uses would then be required to relocate to other facilities around the Bay, the EIR should evaluate whether this could result in substantial physical deterioration of those facilities.

Note that any public access facilities designed as part of the Project should be sited and designed in such a way to seamlessly integrate with existing facilities as well as those already required by existing BCDC permits. New facilities should also be appropriately sized to accommodate usership consistent with a regional recreational attraction. Bay Plan Public Access Policy No. 8 requires that new improvements be “designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should provide barrier free access for persons with disabilities, for people of all income levels, and for people of all cultures to the maximum feasible extent, should include an ongoing maintenance program, and should be identified with appropriate signs, including using appropriate languages or culturally-relevant icon-based signage.” Please ensure that these standards are incorporated in the public access proposal for the Project and included in the public services analysis for parks.

### Transportation

One of BCDC’s key considerations for assessing maximum feasible public access is the convenience and safety of site access where a project connects to the larger transportation network. Please review the findings and policies in the Bay Plan’s sections on Transportation and Public Access and acknowledge them in the regulatory settings for the transportation





analysis. Please consider these policies in your analysis of whether the Project would conflict with a policy addressing transit, roadway, bicycle, and pedestrian facilities, and whether the Project would increase transportation hazards.

Bay Plan Public Access Policy No. 12 states that “federal, state, regional, and local jurisdictions, special districts, and the Commission should cooperate to provide appropriately sited, designed and managed public access, especially to link the entire series of shoreline parks, regional trail systems (such as the San Francisco Bay Trail) and existing public access areas to the extent feasible without additional Bay filling and without significant adverse effects on Bay natural resources.” Through its permitting actions, the Commission has required the implementation of numerous public access facilities, many of which are linked together by segments of the San Francisco Bay Trail. As part of the transportation analysis, the EIR should assess any potential conflicts between the Project and the Bay Plan’s public access policies as well as the planned alignment of the Bay Trail along the Project site.

### **Tribal Cultural Resources**

As part of the Bay Plan’s policies on Environmental Justice and Social Equity, the Commission is required to consider its guiding principles on environmental justice and social equity in all of its actions and activities. The first of these guiding principles is to “recognize and acknowledge the California Native American communities who first inhabited the Bay Area and their cultural connection to the natural resources of the region.” Additionally, Public Access Policy No. 5 states that public access should embrace “local multicultural and indigenous history and presence,” and Recreation Policy No. 4 states that parks should emphasize historical and cultural education and interpretation.

Please ensure that the EIR includes a description of the Native American history and cultural resources associated with the Project site. In preparing the EIR, please conduct meaningful outreach towards the tribes associated with this area as part of the AB 52 consultation requirement. Additionally, please ensure that the cultural and tribal cultural resources environmental setting identifies all historically and culturally significant resources at the Project site and at any related sites (if applicable), and note in the analysis whether and how the Project will acknowledge or incorporate information about those resources in its design or programming.

### **Utilities and Service Systems**

Utilities and Service Systems within BCDC jurisdiction on this project is expected to relate to storm drains and pumping and power systems for the pump station. Please ensure the EIR describes measures in the design to address the reliability and redundancy of the utilities and service systems necessary for the project and any impacts these utilities and systems may have. Please ensure the impacts of the project on the coastal storm drain and sewer systems are also addressed, in current and future scenarios.

## Alternatives Analysis

The 2023 Alternatives Analysis presents three alternatives (1. Shoreline and Creek Levees and Barriers, 2. Shoreline Levees and Barriers with Tide Gates and 3. Offshore Barrier and Managed Tidal Lagoon) and identifies the Offshore Barrier and Managed Tidal lagoon (the proposed project) as the Least Environmental Damaging Practicable Alternative. It appears that these will be the alternatives assessed in the EIR.

Section 66605 of the McAteer-Petris Act includes the following provisions relevant to the selection and evaluation of alternatives for the EIR: "...fill in the bay and certain waterways... for any purpose should be authorized only when no alternative upland location is available for such purpose;" "the water area authorized to be filled should be the minimum necessary to achieve the purpose of the fill;" and "the nature, location, and extent of any fill should be such that it will minimize harmful effects to the bay area, such as, the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment, as defined in Section 21060.5 of the Public Resources Code." These requirements are reflected in policies throughout the Bay Plan, including:

- Bay Plan Water Surface Area and Volume Policy No. 1, which states that "filling and diking that reduce surface area and water volume should... be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative."
- Tidal Marshes and Tidal Flats Policy No. 1, which states that "filling, diking, and dredging projects that would substantially harm tidal marshes or tidal flats should be allowed only for purposes that provide substantial public benefits and only if there is no feasible alternative."
- Subtidal Areas Policy No. 2, which states that "subtidal areas that are scarce in the Bay or have an abundance and diversity of fish, other aquatic organisms and wildlife should be conserved. Filling, changes in use, and dredging projects in these areas should therefore be allowed only if: (a) there is no feasible alternative; and (b) the project provides substantial public benefits."

Therefore, the alternatives evaluated in the EIR should include at least one alternative that is sited upland of the Bay, and at least one alternative that reduces or eliminates the amount of fill proposed. The EIR should also consider at least one alternative that uses the concept of "adaptive pathways," that allows for a more gradual response to climate change impacts. If all such alternatives are determined to be infeasible and not appropriate to include in the EIR analysis, please include a detailed discussion of why the alternatives are infeasible and how the determination was made. Please note that the McAteer-Petris Act does not consider cost as a factor when determining whether an alternative upland location is available. Furthermore, please ensure that the analysis of the alternatives includes comparisons of environmental impacts on tidal marshes and tidal flats and subtidal ecosystems.

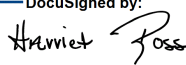
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Please note that, as part of the BCDC permitting process, the project proponent will need to demonstrate to the satisfaction of the Commission that the Project is consistent with Government Code Section 66605. A thorough analysis of these issues in the EIR will likely support the project proponent in this effort.

Thank you for providing this opportunity to review the NOP for the Millbrae and Burlingame Shoreline Area Protection and Enhancement Project. We look forward to working with you as the project is developed and through the permitting process. If you have any questions regarding this letter or the Commission's policies and permitting process, please do not hesitate to contact Harriet Ross at [harriet.ross@bcdc.ca.gov](mailto:harriet.ross@bcdc.ca.gov) or 415-352-3615.

Sincerely,

DocuSigned by:  
  
FF0ABDCC800744A...

HARRIET ROSS  
Regulatory Director

HR/JH/ra

cc: State Clearinghouse, [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)  
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