

San Francisco Bay Conservation and Development Commission

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TO: Commissioners and Alternates

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SUBJECT: **Final Staff Recommendation for Proposed Bay Plan Amendment No. 1-25, an update to the Cartography of the San Francisco Bay Plan Maps**
(For Commission consideration on April 16, 2026)

Final Staff Recommendation

The staff recommends that the Commission adopt the attached Resolution No. 2026.01 (Appendix A) that would:

- Amend the San Francisco Bay Plan: Part V –The Plan Maps. This amendment is for cartographic purposes only and will not result in any policy changes to the Bay Plan.
- Approve minor changes including cartographic edits, data source updates, and other corrections as needed.
- Make necessary findings that this amendment to the San Francisco Bay Plan conforms to all applicable findings and declarations of policies in the McAteer-Petris Act.
- Make necessary findings regarding the Environmental Assessment.

Background and Staff Analysis

I. Bay Plan Amendment No. 1-25

On September 18, 2025, the Commission voted to initiate Bay Plan Amendment No. 1-25 ("BPA No. 1-25") to make cartographic modifications to the *San Francisco Bay Plan Maps*.

BCDC staff released its Preliminary Staff Recommendation on January 16, 2026. This began a required 30-day public comment period, and the Commission held a public hearing on BPA No. 1-25 on February 19, 2026. Subsequently, staff made some changes to the proposed maps, based on Commissioner feedback, which can be found in Resolution 2026.01 (Appendix A, Exhibit A (Maps)). The changes, along with the supporting legal and policy framework used to evaluate the amendment, are summarized and analyzed the following sections.



A. **Bay Plan Maps: Purpose**

The San Francisco Bay Plan includes seven static maps that serve as reference tools that help the public, project applicants, local governments, and other stakeholders understand BCDC's policies for particular locations around the Bay. These maps are published as part of the Bay Plan and are widely available to the public through BCDC's website and in printed form.

The Bay Plan maps serve three primary functions, as established in the San Francisco Bay Plan: Part V –The Plan Maps introduction.

- **Illustrate geographic-specific Bay Plan policies.** The “Bay Plan Policies” listed opposite each corresponding Bay Plan map are enforceable policies (*e.g.*, Plan Map 1, Bay Plan Map Policy 1: “Rat Rock – Preserve island; no development”). These enforceable policies have the same authority as policies throughout the Bay Plan.
- **Provide advisory notes and suggestions.** Comments that are not part of the Bay Plan policies—*e.g.*, suggestions for further study, clarification of policy, and alternative proposals—appear as “Plan Map Notes” and “Commission Suggestions” preceding the corresponding map (*e.g.*, Plan Map 1 Commission Suggestion B “Possible use of Bel Marin Keys Unit V as a wetland restoration site using dredged material”). These comments are not enforceable policies of the Commission.
- **Identify Commission-designated Priority Use Areas (PUAs).** PUAs are shoreline areas designated by the Commission under Government Code Section 66602 for specific water-related uses including airports, ports, water-related industry, waterfront parks/beaches, and wildlife. The specific boundaries of PUAs are set in Commission Resolution No. 16.

The original Bay Plan, published in 1969, contained such maps. Throughout the years, the Commission has made numerous updates to them based on changing conditions, Commission-led policy development, or external requests. These changes can only be made following a public Bay Plan Amendment process outlined in the McAteer-Petris Act (Government Code Section 66652).

In practice, these maps are predominantly used as an initial screening tool by BCDC staff and project proponents seeking a BCDC permit. The maps are one of several tools used to help determine whether a project may be located within or near a Priority Use Area or may be subject to a specific Bay Plan policy. Critically, as stated in the Bay Plan introduction: “The Plan maps are not intended to delineate the Commission’s jurisdiction. The Commission’s legal jurisdiction is described in the McAteer-Petris Act and the Commission’s regulations and has been affected by certain court decisions. The Commission’s staff should be consulted concerning questions of precise jurisdiction.” These maps serve as a reference and work in

conjunction with other BCDC resources including the online interactive PUA map, the internal beta Jurisdiction Screening Map, other available mapping resources, and staff consultation to provide mapping information.

B. Issues with Existing Bay Plan Maps

Despite their importance, the current Bay Plan maps have several limitations and issues that reduce their effectiveness as communication and mapping tools. They have not received a major update since at least 2006, with only minor updates to reflect amendments to Priority Use Area boundaries and related Bay Plan Map Policies and notes. In addition, the maps are not consistent with current cartographic best practices, are difficult to update, may not reflect the geography of the existing shoreline, and are not accessible to individuals with disabilities. Some examples of flaws in the existing maps are described below:

- *Unclear symbology.* The existing maps use the same symbology or color shapes for different feature types, creating confusion for users. Some lines are not defined in any of the legends, leaving the user uncertain about their meaning.
- *Not ADA Accessible.* The existing maps include font sizes that are smaller than recommended for visually impaired readers and utilize symbology that does not meet color contrast standards.
- *Illegible and incomplete labels.* Font sizes on existing maps are too small to read when printed at scale, making it difficult to identify specific locations. Some landmarks are labelled but do not have any connection to BCDC policies and do not assist orienting viewers to the map. These labels can make it more cluttered and difficult to read the maps.
- *Inconsistent jurisdictional boundaries.* The existing maps depict BCDC's jurisdictional boundaries inconsistently across different geographic areas. This can create confusion about the extent of the Commission's regulatory authority and where the Bay Plan policies apply. The maps also use inconsistent colors and lines to depict the Bay's edge, making it difficult for users to understand BCDC's jurisdictional limits.
- *Outdated data sources.* Data representing the physical environment and built infrastructure is out of date in the existing maps and does not represent current conditions.
- *Difficult to maintain and update.* The existing maps are not currently published using Geographic Information System (GIS), which makes them difficult to update with recent, more accurate data.

Public Comments

Section 11005(b)(1) of the Commission’s regulations requires this Final Staff Recommendation to contain “a summary of comments and responses to all comments on the proposed amendment received either in writing prior to the close of the public comment period or at the public hearing which the staff planning report did not already summarize and respond to.” On January 16, 2026, BCDC released its Preliminary Staff Recommendation, which opened a 30-day public comment period. On February 19, 2026, BCDC held a public hearing on BPA No. 1-25. The Commission closed the Public Hearing on February 19, 2026. BCDC received no written public comments during the public comment period (January 16, 2026 – February 19, 2026) nor during the public hearing on February 19, 2026.

Additional Staff Analysis

At the February 19, 2026 public hearing, Commissioners raised multiple questions, policy issues, and suggestions related to BPA No. 1-25. This section analyzes Commissioner comments and describe staff's responses. Commissioner comments centered on themes related to map purpose, PUA designations, scenic designations, accessibility, labeling, data sources, and evolving shoreline conditions. For each theme below, staff provides analysis of the underlying issue, describes the proposed response approach, and any actions taken through map revisions. The final proposed maps can be found in Appendix A, Exhibit A.

II. Purpose and Function of Bay Plan Maps

Multiple Commissioners requested a clearer explanation of what the Bay Plan maps show and their intended purposes, particularly regarding map policies, suggestions, Priority Use Areas (PUAs), and distinction from jurisdictional mapping.

The background and purpose of Bay Plan Maps are detailed in section I.A of this Final Staff Recommendation. These maps balance competing goals: providing useful basic geographic context to orient users to Bay Area geography, supporting the primary map purpose of showing map policies, suggestions and notes, and PUAs, and maintaining readability in a printed format. In addition to this context, staff acknowledge that the relationship between the maps, the accompanying text (map policies, suggestions, PUA names), and other BCDC resources may not be immediately intuitive to users encountering the Bay Plan for the first time. To address this, staff included additional text on the maps indicating that “For Map Policies, Suggestions, Notes and Priority Use Area Names, see preceding pages” to help orient users of the maps how to find the relevant information. Staff also updated the introductory text of the Bay Plan to help clarify the role of the plan maps in illustrating Commission jurisdiction by adding, "Tidal Marsh and Bay Waters extent may be obscured by Priority Use Areas, Salt Ponds, or Managed Wetlands in some locations."

III. Priority Use Areas – Boundaries, Designations and Modification Process

Commissioners asked about the accuracy of specific PUA boundaries, terminology inconsistencies between Resolution No. 16 and the maps, the geographic scope of PUAs, and the process for modifying PUA designations.

PUAs have been designated by the Commission in the Bay Plan from its inception in 1969, with boundaries established reflecting the Commission's regional vision for Bay uses at the time of designation. These boundaries have been modified over time through various Bay Plan amendments. Resolution No. 16, adopted by the Commission, provides the authoritative list of PUA numbers, names, boundaries and designations.

Importantly, this Bay Plan Amendment does not involve any policy or standard changes, and as a result no PUA boundaries are proposed to be modified. Any modification to a PUA is considered a policy change and would require a Bay Plan Amendment with substantial analysis of the impacts of the change and an affirmative vote of two-thirds of the full Commission. Recent examples of PUA changes include BPA 4-19 to modify the Waterfront Park, Beach PUA designation at India Basin (San Francisco) and BPA 5-19 to remove the Water-Related Industry PUA designation along Pacheco Creek (Martinez). Map or diagram changes, such as proposed in BPA No. 1-25, need only be approved by a majority of the Commission.

In this Bay Plan Map revision, staff updated the legend to change “Wildlife Refuge” to “Wildlife” for labeling this Priority Use Areas designation. This is because a “Wildlife Refuge” is typically understood in the context of the National Wildlife Refuge System. The Bay Plan “Wildlife” Priority Use Area designation is inclusive of shoreline area. Plan Map 1. Priority Use Area 15A. Petaluma Marsh”, which is wildlife area managed by the CA Department of Fish and Wildlife. Additionally, the term “Wildlife” is what is referenced in Resolution No. 16.

IV. Symbology, Color Contrast and Accessibility

Commissioners raised concerns about color contrast for colorblind users, overlapping features, and legend clarity. Specifically, Commissioners asked for staff to re-examine overlap of tidal marsh, wildlife, and Bay Waters for colorblind users.

While developing maps, staff conducted multiple rounds of ADA compliance review focused on color contrast, readability standards, and colorblind accessibility. The amended maps represent significant improvements over the existing maps in font size, color contrast, and overall accessibility.

In response to Commissioner comments, staff adjusted PUA color symbology to increase color contrast ratios between PUA designations and basemap features (*e.g.*, Bay Waters), reduced transparency of PUA overlays to make the boundaries more visually distinct, and used a hatched line symbology for “Wildlife” PUAs to allow users to better understand overlap of this designation with tidal marsh and bay waters basemap features.

While not all features in the maps meet recommended 3:1 color contrast for visually impaired users, the Plan Maps include other best practices for distinguishing between map

features such as symbols (*e.g.*, Airports, Seaports, Water-related industry), hatching and patterns (*e.g.*, Tidal Marsh, Salt Ponds or Managed Wetlands), and labeling (*e.g.*, PUA Number labels). Table 1 below highlights current color contrast between various map elements.

Best practice in cartography is to have 3:1 color contrast for graphical elements to ensure adequate readability and elements meeting this ratio are highlighted green. Map elements which improve readability via other strategies, such as hatching or symbols. are highlighted yellow.

Additionally, as mentioned in Section II above, the maps' cartographic emphasis is on layers that show the purpose of the Bay Plan Maps, and clarifying language about obscured background features was added in the introduction to Bay Plan Part V.

Table 1: Table of color contrast ratios for major map elements.

	Waterfront Park, Beach	Airport	Seaport	Water- Related Industry	Wildlife	Bay Waters	Tidal Marsh	Scenic Drives/Vista	Salt Ponds
Waterfront Park, Beach	-	2:1	2:1	3:1	3:1	6:1	4:1	4:1	8:1
Airport	2:1	-	2:1	2:1	3:1	5:1	3:1	3:1	6:1
Seaport	2:1	2:1	-	2:1	3:1	5:1	3:1	4:1	7:1
Water- Related Industry	3:1	2:1	2:1	-	2:1	3:1	2:1	2:1	4:1
Wildlife	3:1	3:1	3:1	2:1	-	2:1	2:1	3:1	5:1
Bay Waters	6:1	5:1	5:1	3:1	2:1	-	2:1	3:1	2:1
Tidal Marsh	4:1	3:1	3:1	2:1	2:1		-	3:1	5:1
Scenic Drives/Vista	4:1	3:1	4:1	2:1	3:1	3:1	3:1	-	6:1
Salt Ponds	8:1	6:1	7:1	4:1	5:1	2:1	5:1	6:1	-

V. Scenic Vistas and Drives

Commissioners asked about vista points and scenic drives, specifically their definition, origin, and how designation works.

The first Bay Plan (1969) included identified vista points and scenic drives. Vista points generally represent locations with significant Bay views accessible to the public. The specific criteria used for their original designation include views from further inland, hills, roadways, and "entrance" roads that come over ridges and provide a "first view" of the Bay. These vista points are not intended to be an exhaustive representation of all the available or significant vista points for the region. The Bay Plan maps are intended as a regulatory and planning tool, not a recreational resource to be relied upon for interpretive activities around the Bay.

These designations connect to several Bay Plan policies, particularly in the Appearance, Design, and Scenic Views; Public Access; and Recreation. Appearance, Design, and Scenic Views Policy 15 states that “Vista points should be provided in the general locations indicated in the Plan maps. Access to vista points should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where parking or public transportation is available.” However, these designations should not be seen in any way as limiting where Bay viewing locations can or should be located. In fact, quite the opposite. Multiple Bay Plan policies incorporate visual access (views) to the Bay from public spaces, as an important concept of public access. (e.g., “Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline..,” “New or rebuilt roads in the hills above the Bay and in areas along the shores of the Bay should be constructed as scenic parkways in order to take full advantage of the commanding views of the Bay,” “Shoreline developments should be built in clusters, leaving areas open around them to permit more frequent views of the Bay.” Excerpts from Appearance, Design, and Scenic Views Policy 2, 7, and 8).

As part of this map update, staff created digital records of vista points and scenic drives for the first time, using the current Bay Plan maps and confirmed their intended location using 1969 Bay Plan Supplement and other historic documents. Some inconsistencies in vista point placement from the old Bay Plan maps compared to the digitized version are intentional, such as due to roadway realignment, were accounted for by having Bay Design Analysts review sites to confirm present-day scenic view and public accessibility. Apparent gaps in the distribution of scenic drives and vista points reflect the original historic designations. To better reflect the legacy quality of vista points and scenic drives in the Bay Plan maps, the final maps reduce the size of vista points and change the color slightly to better distinguish it from PUA designations. BCDC staff are not recommending modifying any vista points at this time, as they have a substantive policy function and any change to a vista point would be beyond changes “pertain[ing] only to a map or diagram,” requiring more robust analysis, outreach, and an affirmative vote of two-thirds of the full Commission. (Cal. Gov’t Code § 66652.)

VI. Labels and Geographic Context

Commissioners requested clarification on label placement, what features should be labeled, and inclusion of jurisdictional/landmark references.

Staff's labeling approach prioritizes features directly relevant to Bay Plan policies and Commission designations, municipalities and jurisdictions, landmarks specifically referenced in map policies or suggestions, and geographic features necessary for orientation. Features that are labeled in the Bay Plan maps include:

- Waterways (including those referenced in BCDC Regulation Section 10121 “San Francisco Bay and Certain Waterways Jurisdiction”)
- Cities and Counties in BCDC’s jurisdiction



- Landmarks relevant to BCDC’s eastern and western jurisdictional extent (*e.g.*, Point Lobos, Point Bonita)
- Bridges
- Highways and some major roadways that appeared in more rural areas in prior Bay Plan Maps (*e.g.*, Grizzly Island Road)
- PUA Numbers
- Map Policies
- Commission Suggestions

The original approach to map labels was inconsistent and resulted in overcrowded, difficult-to-read maps. The current approach represents a balance between comprehensive labeling and readability. Staff intend to include a more comprehensive set of Bay Plan specific landmarks in interactive, online maps planned to be launched next year.

Additionally, staff made the following specific changes to improve labeling in the Bay Plan maps and legend.

- Shifted the location of the city of Novato’s label closer to the shoreline.
- Changed “Bay and Certain Waterways” legend label to “Bay Waters” to reduce confusion of using jurisdiction-specific terminology.
- Changed “Tidal Marsh and Baylands” to “Tidal Marsh” legend label for simplicity.

VII. Data Sources and Evolving Conditions

Commissioner asked whether the maps should be updated to represent evolving shoreline conditions, and several Commissioners requested more detail about data sources and methods.

The amended maps incorporate best available regional data sources to represent current physical conditions as of the data collection dates shown in Table 2 . Key basemap features include transportation networks (highways, railroads) from Caltrans and Metropolitan Transportation Commission (MTC), salt ponds and managed wetlands from the California Department of Fish and Wildlife and historic BCDC records (*e.g.*, staff reports), and tidal marsh and bay waters from a subset of San Francisco Estuary Institute’s Baylands Habitat Map which was adapted for BCDC's Jurisdiction Screening Map. These data sources represent the most authoritative, regionally consistent datasets available at the appropriate scale for Bay Plan maps. Staff selected sources maintained by agencies with primary responsibility for each dataset type and that are actively updated on regular cycles.

There are two types of features shown on the maps. Basemap features (waterways, tidal marsh, salt ponds and managed wetlands, highways, railroads) represent current shoreline conditions that may be updated with new data as it becomes available. Policy features

(PUA boundaries, scenic drives, vista points, map policies, commission suggestions) represent Commission designations and should be changed only through Commission action via Bay Plan amendments.

It is not the intent of the Bay Plan maps to show all shoreline conditions, especially those that are not relevant to the Bay Plan map purpose. Additionally, basemap features that change frequently (*e.g.*, Bay Trail, Water Trail) were not included due to concerns that the information would be out of date.

Table 2: Changes to map data layers. The existing data source and the amended data source is listed, along with a brief description of the methods for developing the new data, when applicable.

Map Data Layer	Existing Map Data Source	Amended Map Data Source	Data Methods (if applicable)
Landmark Labels	Unknown	BCDC 2024	- Organized into various label categories (<i>e.g.</i>, Water, Transportation, Jurisdictions, and Priority Use Area Numbers) - Determined by staff which label categories should all be labeled (<i>e.g.</i>, streams, major bridges, and cities/counties).
Scenic Drives/Vistas	Unknown	BCDC 2024	- Reviewed existing Bay Plan Maps and digitized the scenic drives and vista points to correspond with the roads and viewpoints as originally referenced, with some having changed slightly due to modern road alignments and development. All were confirmed to currently be publicly accessible. - BCDC Bay Development Design Analyst reviewed the digitized scenic drives and vista points and conducted site visits, as needed, to confirm their location.

Salt Pond or Managed Wetland	EcoAtlas version 1.0bc (SFEI 1996)	BCDC 2024	- Conducted historic record review, including Diked Historic Baylands Staff Report (1982) and Salt Ponds Staff Report (2005) and permit records that cited Salt Pond or Managed Wetland jurisdiction. - The shape and extent of the Salt Ponds and Managed Wetlands was estimated based on staff report maps and present-day levee alignment. These were mapped using SF Bay Shore Inventory (SFEI 2016) and Suisun Marsh Private Managed Wetlands (BCDC 2025) and then buffered by 80 feet to estimate the extent of the outboard toe of the levee. Where significant differences were observed, features were modified manually using historic aerial imagery.
Tidal Marsh; Bay Waters	EcoAtlas version 1.0bc (SFEI 1996)	Baylands Habitat Map 2020 (SFEI 2024)	- Bay Waters and Tidal Marsh were estimated based on elevation and habitat data used in the Baylands Habitat Map 2020 (SFEI 2024). Elevations that limited the mapped extent (Mean High Water and 5 feet above Mean Sea Level) were from the San Francisco Bay Coastal Study (AECOM/FEMA 2016). - Additional modifications were made to the Baylands Habitat Map 2020 (2024) to incorporate elements of BCDC jurisdiction and assigned categories of ‘confidence’ based on uncertainty associated with data inputs. - Bay Waters data was restricted to those features with High and Medium Confidence. Low confidence features were filtered out of the maps where there was greater uncertainty about extent of

			tidal action, connectivity to the Bay, or provenance of tidal control structures (e.g., Foster City lagoons). Jurisdictional limits based on laws/regulations were also accounted for via exclusions and bounding geometries that were manually digitized based on written descriptions. These were reviewed and approved by BCDC legal staff. Examples of these limiting geometries are jurisdictional limits (described in BCDC Regulation section 10121), exclusion areas (described in 14 CCR Appendix B and McAteer- Petris Act section 66610), and the western (Pacific Ocean) and eastern (Delta) limits of BCDC jurisdiction (described in McAteer-Petris Act section 66610).
Railroads	Unknown	Caltrans 2023; MTC 2021	Combined passenger rail, freight rail, and BART line segments. MTC serves as the regional transportation planning agency and maintains GIS data on regional transportation networks. Caltrans rail network data includes additional freight rail segments. Data was simplified for cartographic purposes.
Roads	Unknown	MTC 2021	Filtered to 'State' or 'Interstate' Route Type. MTC serves as the regional transportation planning agency and maintains GIS data on regional transportation networks.
County Boundaries	NA	CalFire 2016	Clipped county boundaries at the shoreline, not showing the bayward portion of counties.

Final Environmental Assessment

BCDC received no comments regarding the draft environmental assessment published as part of the Preliminary Staff Recommendation dated January 16, 2026, or the adequacy of its environmental impacts analysis. Accordingly, no revisions to the initial environmental assessment, which is incorporated herein by reference, are proposed, and staff recommends that the Commission approve the final environmental assessment as part of its approval of BPA No. 1-25. (Reference 14 CCR §§ 11005(b)(2), 11524.)