

# PRIORITY CONSERVATION AREA REFRESH INTERIM MEMO

PCA Strengths and Weaknesses &  
Vision, Goals, Objectives for the PCA Refresh

**JULY 2023**

*FINAL MEMO ANTICIPATED WINTER 2023-24*






Association of  
Bay Area  
Governments



Metropolitan  
Transportation  
Commission







PRIORITY  
CONSERVATION  
AREA  
**REFRESH**

**INTERIM MEMO**

PCA Strengths and Weaknesses &  
Vision, Goals, Objectives for the PCA Refresh

---

DRAFT



# ACKNOWLEDGEMENTS

---

## **MTC/ABAG STAFF**

*Ben Botkin / PCA Grant Manager – San Francisco Estuary Partnership (SFEP)*

*Caitlin Sweeney / Director – SFEP*

*Chirag Rabari / Project Manager – Regional Planning Program (RPP)*

*Dave Vautin / Assistant Director, Major Plans – RPP*

*Heidi Nutters / Senior Program Manager – SFEP*

*Kearey Smith / Assistant Director, Data & Visualization – RPP*

*Matt Maloney / Director, RPP*

*Michael Germeraad / Principal Resilience Planner – RPP*

*Nora Bayley / CivicSpark Fellow – RPP*

## **CONSULTANT TEAM**

*WRT / Planning Lead*

*WRT Design Website*

*GREENBELT ALLIANCE / Stakeholder Engagement Support*

*SAGE / Regional Working Lands Support*

*CULTIVATE / Regional Working Lands Support*

# TABLE OF CONTENTS

---

<b>Acknowledgement</b> .....	5		
MTC/ABAG Staff			
Consultant Team			
<b>1. Introduction</b> .....	8		
1.1 Revamping the Regional Growth Framework			
<i>1.1.1 Land Use Tensions</i>			
1.2 Plan Bay Area 2050 and the Environment Element			
<i>1.2.1 The Environment Element</i>			
1.3 The Priority Conservation Area Program			
1.4 Why Refresh the Priority Conservation Area Framework?			
1.5 Priority Conservation Area Refresh Goals and Approach			
1.6 Introduction   Supplementary Content			
<i>Project Timeline</i>			
<i>Sustainable Agricultural Lands Conservation (SALC) Program Planning Grant</i>			
<i>Plan Bay Area 2050 Environmental Strategies</i>			
<i>MTC/ABAG PCA Refresh Project Scope</i>			
1.7 Key Takeaways from this Chapter			
			<i>2.1.1 Subsequent PCA Program Updates</i>
			<i>Summary of Priority Conservation Area Designations</i>
		2.2 Overview of Existing PCA Designations	
		<i>2.2.1 Data Analysis of Existing PCAs</i>	
		<i>2.2.2 Mapping Analysis of Existing PCAs</i>	
		2.3 PCA Grant Funding Overview and Analysis	
		<i>Funding Sources, Restrictions, and Swaps</i>	
		<i>PCA Grant Program Cycle 1 &amp; 2 Funding</i>	
		2.4 Key Takeaways from this Chapter	
		<b>3. Summary of Partner and Stakeholder Engagement</b> .....	42
		3.1 Detail of Engagement Activities and Approach	
		<i>TAC Members List</i>	
		<i>TAC Meeting Summaries</i>	
		<i>Engagement Timeline</i>	
		3.2 Key Themes Emerging from Engagement Activities to Date	
		<i>Existing PCA Framework Strengths and Weaknesses</i>	
		<i>PCA Refresh Priorities Strengths and Weaknesses</i>	
		<i>Survey 1 Participant Quotes</i>	
		<i>Key Questions Explored in TAC Meeting #1</i>	
		3.3 Key Takeaways from this Chapter	
<b>2. The Existing Priority Conservation Area Program</b> .....	24		
2.1 PCA Program Inception – 2007			

## 4. Draft Vision, Mission and Goals for the Refreshed PCA Program 56

Draft Vision, Mission, Goals for the Refreshed PCA Program

*Mission*

*Goals*

*Vision*

### 4.1 Refresh Priorities

Proposed PCA Types, Definition, and Draft Objectives

### 4.2 Key Takeaways from this Chapter

## 5. Draft Elements of a Data-driven Framework ..... 64

### 5.1 Draft Regional Data

### 5.2 A Science-Based, Data-Driven Approach

### 5.3 Methodology

List of Draft Regional Data

### 5.4 Potentially Eligible PCA Lands

*A. Natural Lands*

*B. Working Lands*

*C. Regional Recreation*

*D. Urban Greening*

*E. Climate Adaptation*

### 5.5 Equity Indicators

*CalEnviroScreen Key Indicators*

### 5.6 Key Takeaways from this Chapter

## 6. Considerations for the Path Ahead and Next Steps ..... 94

*Refining the Data-Driven Framework*

*Nominating, Evaluating, and Designating PCAs 2.0*

*Funding PCA Projects*

Next Steps for the PCA Refresh and Pivoting to Implementation

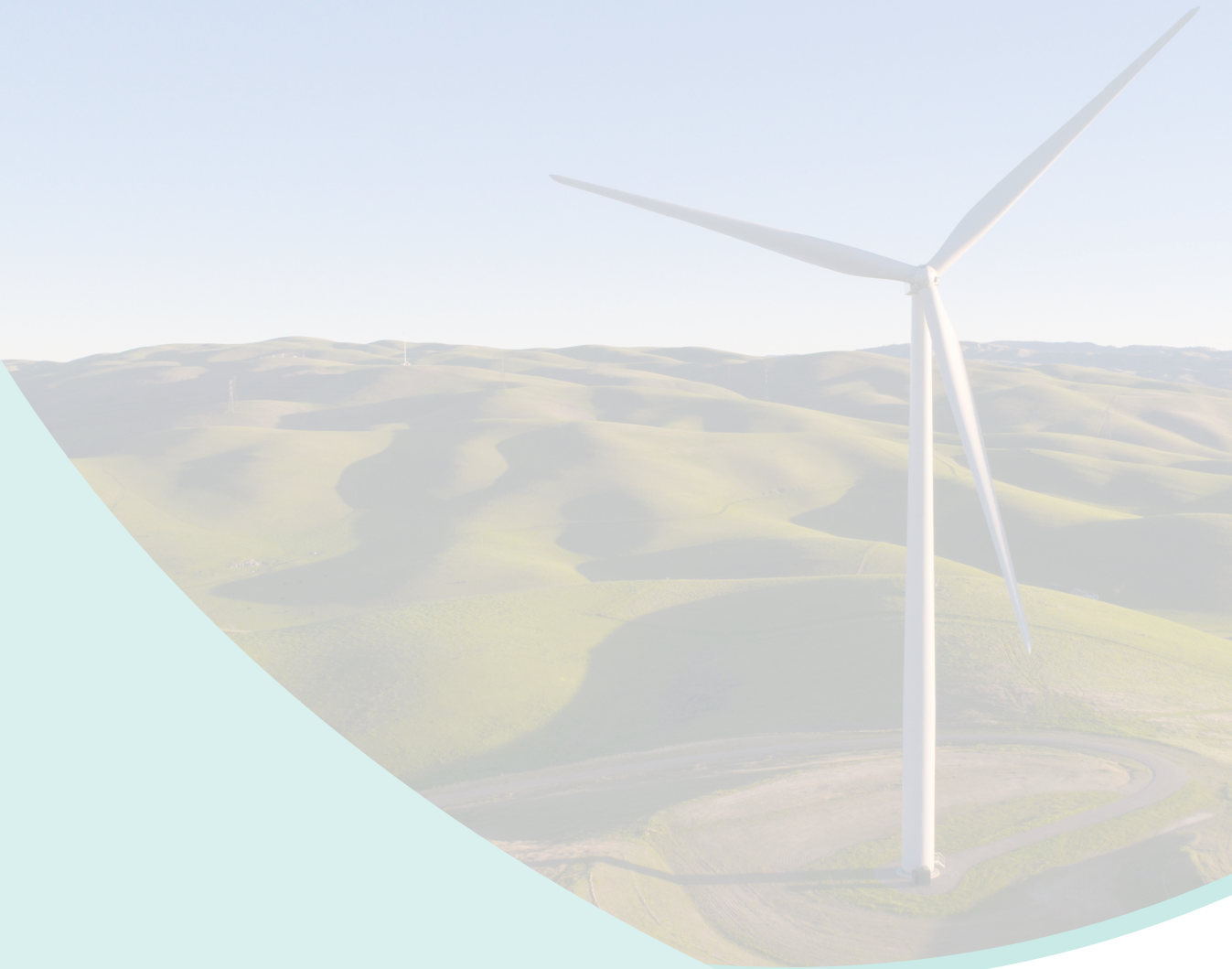
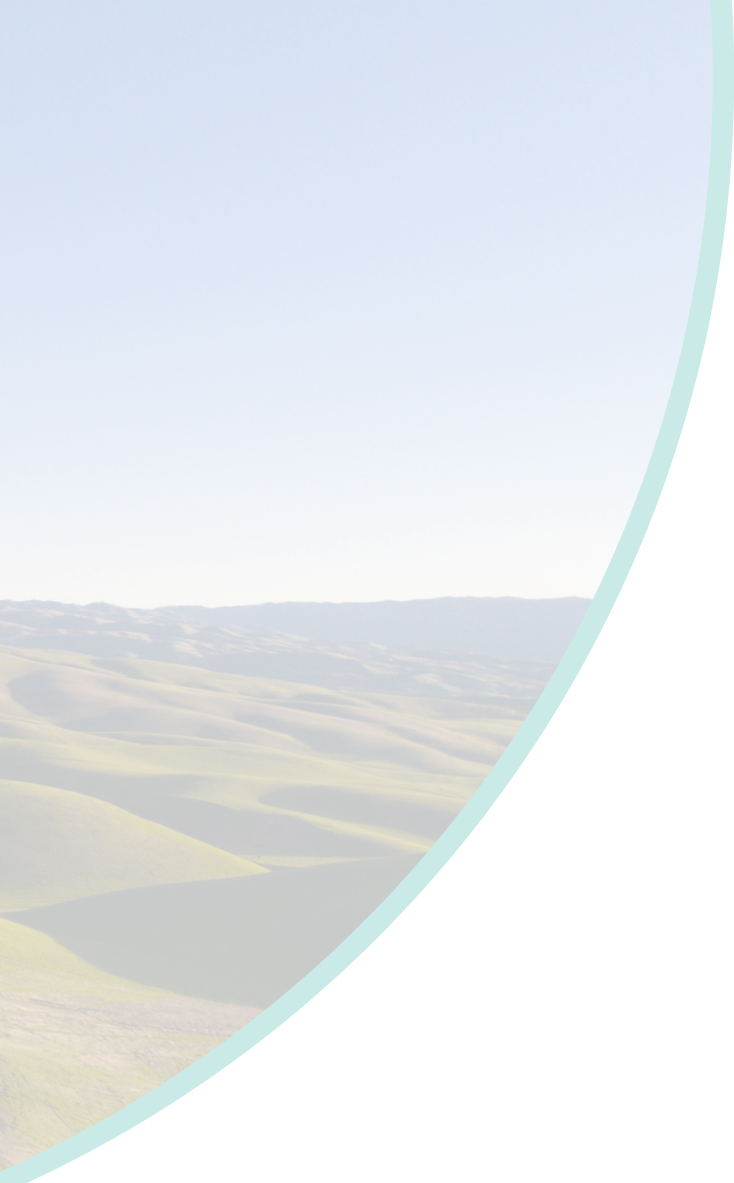


Photo: Karl Nielsen





# 01.

## INTRODUCTION

# 1.0 INTRODUCTION

---

The natural landscapes and unique microclimates of the Bay Area are part of what make it a special place to live. These same natural features are what make it possible for diverse ecosystems and a dynamic local food system. Past generations of Bay Area stewards have recognized the value of conserving land for open space and agriculture, protecting nearly one-third of the region for these uses. However, not all residents have easy access to these special recreational resources, nor the benefits of greenery in their neighborhood. The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) seek to update a regional conservation framework to inform future progress on conservation with a new emphasis on advancing social equity and climate resilience.

The Introduction Chapter contains an overview of Plan Bay Area 2050,

an overview of the existing Priority Conservation Areas (PCA) program, and a description of the PCA Refresh project approach.

---

## 1.1 REVAMPING THE REGIONAL GROWTH FRAMEWORK

In October 2021, MTC and ABAG unanimously adopted Plan Bay Area 2050, the long-range plan charting a course for the nine-county San Francisco Bay Area, focused on the future of transportation, housing, the economy, and the environment. For a decade, previous iterations of Plan Bay Area integrated a regional growth framework that worked on two fronts to focus growth and reduce environmental impacts. On one front, the regional growth framework sought to focus housing and jobs development in transit-served Priority Development Areas (PDAs) nominated by cities and counties, and on the other, PCAs were identified to protect the region's open spaces. The regional

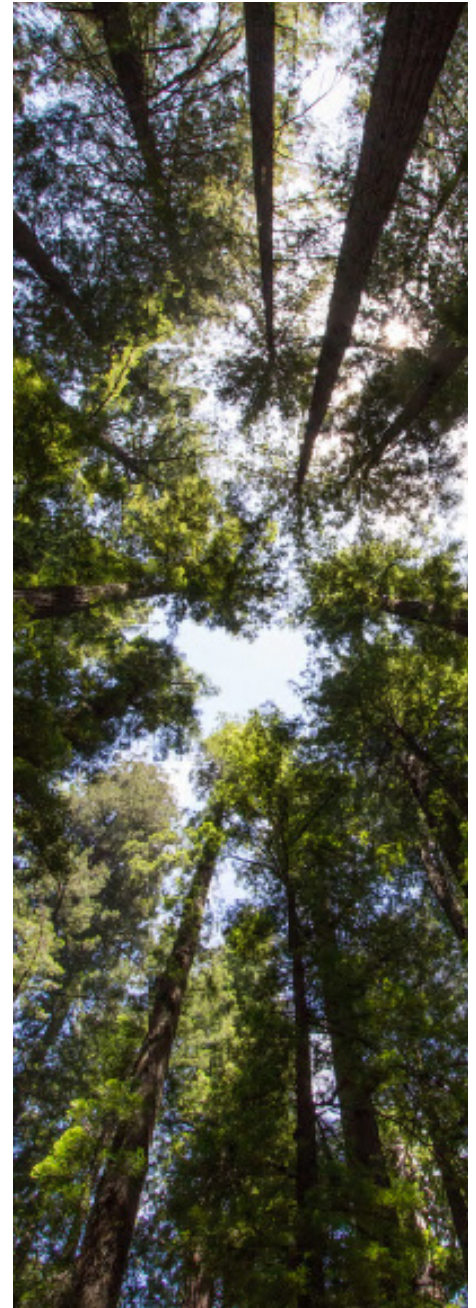


Photo: Ben Botkin

growth framework had a few key characteristics: it was opt-in, local control was a major point of emphasis, and the framework was supported by regional funding and policy.

However, experience over the intervening years showed this framework faced significant obstacles to implementation. Many places with the Bay Area's best transit access had not been nominated as PDAs by cities, particularly communities with high-quality schools and services. A large share of PDAs did not meet the program's transit guidelines. Finally, the level of housing production — both inside and outside of PDAs — was falling far short of meeting the Bay Area's needs, leading to sprawl in prime agricultural lands outside the region and a growing number of super-commuters traveling in and out of the region.

To inform the development of Plan Bay Area 2050, a major planning effort was undertaken in 2018 and 2019 to revamp the regional growth framework and growth geographies to support implementation and address a wider range of pressing

policy concerns. This led to the identification of new growth geographies for inclusion in the plan update — including Transit-Rich Areas and High-Resource Areas, as well as Priority Production Areas (PPAs), which are locally identified places for job growth in middle-wage industries like manufacturing, logistics or other trades. It also helped clarify the need for additional resources to support local jurisdictions, which led MTC/ABAG accelerating efforts in this space in recent years.

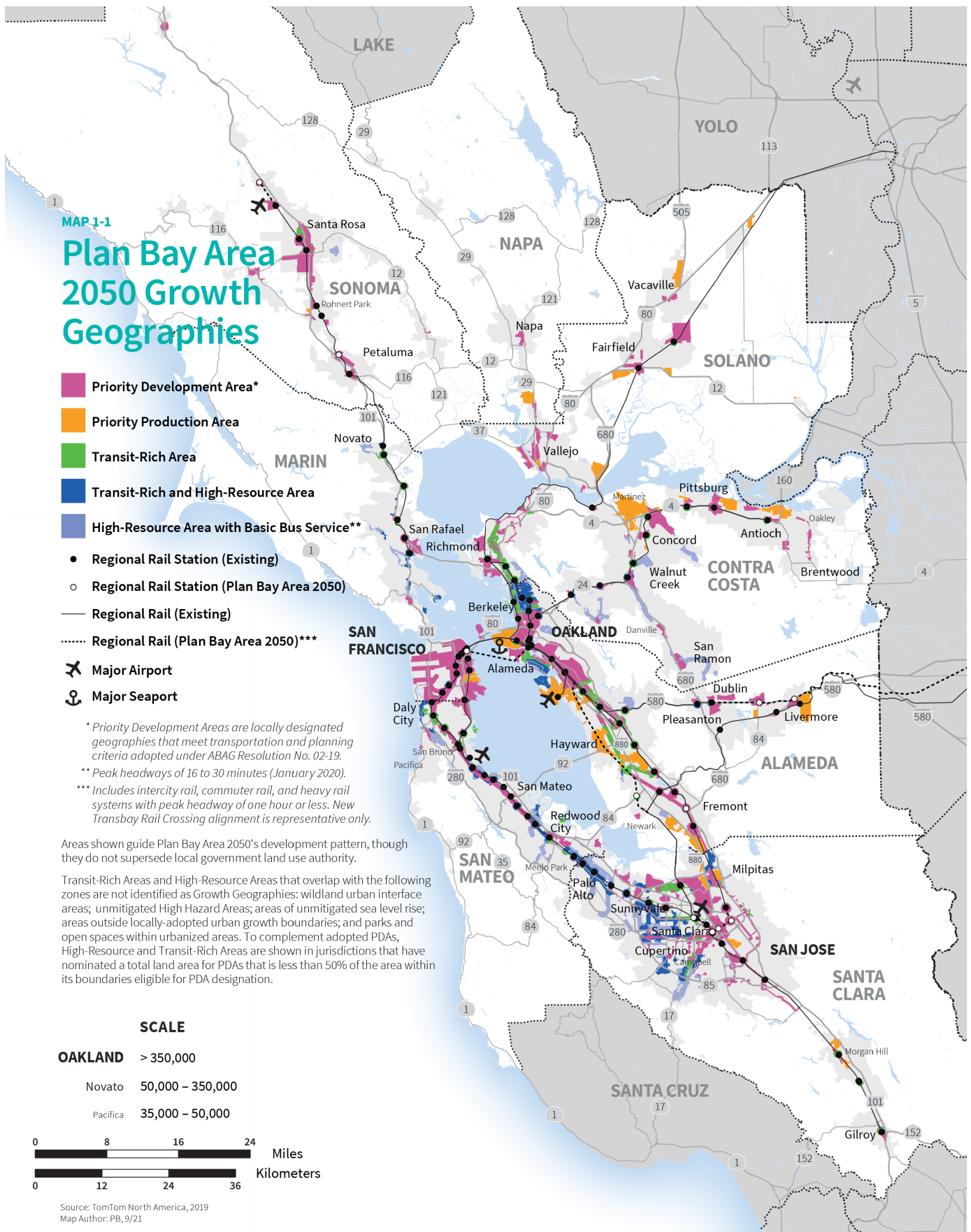
In contrast, given staffing and resource constraints, the PCA framework was largely left in place and was transitioned to the plan's newly-formed Environment Element as a component of a broader set of conservation strategies that work in concert to support action on climate, resilience, equity and open space protection.

### **1.1.1 BALANCING HOUSING NEEDS WITH CONSERVATION PRIORITIES**

Like many issues in our complex and diverse region, the regional

growth framework naturally raises some important policy tradeoff questions. The coastal mountains, bay, and ocean that make the region so special also put significant pressures on the available land between them. The framework and Plan Bay Area seek to address these land use tensions with balanced approaches to advancing equity, environment, and economic goals in concert. The PCA Refresh is a space to grapple with these challenges and weigh the pros and cons of different approaches, seeking opportunities to find complementary strategies and areas of synergy whenever possible.

Making progress on all the goals and objectives articulated in Plan Bay Area 2050 will require thoughtful planning and cooperation. As the region plans for its conservation and open space needs, it must also ensure enough housing is produced to meet the needs of current and future Bay Area residents. Similarly, as we plan for future development, we must ensure the region's agricultural, resource, scenic, recreational, and high-value ecological lands are preserved, well-managed, and accessible to all.



**FIGURE 1-1**  
 Plan Bay Area 2050 Growth Geographies Map



---

## 1.2 PLAN BAY AREA 2050 AND THE ENVIRONMENT ELEMENT

The Plan Bay Area 2050 vision is to ensure by the year 2050 that the Bay Area is affordable, connected, diverse, healthy and vibrant for all. With equity and resilience serving as core cross-cutting themes, Plan Bay Area 2050 represents a more comprehensive vision for the region's future than prior planning efforts in the Bay Area.

### 1.2.1 THE ENVIRONMENT ELEMENT

In recognition that the Bay Area is sustained by its natural lands, ranging from the farms and fields that support our local food systems to buffer zones that stand between natural hazard areas and cities or towns, Plan Bay Area 2050 included a first-ever Environment Element. The Environment Element includes nine strategies, grouped under the following three themes:

**Reduce risks from hazards;**

**Expand access to parks and open space;**

**Reduce climate emissions from vehicles.**

Four environmental strategies (refer to page 19) are directly relevant to PCA Program focus areas, including natural lands, working lands, regional recreation, urban greening, and climate resilience.

---

#### EN 1: Adapt to Sea Level Rise

---

This strategy encourages the region to proactively address inundation risks to communities and regional systems as sea levels rise over the coming decades. The strategy would fund a suite of protective strategies (e.g. ecotone levees, traditional levees, sea walls), marsh restoration and adaptation, the elevation of critical infrastructure and support some lower density communities with managed retreat. The strategy prioritizes nature-based actions and resources in Equity Priority Communities as well as areas of high impacts and low costs. The adaptation actions are intended to balance multiple goals of flood protection, habitat restoration, and public access – protecting existing and future communities while also dedicating sufficient funds to

support the 100,000 acre marsh restoration goal for the region.

---

## **EN 4: Maintain Urban Growth Boundaries**

---

This strategy directs all new growth within the region's existing (2020) urban footprint or growth boundaries in order to prevent the conversion of agricultural and open space lands to higher greenhouse gas emitting uses. This strategy would support regional resilience by limiting new growth in unincorporated areas in the wildland-urban interface and other high-risk areas.

---

## **EN 5: Protect and Manage High-Value Conservation Lands**

---

This strategy supports conservation and management of priority agricultural and open space lands that support local food systems, biodiversity and natural resources, fire or flood protection, recreation opportunities, water supply, carbon

sequestration and other ecosystem services. It proposes provision of strategic matching funds to help conserve and manage high-priority natural and agricultural lands, including but not limited to PCAs, wildland-urban interface lands, and other areas at high risk of wildfires, floods, or other natural hazards.

This strategy would support regional goals for agriculture, open space, and public access, which include a vision of 2.2 million acres of preserved open space, enhanced wildfire, flood, and drought resilience, and a thriving agricultural economy. Bayland conservation, restoration and adaptation is included within the Adapt to Sea Level Rise (EN1) strategy.

---

## **EN 6: Modernize and Expand Parks, Trails and Recreation Facilities**

---

This strategy supports strategic planning and investment in quality parks, trails, and open spaces that provide inclusive recreation opportunities for people from all backgrounds, abilities, and ages

to enjoy. This strategy would fund enhancements to regional and local parks, development and maintenance of 1,500-acres of parks and recreation facilities, acquisition of new open space, and construction of over 1,200-miles of cross-jurisdictional trails and greenways with an emphasis on expanding recreation opportunities in Equity Priority Communities and other underserved areas.

In an equitable future, all Bay Area residents, regardless of race, age or income, would have access to open space; clean air and water; safe housing; and a full suite of sustainable, accessible transportation choices. All residents, including seniors and those with disabilities, would be able to easily access parks and open spaces close to home and fully enjoy the region's rich natural resources. Plan Bay Area 2050 proposes long-term strategies and means-based support to protect those most at risk from environmental hazards and the effects of climate change, including provision of new or enhanced parks in Equity Priority Communities and protecting vulnerable communities from sea level rise.



## 1.3 THE PRIORITY CONSERVATION AREA PROGRAM

PCAs are open spaces that provide agricultural, natural resource, scenic, recreational, and/or ecological values and ecosystem functions in the nine-county San Francisco Bay Area. These areas are identified and nominated through a voluntary, locally-driven process by cities, counties, and park/open space districts, and then designated by ABAG as lands in need of protection and management to maintain valuable ecological benefits. The PCA planning framework was inaugurated in 2007 and received a minor update in 2014.

At present, PCAs encompass four primary designations: natural landscapes, agricultural lands, urban greening, and regional recreation, and there are currently 185 PCAs within the region. There is a PCA Grant Program parallel to this designation process, through which the Metropolitan Transportation Commission (MTC) has set aside over \$25 million in grant funds to



**FIGURE 1-2**  
Map of Parks and Open Space in San Francisco Bay Area

support relevant projects in eligible PCAs since 2013. The California State Coastal Conservancy (SCC) is a key funding partner supporting PCA grants. Additional information on the PCA Program is provided in Chapter 2.

---

## 1.4 WHY REFRESH THE PRIORITY CONSERVATION AREA FRAMEWORK?

PCAs are one of the key regional policy tools available to support the broader set of conservation-related strategies previously described. The 2007 PCA framework established a process for designating PCAs in lands important for protection via purchase fee title or easement within the next few years. Chapter 2 reviews how PCAs have worked in practice, which has not always been in direct alignment with this goal. The PCA Refresh is an opportunity to explore how PCAs have functioned to date and better align the PCA

Framework with state and regional policy goals that have been adopted over the past fifteen years.

In development of the Plan Bay Area 2050 Implementation Plan, many partners and stakeholders further articulated a need to revamp the PCA planning framework and program to be more data-driven and science-based. Advances in conservation science and mapping since the PCA planning framework was first developed support opportunities to further integrate multi-benefit considerations into the PCA planning framework and ensure alignment with other regional conservation plans and priorities. MTC/ABAG thus committed in its adopted Implementation Plan to “engage with a variety of stakeholders and partners to provide guidelines and resources to support future conservation work, while also broadening the scope of the PCA program to promote climate resilience and equity.”

---

## 1.5 PRIORITY CONSERVATION AREA REFRESH GOALS AND APPROACH

The overall scope and goals of the PCA Refresh were deeply informed by the extensive public engagement which took place as part of Plan Bay Area 2050. This public engagement specifically helped to:

- Shape the inclusion of “Healthy” as one of the plan’s five guiding principles, where the region’s natural resources, open space, clean water and clean air are conserved and the region actively reduces its environmental footprint and protects residents from environmental impacts
- Introduce Strategy EN6 over the course of the planning process to enhance access to parks and open space, especially in communities with limited existing access to parks or forecasted population growth

Conserving the region's natural resources and open space, protecting residents from environmental impacts and hazards, and enhancing access to parks and open space – especially with an eye towards equity and resilience – are all core goals of the PCA Refresh project. The overriding task of the Refresh is to operationalize the public and partner/stakeholder feedback received during Plan Bay Area 2050 into the revamped PCA framework.

The PCA Refresh project is thus focused on identifying ways that the PCA program can support the goals outlined in Plan Bay Area 2050, in coordination with key partners and stakeholders. In November 2021, MTC was awarded a \$250,000 grant from the Sustainable Agricultural Lands (SALC) Program managed by the California Department of Conservation to engage in a broad-based, multi-partner and multi-stakeholder effort to:

- Understand the strengths and weaknesses of the current PCA framework;
- Articulate a vision for next-generation PCAs;

- Establish clear goals and objectives for PCAs;
- Incorporate a wider range of policy concerns into the planning framework; and
- Develop and/or refine data and mapping tools available to program partners.

This project evaluates all aspects of the current PCA nomination, evaluation, and designation process as well as develop the guidelines and resources that project applicants need to support high-impact conservation planning and policy decisions. **A final report of major findings, including a recommended suite of options for regional policymakers to consider, is tentatively scheduled for release in early 2024.** This final report will also include considerations for maximizing future funding for PCAs, building upon the successful companion PCA Grant Program that is entering its third cycle.

The project team is utilizing a stakeholder-driven approach, including Technical Advisory

Committee (TAC) meetings, workshops, surveys, and individual consultation with stakeholders including partners such as local jurisdictions, regional parks and open space districts, state agencies, environmental and equity advocates/non-profits, researchers/academics, and agricultural stakeholders, among others. This approach is described further in Chapter 3.

This document encompasses the strengths and weaknesses of the existing PCA planning framework, presents draft vision, goals and objectives for a revamped PCA planning framework, and presents a proposal for a more data-driven mapping framework.

## SUSTAINABLE AGRICULTURAL LANDS CONSERVATION (SALC) PROGRAM PLANNING GRANT

The work upon which this publication is based was funded in whole or in part through a grant awarded by the California Department of Conservation. The Sustainable Agricultural Lands Conservation Program (SALC), a component of the Strategic Growth Council's Affordable Housing and Sustainable Communities (AHSC) Program, supports California's greenhouse gas (GHG) emission reduction goals by making strategic investments to protect agricultural lands from conversion to more GHG-intensive uses. Protecting critical agricultural lands from conversion to urban or rural residential development promotes smart growth

within existing jurisdictions, ensures open space remains available, and supports a healthy agricultural economy and resulting food security. A healthy and resilient agricultural sector is becoming increasingly important in meeting the challenges occurring and anticipated as a result of climate change.

SALC is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities.

The Cap-and-Trade program also creates a financial

incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investments projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling, and much more. At least 35 percent of these investments are located within and benefiting residents of disadvantaged communities, low-income communities, and low-income households across California.



Source: [conservation.ca.gov](http://conservation.ca.gov)

# PROJECT TIMELINE

## PROJECT LAUNCH, SUMMER 2022

### Summer 2022

- Data collection and curation and mapping analysis
- Partner and stakeholder engagement began

### Fall 2022

- Workshops and surveys launched

### Winter 2023

- Data collection, curation, and mapping analysis round 2

### Summer 2023

- Memo 1 and Memo 2 release
- Workshop 2
- Survey 2

### Fall 2023

- Memo 3 release
- Final Report and Final Data / Mapping Products

### Winter 2024

- Final Report to Committees ABAG Executive Board Consideration and Adoption of Revised Planning Framework

## PROJECT END, WINTER 2024



## Environmental Strategies — Cost: \$103 Billion

Reduce Risks From Hazards	<b>EN1. Adapt to sea level rise.</b> Protect shoreline communities affected by sea level rise, prioritizing low-cost, high-benefit solutions and providing additional support to vulnerable populations.	<b>\$19 BILLION</b>
	<b>EN2. Provide means-based financial support to retrofit existing residential buildings.</b> Adopt building ordinances and incentivize retrofits to existing buildings to meet higher seismic, wildfire, water and energy standards, providing means-based subsidies to offset associated costs.	<b>\$15 BILLION</b>
	<b>EN3. Fund energy upgrades to enable carbon neutrality in all existing commercial and public buildings.</b> Support electrification and resilient power system upgrades in all public and commercial buildings.	<b>\$18 BILLION</b>
Expand Access to Parks and Open Space	<b>EN4. Maintain urban growth boundaries.</b> Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	<b>N/A</b>
	<b>EN5. Protect and manage high-value conservation lands.</b> Provide strategic matching funds to help conserve and maintain high-priority natural and agricultural lands, including but not limited to, Priority Conservation Areas and wildland-urban interface areas.	<b>\$15 BILLION</b>
	<b>EN6. Modernize and expand parks, trails and recreation facilities.</b> Invest in quality parks, trails and open spaces that provide inclusive recreation opportunities for people of all backgrounds, abilities and ages to enjoy.	<b>\$30 BILLION</b>
Reduce Climate Emissions	<b>EN7. Expand commute trip reduction programs at major employers.</b> Set a sustainable commute target for major employers as part of an expanded Bay Area Commuter Benefits Program, with employers responsible for funding incentives and disincentives to shift auto commuters to any combination of telecommuting, transit, walking and/or bicycling.	<b>N/A</b>
	<b>EN8. Expand clean vehicle initiatives.</b> Expand investments in clean vehicles, including more fuel-efficient vehicles and electric vehicle subsidies and chargers.	<b>\$5 BILLION</b>
	<b>EN9. Expand transportation demand management initiatives.</b> Expand investments in programs like vanpools, bikeshare, carshare and parking fees to discourage solo driving.	<b>\$1 BILLION</b>

**FIGURE 1-4**

Plan Bay Area 2050 Environmental Strategies

\* Highlighted in boxes are the four strategies to be more systematically integrated as part of the PCA Refresh

\* Numbers may not sum due to rounding.



“Engage with a variety of stakeholders and partners to provide guidelines and resources to support future conservation work, while also broadening the scope of the PCA program to promote climate resilience and equity.”

- MTC/ABAG PCA Refresh Project Scope

Engagement Snapshot of the Technical Advisory Committee (TAC) during one of the PCA Refresh Calls

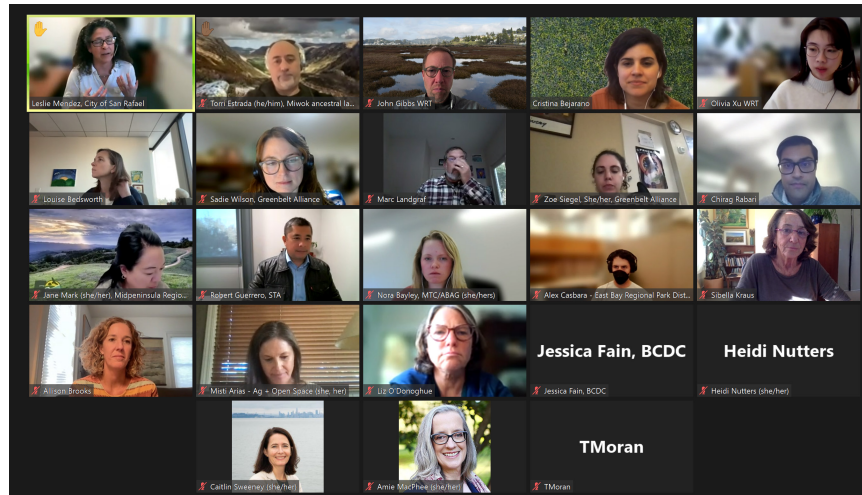


Photo: Mike Gifford, Flickr



## KEY TAKEAWAYS FROM THIS CHAPTER

- PCAs are one of the key regional policy tools that are available to support a broader set of Plan Bay Area 2050 environmental strategies, working in concert to support action on climate, resilience, equity and open space protection
- In development of the Plan Bay Area 2050 Implementation Plan, many partners and stakeholders articulated a need to revamp the PCA planning framework and program to be more data-driven and science-based.
- The PCA Refresh project is focused on identifying ways that the PCA program can support the goals outlined in Plan Bay Area 2050, in coordination with key partners and stakeholders. This project will evaluate all aspects of the current PCA nomination, evaluation, and designation process as well as develop the guidelines and resources that project applicants need to support high-impact conservation planning and policy decisions





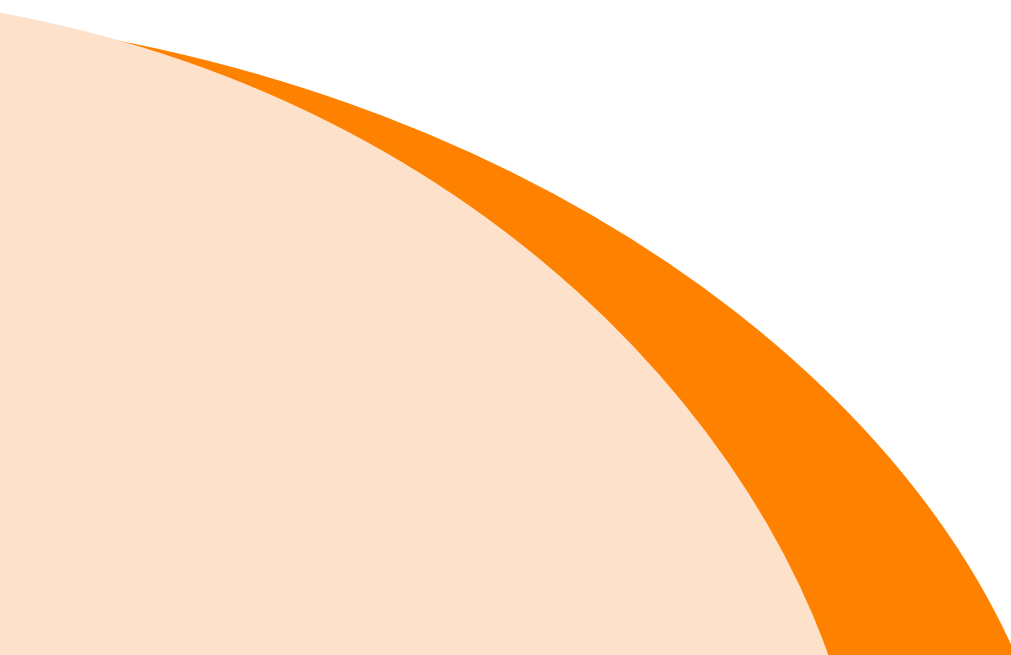


Photo: Ben Botkin



# 02.

## THE EXISTING PRIORITY CONSERVATION AREA PROGRAM

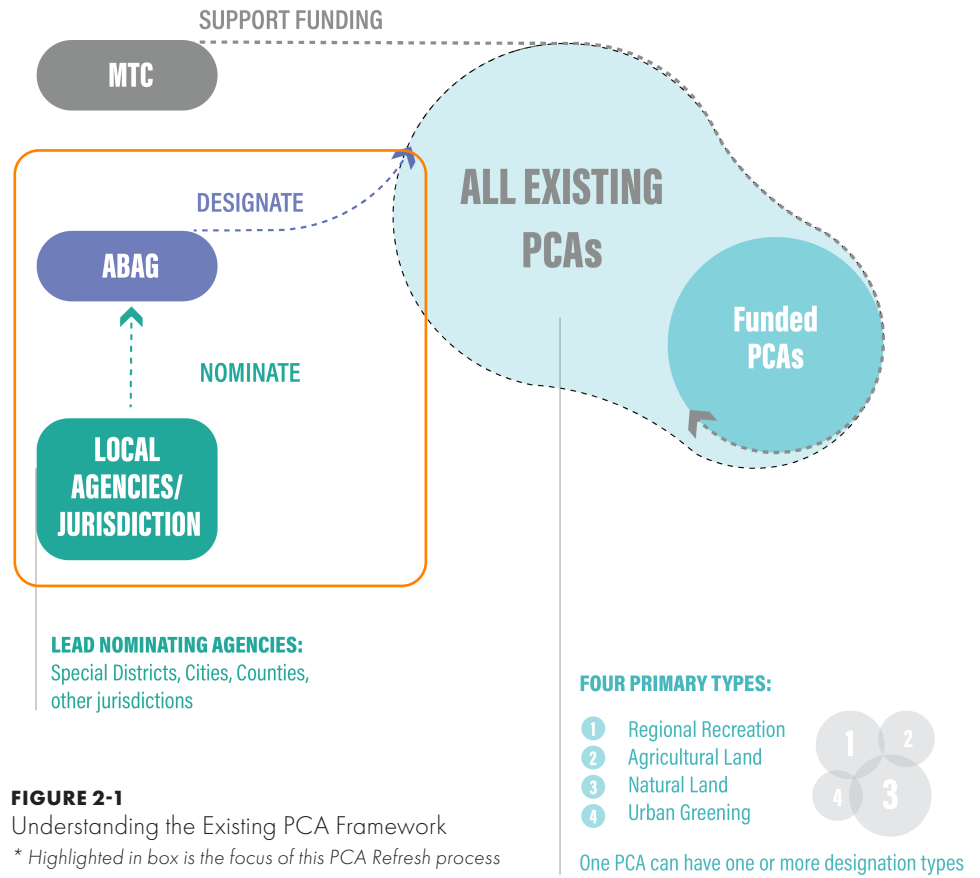


# 2.0 THE EXISTING PRIORITY CONSERVATION AREA PROGRAM

The PCA program has undergone various revisions and updates to the nomination and designation process since its inception in 2007. Today, PCAs are identified and nominated through a locally-driven process by cities, counties, and park/open space districts, and then designated by the Association of Bay Area Governments (ABAG) (see figure 2-1). This local-nomination process has led to the designation of 185 priority conservation areas, classified under one or more types.

## 2.1 PCA PROGRAM INCEPTION - 2007

This chapter contains a history of the PCA program from inception to



**FIGURE 2-1**  
Understanding the Existing PCA Framework  
\* Highlighted in box is the focus of this PCA Refresh process

now, an overview of the existing PCA designations, data analysis on how the PCAs are currently being used and concludes with a brief grant funding overview.

The Priority Conservation Area Program grew out of a multi-agency, regional planning initiative – the FOCUS Program - spearheaded by ABAG and MTC in coordination with the Bay Area Air Quality

Management District and Bay Conservation and Development Commission in 2007. This program built upon regionally adopted smart growth policies and related programs to create a specific and shared concept of where growth can be accommodated (Priority Development Areas) and what areas need protection (Priority Conservation Areas) in the nine-county San Francisco Bay Area.



The FOCUS Program established a process for nominations for regionally designating Priority Conservation Areas that contain lands important for protection via purchase fee title or easement “within the next few years”. Priority Conservation Areas were defined as areas of regional significance that have broad community support and an urgent need for protection. These areas will contain important agricultural, natural resource, watershed, historical, scenic, cultural, recreational, and/or ecological values and ecosystem functions.

The purpose of designating priority conservation areas through the FOCUS Program was to accelerate protection and restoration of key natural lands in the San Francisco Bay Area through purchases or easements. It sought to promote conservation through regional designation by:

- Coordinating conservation efforts within a regional framework of near-term priorities
- Providing a strong platform on which to leverage public and private resources

- Building upon prior and existing land protection efforts and investments
- Providing opportunities for forging new partnerships

Local governments (cities, counties, towns), tribes, water/utility districts, resource conservation districts, park and/or open space districts, land trusts and other land/resource protection nonprofit organizations in the nine-county San Francisco Bay Area were invited to nominate areas for consideration as near-term, regional conservation priorities. Initially, eligibility for a PCA nomination was based on an area having a high level of regional significance, stakeholder and community consensus, and urgency for action. Nominated areas did not include areas already protected, but focused on those that would benefit from targeted purchases and easements in the near-term. The geographic areas of the nomination had to be identified within the regional context of the conservation values and functions provided but without delineating specific parcels. This lack of parcel-specific area requirements led jurisdictions to



## LIMITATIONS WITH MAPPING PCAS

The geographic extent and boundaries of specific PCAs (or “polygons” in mapping terms) were locally designated and reported over the course of past PCA nomination processes. Given a wide mix of sources, methodologies, and maintainers, the accuracy of the data varies widely. As such – on the MTC Open Data Portal and all public-facing documents such as Plan Bay Area 2050 – PCAs have been officially presented as “points” rather than polygons. The existing polygons are used to support certain analyses within this chapter, however these are meant to illustrate general degrees of magnitude. Any text, tables or charts within this chapter presenting acreage figures, for example, should be interpreted as estimates.

# EXHIBIT: PAST PCA NOMINATION FORMS

## Priority Conservation Area Designation Nomination Form

Enter information in the spaces provided. E-mail this completed nomination form and attachments requested as part of this form to [MarkS@abag.ca.gov](mailto:MarkS@abag.ca.gov). If e-mailing is not possible, a hard copy of materials can be mailed to Mark Shorett, Association of Bay Area Governments, P.O. Box 2050, Oakland, CA 94604-2050.

### PART 1: AREA INFORMATION

Area Name	
Area Location (city, town, county)	
Total Acreage	

Attach a map showing the proposed area boundaries and location. Include other relevant information, such as topography or an aerial photograph, to show the context for protection of this area.

### PART 2: NOMINEE CONTACT INFORMATION

Lead Nominating Agency/Organization	
Contact Person	
Address	
Phone Number(s)	
E-mail address	
Partnering Agency(ies)/Organization(s)	

### PART 3: AREA CRITERIA

Provide a description of how the area meets each of the following criteria by addressing the points for each. Limit responses for each criterion to one page, which can be typed within this document or provided as separate attachments.

- A. *Level of Consensus*
  - Describe the level of community support and/or political will for protection of this area, mentioning any existing plans that identify this area. Some examples of plans include an organization/agency's strategic plan, general plan, habitat conservation plan, etc.
  - Describe how this area might promote collaboration between multiple organizations and/or jurisdictions.
  - Describe any work underway to protect this area and who is involved.
- B. *Regional Significance*
  - Describe how this area promotes regionally significant conservation values. Some examples of regionally significant conservation values that an area may provide include landscape/habitat linkages between large patches, unique landscapes/features, large important farmland areas, landscapes with significant water protection and enhancement opportunities, large patches of critical habitat, connections for people (ex. trails) and wildlife (ex. corridors) on a regional scale, buffers for waterways and/or other natural areas, separation of urbanized areas through open space networks, adds to regional parks/other large protected areas. The area may also provide a service that benefits public safety and/or the economic vitality of the region, such as agricultural land or tourism.
- C. *Urgency*
  - Describe the existing or potential threats to the ecological integrity of this area or to the efforts to protect this area.
  - Describe any existing or potential opportunities for the protection or restoration of this area and how ready the process is to proceed.
  - Describe the need for protection of this area if this description does not duplicate the answer in Part 3B.

For questions regarding the nomination form, please contact Mark Shorett, ABAG Regional Planner, at [MarkS@abag.ca.gov](mailto:MarkS@abag.ca.gov) or 510.464.7994.

Priority Conservation Area Nomination Guidelines

2013 PCA Application Form

## ATTACHMENT 1 Priority Conservation Area Designation Application Form

Enter information in the spaces provided. E-mail this completed application form and attachments requested as part of this form to ABAG Planning by **May 30, 2015**. If e-mailing is not possible, a hard copy of materials can be mailed to PCA Applications, Association of Bay Area Governments, P.O. Box 2050, Oakland, CA 94604-2050.

### PART 1: AREA INFORMATION

Proposed Name	
Description	
Location (include map and text description)	
Total Acreage	

### PART 2: SPONSOR(S)

Lead Nominating Agency/Organization	
Staff Person	
Address	
Phone Number(s)	
E-mail address	
Partnering Agency(ies)/Organization(s)	

### PART 3: DESIGNATION

**Selected Designation** – Select one or more designation for the proposed PCA

**Natural Landscapes**     **Agricultural Lands**     **Urban Greening**     **Regional Recreation**

### PART 4: BENEFITS

**Primary Benefit(s)** – Select one or more benefits and co-benefits for the proposed PCA

\_\_\_\_\_

### PART 5: ATTACHMENTS

#### Required

1. Copy of adopted resolution by City Council, Board of Supervisors, or Open Space or Park District Board.
2. Attach a map showing the proposed general area boundaries and location. Include other relevant information, such as topography or an aerial photograph, to show the context for protection of this area.
3. Provide text, data/maps that demonstrate primary benefit(s) of the relevant designation and co-benefit(s).

#### Optional

4. Letters of Support from partner agencies or organizations (*not required*)
5. Additional data, maps, supportive local policies (*not required*)

2015 PCA Application Form

**Letter-of-Interest: Priority Conservation Area**

Use this form to express interest in: a) establishing a new PCA; or b) modifying the boundaries of an existing PCA.

**Instructions:** Complete this form and send it to [pcas@bayareametro.gov](mailto:pcas@bayareametro.gov) along with a GIS shapefile of the PCA boundaries, and any additional attachments, by **September 16, 2019**. Forms may be signed by planning directors or city managers/administrators. Following review of this form by MTC/ABAG staff and additional discussion with applicants if needed, City Council or Board of Supervisors resolutions nominating new PCAs will be required by **January 16, 2020**.

For other forms, including Priority Development Area (PCAs) or Priority Production Area (PPAs) Letters of Interest, and for Letters of Confirmation for PDA Planning, Transit Service, and VMT-Reduction Policies, go here: <https://www.planbayarea.org/priority>

**1: APPLICATION TYPE**

I want to:  Propose a new PCA  Modify an existing PCA

**2: GENERAL PCA INFORMATION**

City or County: \_\_\_\_\_ Date: \_\_\_\_\_  
 PCA Name: \_\_\_\_\_ Acres: \_\_\_\_\_  
 Staff Contact/Title: \_\_\_\_\_  
 Email: \_\_\_\_\_ Phone: \_\_\_\_\_

**3: PCA DESIGNATION**

**Step One:** Determine the designation for your PCA and its benefits by reviewing the [designations](#) and [required benefits](#).

**Step Two:** Check the appropriate box(es) below for the PCA Designation:  
 Natural Landscapes  Agricultural Lands  Urban Greening  
 Regional Recreation

**Step Three:** Check the appropriate boxes below for the PCA Benefits:  
 Terrestrial EcoSystems  Aquatic (Water) Ecosystems  
 Water Supply and Water Quality  Agricultural Resources and Economy  
 Community Health  Recreation  Climate and Resilience  Compact Growth

2019 PCA Letter of Interest

provide varying degrees of specificity for a nominated PCA’s boundaries, resulting in an inconsistent suite of data available for PCAs.

The first PCA nomination process resulted in 94 PCA designations based upon nominations from local governments, public agencies, and nonprofit organizations. Nominations were reviewed by ABAG/MTC staff, regional committees, and local governments. The ABAG Executive Board formally adopted the first set of PCAs on July 17, 2008.

### 2.1.1 SUBSEQUENT PCA PROGRAM UPDATES

In 2012 and 2013, the ABAG Regional Planning Committee and Executive Board requested that staff revise the PCA program to provide greater specificity about the qualities and function of different types of PCAs. In addition, Regional Planning Committee and Executive Board members stressed the importance of urban parks and green spaces.

This feedback was formalized in Plan Bay Area 2040, which directed staff to update the program to define the role of different kinds of PCAs and ensure that local jurisdictions are consulted on updates to individual PCAs.

The PCA update included more detailed guidelines for PCA applications, review, and adoption. This updated application process introduced four types of PCA designation to recognize the role of different kinds of PCAs in supporting the vitality of the region's natural systems, rural economy, and human health. Applicants were required to select one or multiple designation types for each PCA being nominated. The updated application also asked applicants

to identify benefits and potential co-benefits for each designation. Applicants were required to discuss how the PCA provides these benefits – referencing data and maps. ABAG provided a table of resources to assist applicants in this process.

PCAs are currently categorized by one or more of the four designations that recognize the vitality of the Bay Area's natural systems, rural economy and the health of all residents: (1) Natural Landscapes; (2) Agricultural Lands; (3) Urban Greening; and (4) Regional Recreation.

As seen in Table 2-2, the existing program's primary PCA types are all linked to important co-benefits, including climate resilience, urban forests, and wildlife habitat.

While these co-benefits have been included as guidance for PCA program users, there were no requirements or data-driven evaluation applied during the nomination or designation process. The section below aims to evaluate these existing PCAs by analyzing their coverage and type with key map overlays.

**TABLE 2-2**  
Summary of Priority Conservation Area Designations

<b>PCA Designation</b>	<b>Primary Benefits</b>	<b>Potential Co-Benefits Examples</b>	
Natural Landscapes	<ul style="list-style-type: none"> <li>• Terrestrial (Land) Ecosystems</li> <li>• Aquatic Ecosystems</li> <li>• Water Supply and Quality</li> </ul>	<ul style="list-style-type: none"> <li>• Climate and Resilience</li> <li>• Compact Growth</li> <li>• Recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Critical Habitat Areas</li> <li>• Wetlands targeted for restoration</li> <li>• Riparian Corridors</li> <li>• Watershed Land Protection</li> </ul>
Agricultural Lands	<ul style="list-style-type: none"> <li>• Agricultural Resources</li> <li>• Agricultural Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife Habitat</li> <li>• Water Supply and Quality</li> <li>• Recreation</li> <li>• Climate and Resilience</li> <li>• Compact Growth</li> </ul>	<ul style="list-style-type: none"> <li>• Farmland or Grazing Land</li> <li>• Timberlands</li> </ul>
Urban Greening	<ul style="list-style-type: none"> <li>• Community Health</li> <li>• Recreation</li> <li>• Climate Resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife Habitat</li> <li>• Water Supply and Quality</li> <li>• Recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Potential “eligible park” sites (park + community garden)</li> <li>• Urban Forest Areas</li> <li>• Urban Portion of Riparian Corridor</li> </ul>
Regional Recreation	<ul style="list-style-type: none"> <li>• Recreation</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife Habitat</li> <li>• Water Supply and Quality</li> <li>• Climate Resilience</li> <li>• Community Health</li> <li>• Compact Growth</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Trail Network</li> <li>• Potential Regional Park Sites</li> </ul>

## 2.2 OVERVIEW OF EXISTING PCA DESIGNATIONS

Since the inauguration of the PCA program, 185 PCAs have been designated, representing over two million acres of land. Over half of these PCAs were adopted as part of the first PCA cycle, with the number of newly designated PCAs declining over time. The most recent PCA designation cycle saw 21 newly adopted PCAs. This section provides an overview of existing PCAs, including how they are distributed, composed and funded.

### 2.2.1 DATA ANALYSIS OF EXISTING PCAS

PCAs designations are distributed throughout the nine-county Bay Area. In the table below, roughly 60 percent of all PCAs are located in the North Bay and South Bay, 23 percent are located in the East Bay and 15 percent on the Peninsula. A small number of PCAs are located within multiple counties, primarily

encompassing regional or state trail systems, such as the San Francisco Bay Trail, Bay Area Ridge Trail, and the California Coastal Trail, among others. By county, the largest number of designated PCAs are located in Santa Clara County (55), while the smallest number of PCAs are located in Napa (9).

In terms of PCA acreage, the vast majority is located in the North Bay and South Bay versus the East Bay and the Peninsula, as shown in the

charts below. That said, even within sub-regions there are county-level variations. Within the North Bay, for example, total PCA acreage is much smaller in Marin and Solano Counties versus Napa and Sonoma Counties. On the Peninsula, however, PCA acreage has a significantly smaller footprint in San Francisco compared to San Mateo, despite having a relatively similar number of total PCAs.

# of PCAs by			# of PCAs by		
Sub-Region	Sub-Region	% of Total	County	County	% of Total
East Bay	42	23%	Alameda County	25	14%
			Contra Costa County	17	9%
			City and County of San Francisco	12	6%
Peninsula	28	15%	San Mateo County	16	9%
			Santa Clara County	55	30%
			Marin County	22	12%
North Bay	56	30%	Napa County	9	5%
			Solano County	10	5%
			Sonoma County	15	8%
Multi-County		2%	Multi-County	4	2%
<b>Grand Total</b>	<b>185</b>	<b>100%</b>	<b>Grand Total</b>	<b>185</b>	<b>100%</b>

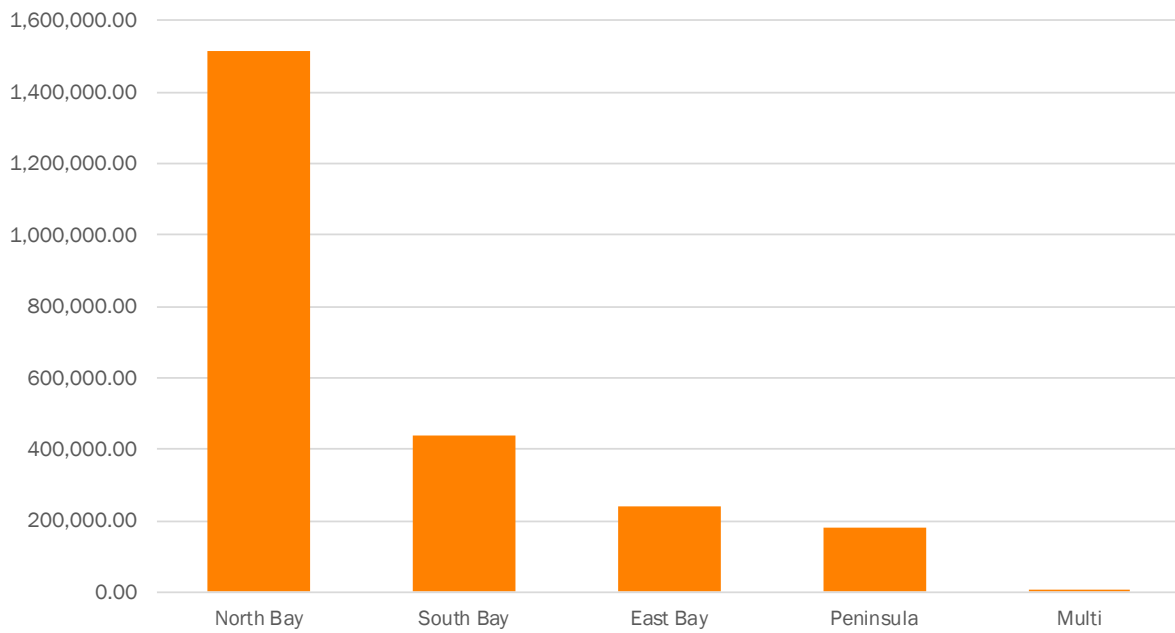
**TABLE 2-3**  
Statistics of the Existing PCA Designation

The sum of PCA acreage (663,424 acres) in Napa is greater than the actual acreage of the county (504,960 acres) – 131 percent of the total, which suggests there are overlapping PCA boundaries (as discussed in next section)

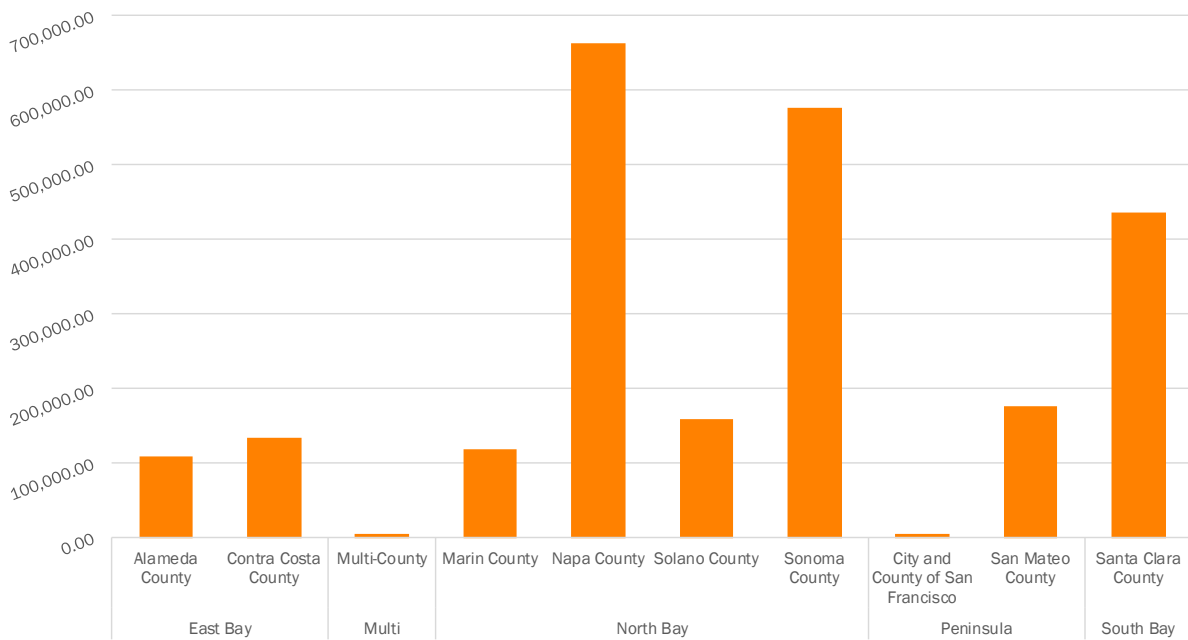




**TABLE 2-4**  
**PCA ACREAGE\* BY SUB-REGION**



**TABLE 2-5**  
**PCA ACREAGE\* BY COUNTY**

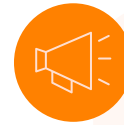


PCAs do not have official mapped boundaries so all acreage figures are estimates. Overlapping PCA boundaries may lead to double-counting of certain acreage figures.

Over 2 million acres of land have been designated as PCAs across the Bay Area, with the first PCA designation cycle accounting for approximately 80 percent of total PCA acreage. Notably, average PCA size is declining over time – from

an average of nearly 20,000 acres per PCA in the first PCA cycle to an average of less than 5,000 acres in the most recent PCA cycle.

In terms of who originally nominated PCAs, there are 53 unique lead nominators across the multiple PCA designation cycles. Special districts and cities account for nearly 70 percent of total designated PCAs, as



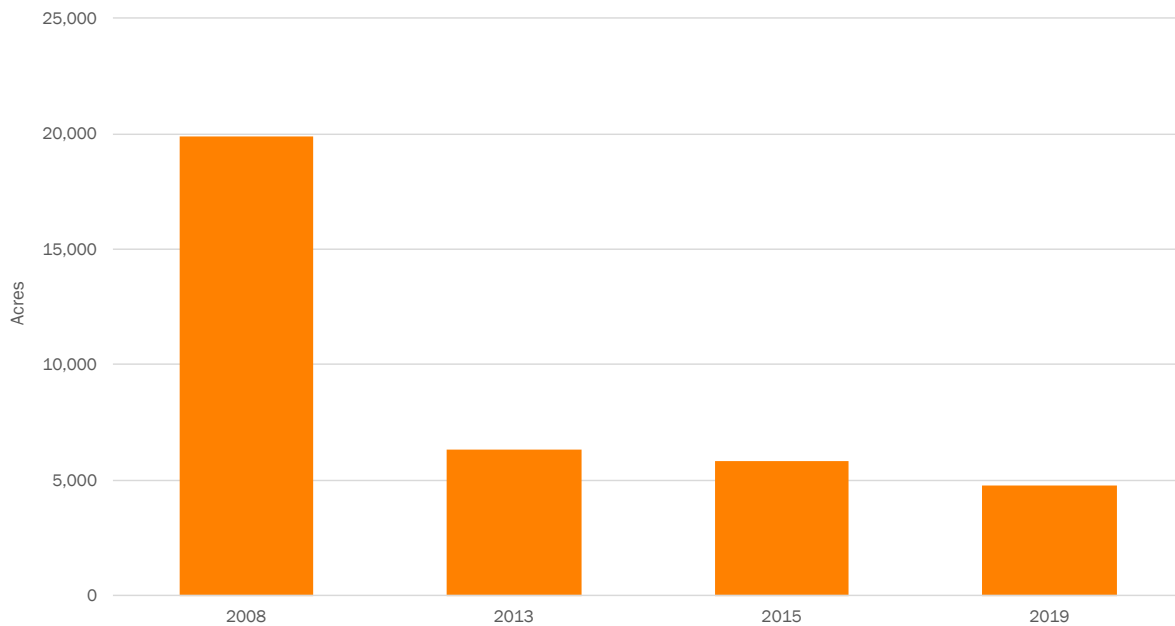
### TOP LEAD NOMINATING AGENCIES

Lead nominating agencies with a majority of PCA designations:

- Santa Clara Valley Open Space Authority
- Midpeninsula Regional Open Space District
- City and County of San Francisco
- City of Oakland
- Santa Clara County Parks & Recreation Department
- East Bay Regional Park District (EBRPD)

TABLE 2-6

## AVERAGE PCA SIZE (ACRES\*)

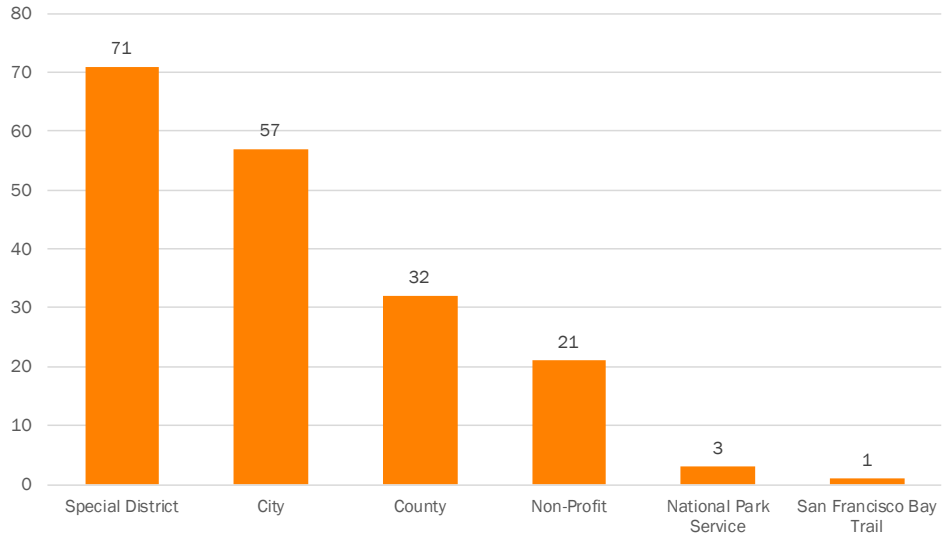


Note for Tables 2.3, 2.4, 2.5, and 2.7: PCAs do not have official polygon boundaries so all acreage figures are estimates. Some PCAs have overlapping boundaries.



**TABLE 2-7  
PCAS BY ORIGINAL NOMINATOR TYPE**

shown below. The top-heavy nature of PCA nominators is also notable: **six lead nominating agencies account for 51 percent (94) of all designated PCAs.** By contrast, there are 26 lead nominating agencies that each have only one PCA – these are primarily local jurisdictions.



**TABLE 2-8  
PCA ACREAGE BY ORIGINAL NOMINATOR TYPE**

PCAs originally nominated by counties have the greatest amount of aggregated acreage at 850,000 acres. Despite having the second-largest number of total PCAs, city-nominated PCAs have a much smaller footprint at less than 100,000 acres total.



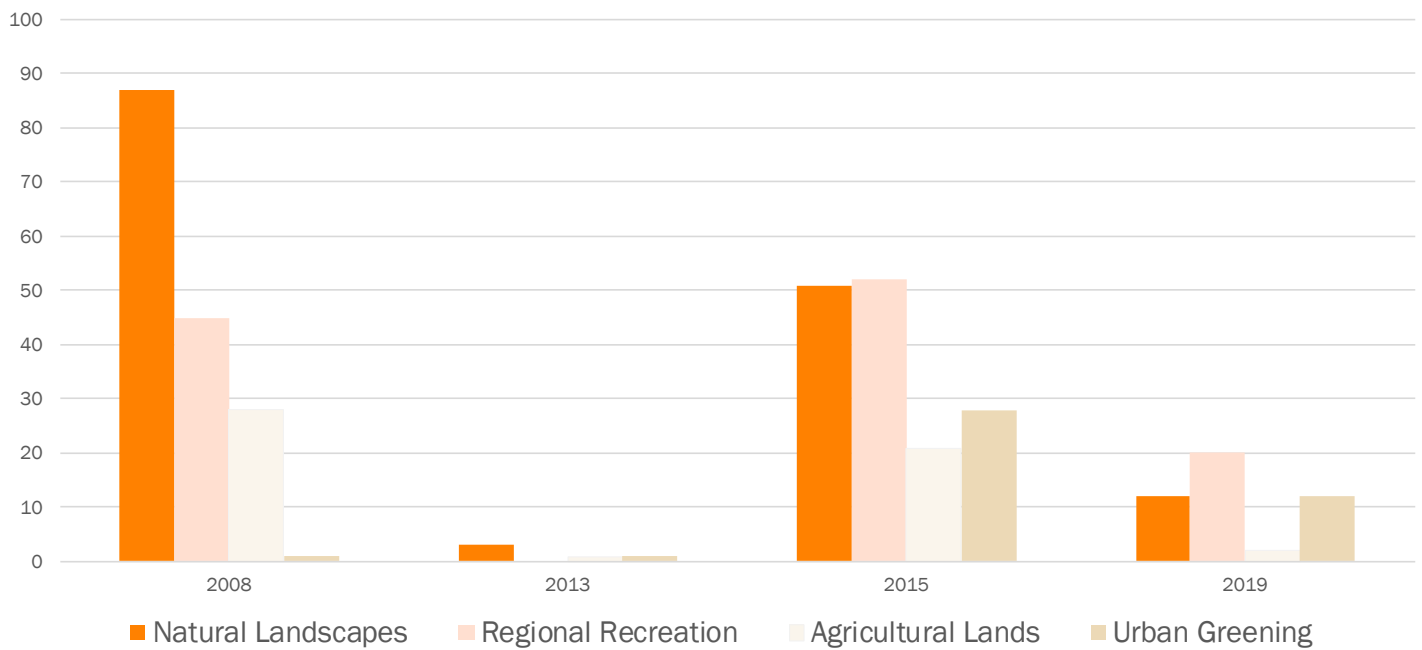
The vast majority of existing PCAs, 83 percent, include a “Natural Lands” designation, with 63 percent including a “Regional Recreation” designation, and roughly 28 percent and 23 percent designated as “Agricultural Lands” and “Urban Greening”, respectively (table 2-9).

	# of PCAs	% of All PCAs*
Natural Lands	153	83%
Regional Recreation	117	63%
Agricultural Lands	52	28%
Urban Greening	42	23%

**TABLE 2-9**  
Summary Statistics of the Existing PCAs

**TABLE 2-10**

### PCA DESIGNATION BY YEAR



\*PCAs can have one or more designations, so percentages do not add to 100 percent and the number of PCAs does not add to 185



## A VARIETY OF LAND TYPES ACROSS THE BAY AREA

The composition of these PCA designations is also changing over time. Over half of PCAs with a Natural Landscapes designation were created in 2008, with a declining number of designated Natural Lands each cycle. Regional recreation and urban greening PCAs have taken on a relatively higher percentage of designated PCAs in the 2015 and 2019 designation cycles, for example.



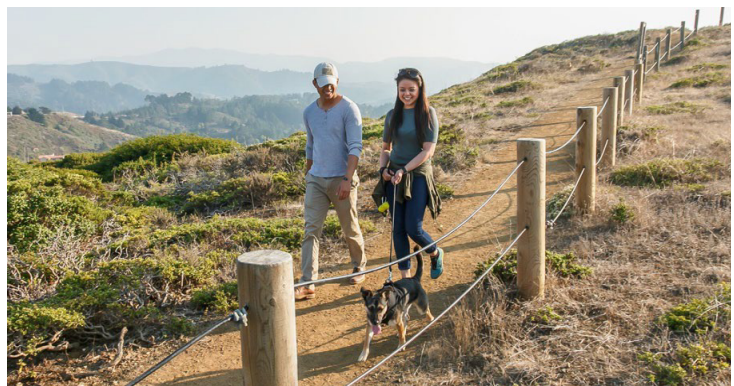
**ROLLING HILLS AND OCEAN VIEWS**

Image Source: National Park Service



**URBAN GARDEN**

Image Source : Hayward Public Library



**MILAGRA BATTERY TRAIL**

Image Source: Vivien Kim Thorp, Golden Gate National Parks Conservancy



## 2.2.2 MAPPING ANALYSIS OF EXISTING PCAS

As previously noted, officially adopted PCAs are recorded as “point” data in format, rather than “polygon” format, which poses challenges for categorizing existing PCAs by type. From provisional mapping to convert points to PCA polygon areas, it is evident that PCAs overlap in some places – especially in the North Bay.

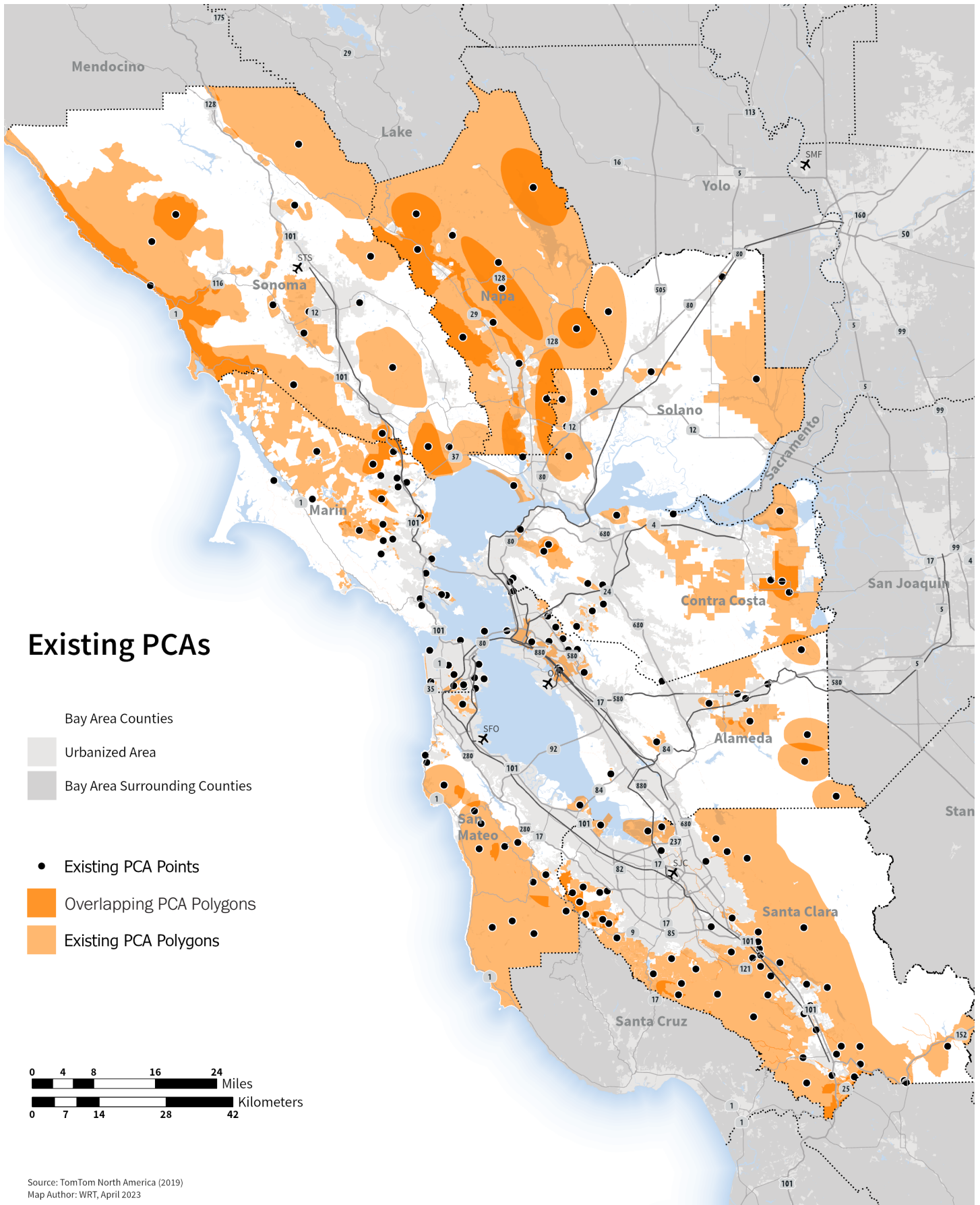
When comparing provisional PCA polygon areas with Official Conserved Areas (OCAs), as identified through [calands.org](http://calands.org), which is sponsored by the State of California and includes Protected Areas and Conservation Easements, it can be seen that 33 percent of PCA land area is officially conserved and 40 percent of PCA points fall within OCAs. The overlap of PCAs and OCAs is not entirely consistent with the 2007 PCA guidelines that call for “designating PCAs that contain lands important for protection via purchase fee title or easement within the next few years.” The PCA Refresh is an opportunity to address this inconsistency. The

Refresh can better distinguish the needs of PCAs that are not yet protected and identify the value add of PCA designations for areas already protected.

Additionally, when analyzing how PCA areas intersect with Priority Development Areas and Urban Growth Boundaries, we find that about 10 percent of Urban Greening PCA areas fall within Plan Bay Area 2050 Growth Geographies and that roughly 10 percent of PCAs are within the Bay Area’s Urban Growth Boundaries (see map 2-1 for more detail). These data point to the need to establish a clearer relationship to the Plan Bay Area regional growth framework, as well as the need to leverage PCAs to offer more support for key Plan Bay Area strategies. As with the PCA-OCA overlap, Urban Greening PCAs are another example of where a more nuanced definition of PCAs is needed. The next phase of the Refresh is an opportunity to expand the definition of PCAs beyond protection and acquisition. **A more contextual PCA definition will help address past inconsistencies and clarify the value of PCAs in OCAs or**

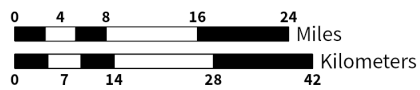
**urban lands where the focus is not on protecting the lands but is instead on advancing multi-benefit improvements.**

In an effort to understand how existing PCAs relate to climate hazard areas, MTC overlaid the PCA polygons with CALFIRE’s Fire Hazard Severity Zones (FHSZ) and areas likely to experience sea-level rise impacts in the near future. That analysis indicated that existing PCAs cover much of the FHSZ areas, but there are significant areas that are designated as a fire hazard zone but not included in an existing PCA. Additionally, many PCAs that border the Bay Edge overlap with areas that will likely be inundated with 36 inches of sea level rise. These findings suggest that many PCA are uniquely positioned to deliver climate resilience and adaptation benefits in a manner that can support Plan Bay Area strategies and goals.



## Existing PCAs

- Bay Area Counties
- Urbanized Area
- Bay Area Surrounding Counties
- Existing PCA Points
- Overlapping PCA Polygons
- Existing PCA Polygons



Source: TomTom North America (2019)  
 Map Author: WRT, April 2023

**MAP 2-2**  
 Map of Existing PCA Points and Polygons

## 2.3 PCA GRANT FUNDING OVERVIEW AND ANALYSIS

MTC and the State Coastal Conservancy (SCC) jointly funded two rounds of grant funding for established Priority Conservation Areas (PCAs) in 2014 and 2019. Grant awards ranged in size from \$40,000 to \$2.1 million and provided funding to cities, counties, park districts, utility districts, and other agencies and eligible non-profits to acquire, enhance, or improve areas designated as conservation priorities. A quick summary of PCA grant funding to-date follows; a more detailed review of PCA grant funding considerations will be included in Memo 3.

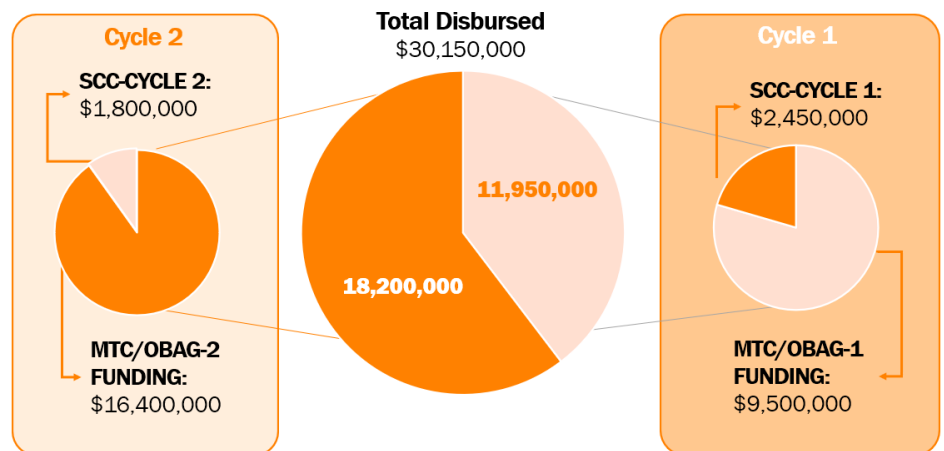
MTC and the SCC disbursed \$30,150,000 in PCA grant funding through two distinct funding cycles. MTC committed a total of \$25.9 million from the One Bay Area Grant (OBAG) program, and the SCC committed a total of \$4.25 million in funding from its own bond measure funds and through state bonds. 58 projects were funded by PCA grants which supported work in 32 PCAs

—16 percent of the established 185 PCAs. Additionally, 78 percent of funded projects were categorized as trail improvement or access related, 12 percent were planning projects, 8 percent were acquisition projects, and just a few were categorized as rehabilitation, restoration, or urban greening.

### FUNDING SOURCES, RESTRICTIONS, AND SWAPS

OBAG program funds came from regional shares of Federal Highway Administration (FHWA) Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement (CMAQ)

funds (STP/CMAQ). Thus, any PCA project funded by these funds was required to comply with all federal requirements and eligibility rules. However, two types of PCA projects—open space acquisition and habitat restoration—are ineligible for federal transportation funding. In order to proceed with those types of projects, project sponsors either had to receive SCC funding support or completed internal funding exchanges and swaps to free up non-federal funds. The funding for these exchanged projects came from a variety of sources, such as local sales tax measure funds.



**FIGURE 2-11**  
OBAG Cycle 1&2 Funding

## KEY TAKEAWAYS FROM THIS CHAPTER

- PCAs are currently categorized by one or more of the four designations that recognize the vitality of the Bay Area's natural systems, rural economy and the health of all residents: Natural Landscape; Agricultural Lands; Urban Greening; and Regional Recreation
- While the existing program's primary PCA types are all linked to important co-benefits, including climate resilience, urban forests, and wildlife habitat, there were no requirements or data driven evaluation applied during the nomination or designation process.
- PCAs account for a significant share of the region's land, which raises important questions about regional prioritization. The need for open space has changed and evolved overtime.
- There are a wide variety of needs and use cases that local jurisdictional partners have with respect to the current PCA program, which is illustrated by the clear variation across a number of categories: by subregion, county, PCA size, PCA nomination, PCA designation, etc. These distinctions represent different capacities, natural endowments, and policy goals across jurisdictions.
- An updated PCA program will have to consider these needs and make room for differing local contexts while also more closely aligning with key regional priorities and appropriate guidelines for program partners. These requirements helped drive the need for the survey approach described in the subsequent chapter, in order to better understand and unpack these needs and uses.
- Mapping and identifying existing PCAs is a challenge due to inconsistent local practices and a lack of regional guidance, which has led to overlap between PCAs. This inconsistency poses difficulties in measuring, quantifying, and assessing the benefits of PCAs. Improving the mapping and identification process of PCAs is a key consideration and priority for future work.
- There is relatively limited regional funding to support PCA projects, and this funding has various restrictions on uses/eligible expenses (STP/CMAQ).
- There are also project types that are difficult to support because they are not eligible for federal transportation dollars, or the available funding mechanisms (i.e., swaps/exchanges) are not always feasible or scalable.
- Therefore, there is a need for funding sources that are a better match for a wider range of policy concerns, including equity, resilience/adaptation, and a meaningful regional planning and prioritization framework that will help speak to other funder priorities and concerns. All of these issues will be investigated further in Memo 3.





Photo: Noah Berger





# 03.

## SUMMARY OF PARTNER AND STAKEHOLDER ENGAGEMENT

## 3.0 SUMMARY OF PARTNER AND STAKEHOLDER ENGAGEMENT

The Partner and Stakeholder Engagement chapter includes an overview of engagement activities conducted since project kick-off as well as a summary of various themes and key takeaways from this ongoing outreach during the PCA Refresh project.

The PCA Refresh relies heavily on stakeholder engagement as a way to understand the strengths and weaknesses of the existing Program, priorities of key partners, and options for structuring and implementing the Refresh. Stakeholder input has been critical to the development of the draft vision, goals and objectives described in Chapter 4, the preliminary data-driven mapping framework detailed in Chapter 5, and considerations for the paths ahead summarized in Chapter 6.

### 3.1 DETAIL OF ENGAGEMENT ACTIVITIES AND APPROACH

The PCA Refresh process thus far has included multiple opportunities for partners to provide input and feedback on the program, including technical advisory committee (TAC) meetings, a partner and stakeholder workshop, a survey, and office hour opportunities. Listed in the sidebar infographics on the next page is a snapshot of engagement activities to date for the PCA Refresh. The intended purpose, audience, and format of these activities is further detailed in the following section.

#### TAC MEMBERS LIST:

**Misti Arias**

*Sonoma Ag & Open Space*

**Louise Bedsworth**

*Center for Law Environment and Energy (CLEE)*

**Stacy Bradley**

*City/County of San Francisco*

**Allison Brooks**

*Bay Area Regional Collective (BARC)*

**Torri Estrada**

*The Carbon Cycle Institute*

**Robert Guerrero**

*Solano CTA*

**Jessica Fain**

*San Francisco Bay Conservation and Development Commission (BCDC)*

**Brian Holt**

*East Bay Regional Parks District*

**Joshua Hugg**

*MidPenOpen Space District*

**Megan Lamb**

*Groundwork Richmond*

**Marc Landgraf**

Santa Clara Valley  
Open Space Authority

**Moira McEnespy**

State Coastal Conservancy

**Leslie Mendez**

City of San Rafael

**Elizabeth O'Donoghue**

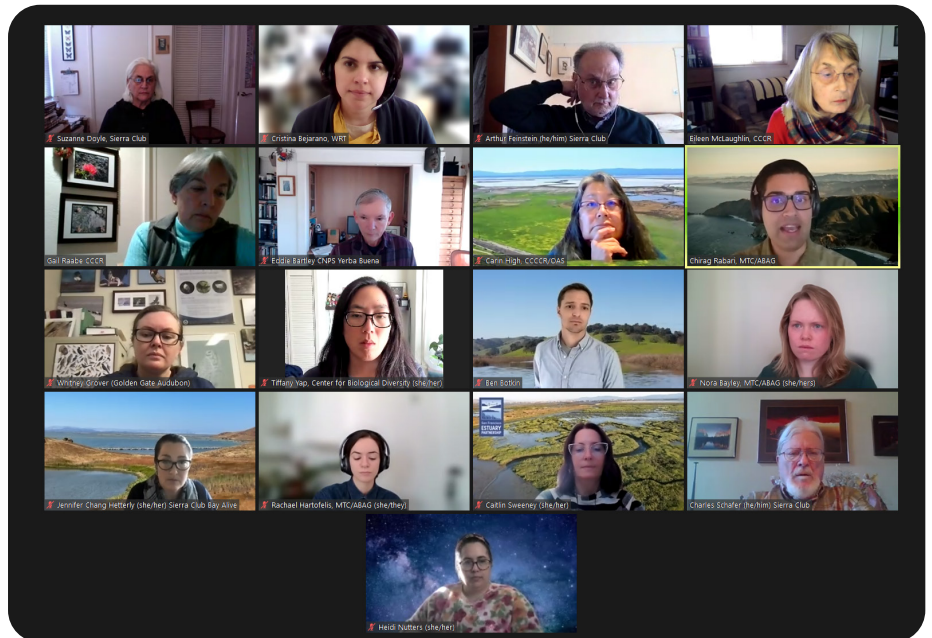
The Nature Conservancy

**Matt Regan**

Bay Area Council

**Danielle Schmitz**

Napa CTA



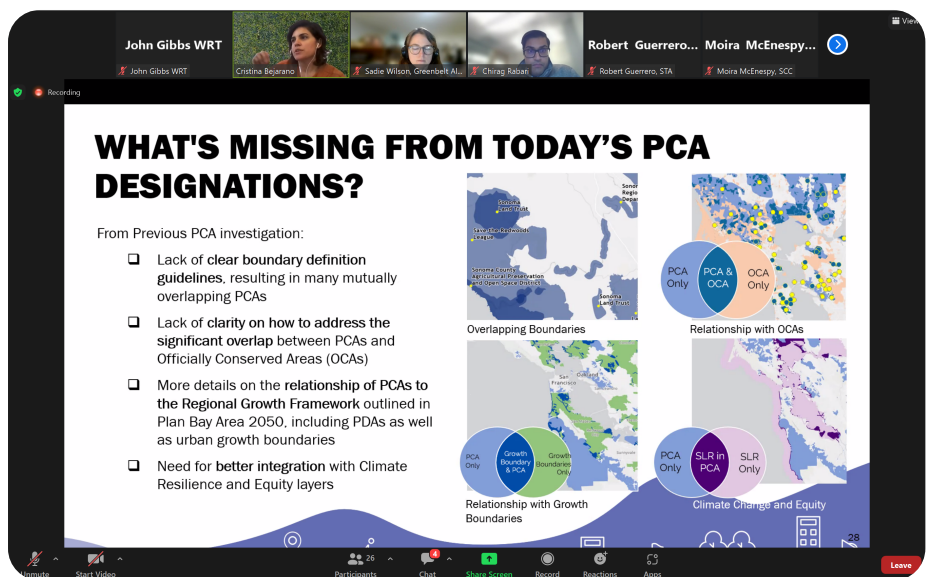
**FIGURE 2-2**

Environment Office Hour

**FIGURE 2-1**

Technical Advisor Committee (TAC)  
Members

\* Conversions with other potential TAC members  
are ongoing and membership may expand as the  
process moves forward



**FIGURE 2-3**

TAC Meeting 2 Presentation

## TAC MEETING #1

- 10/6/2022
- **16** participants (plus staff/ consultant team)
- Topics: PCA overview, Goals, Past Uses, Existing Knowledge
- Format: Presentations, MURAL exercises, discussions

## TAC MEETING #2

- 11/15/2022
- **16** participants
- Topics: Initial Findings, Emerging Themes, Upcoming Engagement Activities
- Format: Presentations, MURAL exercises, Discussions

## TAC MEETING #3

- 2/27/2023
- **12** participants
- Topics: Review Summary of Findings, Data Overlays by Theme, Paths Ahead
- Format: Presentations, Breakout Rooms, Facilitated Discussion, virtual white-board exercises

- **Technical Advisory Committee (TAC):**

The role of the TAC is to provide insights and direction in support of the project, feedback and discussion to shape research and analysis priorities, and review key materials and deliverables. TAC members were invited to participate to compose a group of experts that represented different sectors and portions of the nine-county region. The TAC is made up of 16 members (see Figure 2-1)

- **Workshop:**

Workshops are an opportunity to engage a wide range of interested parties, including representatives of various roles in local and regional conservation. Invitations to participate in workshops were sent to a wide list of people and organizations interested in the PCA work.

## WORKSHOP #1

- 12/8/22
- **66** participants
- Topics: PCA Program Background, Goals of Project, Emerging Themes and Data Sources
- Format: Presentations, Two Facilitated Break-Out Sessions, MURAL Boards, Discussions

## SURVEY #1

- Open 12/8/22 to 1/13/23
- **181** participants
- Topics: Program Priorities, Past Uses of PCA Designation, Strengths and Weaknesses of Existing Program, Goal Alignment, Data Sources, Emerging Themes
- Detail: Survey targeted at interested stakeholders. Questions included multiple choice, rank choice, and short answer questions.

## OFFICE HOURS #1

- Held over various days from Dec 2022 – Feb 2023
- **Multiple small group conversations**
- Topics Discussed: North Bay priorities, environmental group priorities, new needs for conservation in addition to acquisition, working lands opportunities, regional data review

- **Survey:**

Surveys are employed to gain detailed feedback from an even wider range of partners and stakeholders. Surveys were distributed to the same list as workshop participants and widely promoted through email blasts sent by MTC and Greenbelt Alliance.

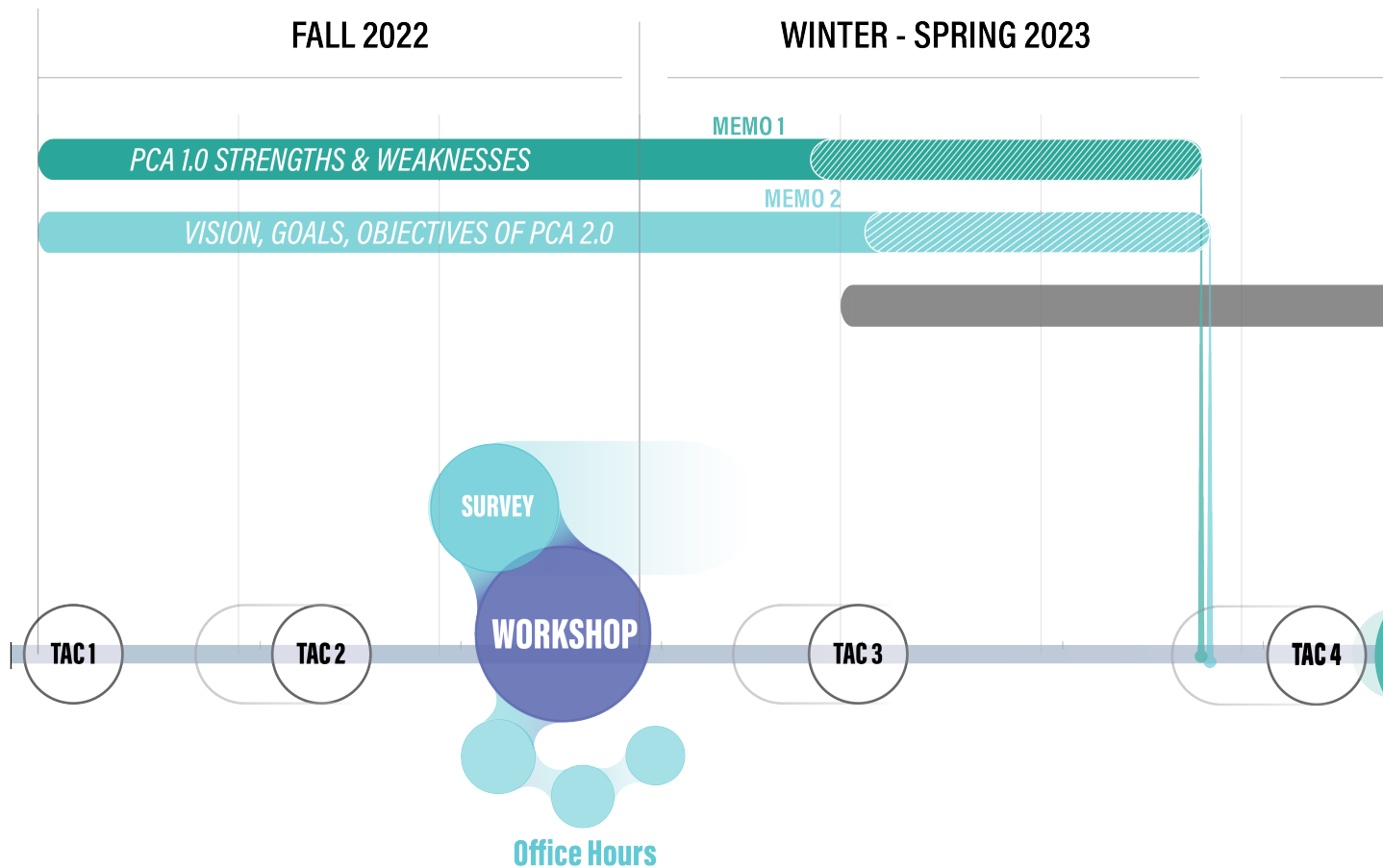
- **Office Hours:**

Office hours provide room for in-depth one-on-one or small group discussions that may not be appropriate for workshops or TAC meetings. Office hours will be scheduled throughout the project as needed or at key decision points.

# ENGAGEMENT TIMELINE

PROJECT  
LAUNCH

2023

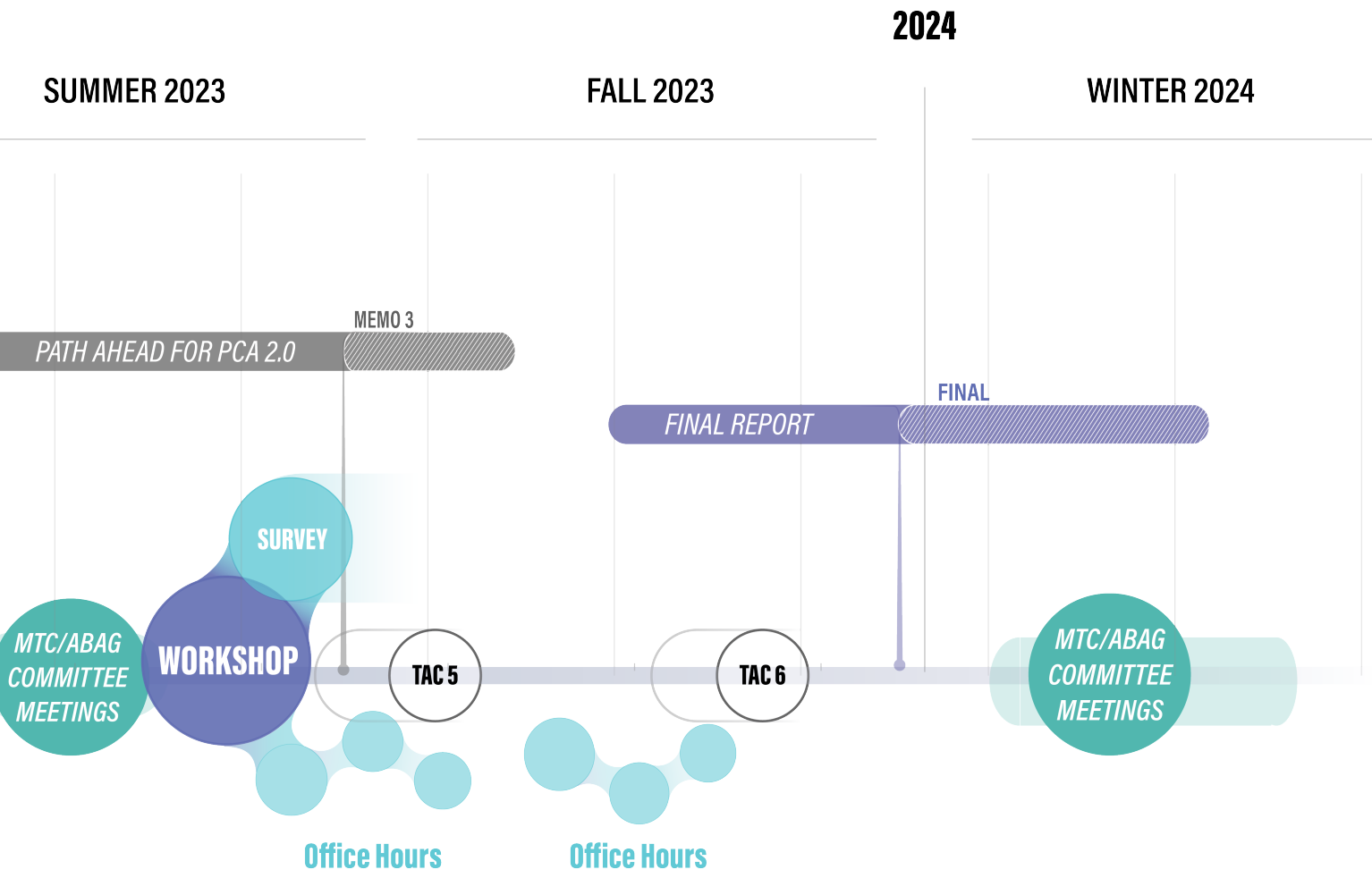


The engagement timeline has been designed to strategically engage key partners throughout the project to shape deliverables and provide multiple modes and opportunities

for feedback. To date the project team has held three Technical Advisory Committee (TAC) meetings, one Survey, one Workshop, and eight (8) office hours meetings.

These activities were largely focused on understanding what aspects of the existing program were working well, where there are opportunities for further improvement, and how





to align the Program with local, regional, and state conservation strategies and priorities.

**FIGURE 2-4**  
PCA Refresh Schedule  
\*Schedule is tentative and subject to change

● Key Strength

● Key Weakness



## 3.2 KEY THEMES EMERGING FROM ENGAGEMENT ACTIVITIES TO DATE

Through the engagement activities conducted to date, the project team has built a strong understanding of the many competing priorities driving conservation work in the Bay Area, existing barriers to implementation, and emerging opportunities for using the PCA process to further align with cross-sector goals and facilitate more effective planning and implementation of conservation projects. The following summarizes key takeaways and themes heard from TAC meetings 1,2, and 3, Workshop 1, Survey 1, and office hours meetings regarding the existing PCA framework and priorities for the PCA Refresh project.

Participant feedback is summarized below by feedback on the Existing PCA Framework and feedback on Priorities for the Refresh.

## EXISTING PCA FRAMEWORK

**The existing PCA program has been valuable in building local consensus on conservation priorities and fostering partnerships that are key to conservation work.**

- 31 percent of survey respondents indicated that “contributions to conservation and park access planning” were working well as part of the existing program.
- In particular, participants appreciate that the program “establishes land conservation as a planning goal” and “assists in building consensus at the local level for conservation priorities”.

**There is a need for improving access to the PCA program to achieve greater diversity in nominating agencies and more equitable outcomes.**

- Participants voiced that (1) constraints to local capacity, (2) need for technical assistance, (3) lack of designated funding and/or match funding requirements, and (4) inadequate local support may be contributing to the unequal participation in the existing program.
- Participants identified that the existing program has not been used equally across Bay Area communities and that currently there is no way to ensure that equity priority communities are being prioritized through the PCA designation process or projects in PCA areas.

## PCA REFRESH PRIORITIES

### **Participants see great value in the ability of the PCA program to provide access to funding that can be used to leverage other sources or get conservation projects off the ground.**

- 72 percent of survey respondents indicated that the PCA's link to project funding was helpful in meeting their organizational goals.
- Participants indicated that funding for farm-to-market and trail access programs is a valuable part of the PCA Grant Program and that "putting ag and open space lands on the map for policy and funding considerations" was a PCA program strength.
- Some participants indicated that the existing connection of PCAs to OBAG funding was particularly effective at providing access to support rural PCAs.

### **Many respondents indicated a desire to see a "data-driven" or "science-based" approach for determining PCA eligibility, as a way to better align with regional and state goals/ programs.**

- When survey respondents were asked what aspects of the existing program could be improved, the highest share of respondents indicated "alignment of PCAs with regional and state goals". The state's 30x30 program in particular, as well as regional and state climate resilience goals and alignment with SB375, were key areas where participants wanted to see greater alignment.
- In particular, participants called for a "data-driven" framework for the PCA program that could remove some of the "unevenness" found in the existing program and elevate the PCA program to be a designation that is associated with specific metrics and requirements indicating an area's efficacy in meeting stated goals and objectives.

### **Participants indicated a desire to see the PCA Refresh expand access to funding opportunities through an integrated approach that is coordinated with other relevant agencies, plans, and goals.**

- When asked what is needed to achieve regional conservation goals, 81 percent responded that economic incentives and funding are needed.
- Survey respondents ranked "funding opportunities and access" as the greatest priority for the refresh.
- When asked about top priorities for the Refresh, respondents ranked "Climate resilience and ecosystems" as a top priority after funding opportunities.
- Participants also reflected a need for increased, designated funding that is aligned with PCA goals, including funding for climate resilience, biodiversity, and equitable access.

● Key Strength

● Key Weakness



## PCA REFRESH PRIORITIES

**Participants indicated a that in order to meet key Program objectives, climate resilience and biodiversity in particular, management of PCA areas must be considered.**

- Partners indicated that the performance of natural and working lands for meeting climate goals is largely dependent on land management strategies and agricultural practices, which ought to be considered in the Refresh.
- Many commented that climate resilience was fundamental to other categories like biodiversity, access, equity, and working lands and that understanding climate as an overarching theme would allow for further prioritization of multi-benefit projects.
- Participants indicated that biodiversity goals must be understood in light of climate change and projects and management strategies must be developed to meet multiple goals.

**Many participants accentuated a desire to see the Refresh benefit equity-priority communities through expanded access to open space and establishment of PCAs that benefit these communities.**

- Participants expressed concern about relying solely on data for understanding underlying social, equity, and community development dynamics, including how outcomes are achieved.
- Workshop participants in particular emphasized the desire to see the PCA program incorporate public health indicators and outcomes that can help meet equity goals through urban greening, equitable outcomes, and climate resilience benefits.
- 50 percent of survey respondents said that ensuring projects have adequate community engagement would help the PCA program benefit a larger range of users, and disadvantaged communities in particular.
- Need for more “qualitative information on cultural and societal barriers that prevent equitable access to open space, and community input on potential open spaces”.

**“The PCA funding supported park planning and scope that was later leveraged to secure capital funding from local, regional, and state funding sources.”**

- Survey 1 Participant’s Voice

**“Climate resilience has taken on a great urgency, priority resilience areas are a critical need for the Bay ecology, for frontline communities, and climate disasters.”**

- Survey 1 Participant’s Voice

**“Ensure wildlife connectivity is included. Connecting critical linkages across landscapes will require large swaths of land to be conserved.”**

- Survey 1 Participant’s Voice

**“Integration of equity including support for transit connections and CBO-led programs for accessing public lands, i.e. student fieldtrips etc.”**

- Survey 1 Participant’s Voice

## SAMPLE OF KEY QUESTIONS EXPLORED

### 1. What are the best features of the existing PCA program? What's working well?

Supported by local governments	Awareness and incentives for conservation throughout the Bay ✓	Covers the multitude of resources in the Bay Area (e.g., includes urban greening)	provides transportation resources that assist in preserving farm to market activities	Leveraging funding
establishes land conservation as a land use planning goal	Is a framework that is supported by MTC/ABAG	worked moderately well to underpin project funding, but timing is a constraint	the Bay Area remains one of the least developed major metros in the nation	Art projects are being funded that provide transportation and access to open spaces and parks in the region
Part of the integrated planning for PBA	Connected to funding	Neither "too big to fail" nor "too small to matter"	Assist in building consensus at the local level for what are the priorities for conservation	\$\$

### 2. What are the gaps in knowledge that the TAC can help resolve? What could the broader survey help resolve?

Benefits of PCA funding to local communities and how to leverage that for future funding opportunities	How can the collective value of the program be better leveraged to support more PCA projects in the Bay Area?	How can PCAs more effectively impact land use decisions?	What are the range of climate resilience benefits to the Bay Area?	How is the relationship between state preservation goals and MTC's RTP?	How can the PCA program support habitat mitigation?
How can the PCA program be better integrated with other land use planning goals?	How much money is there between the state and community for green bond control?	What are the most important future intended uses for PCAs?	How can we better leverage the state's resources to support PCA projects?	How can the PCA program be better integrated with other land use planning goals?	How can the PCA program support resilience and other conservation goals?
Relationship of PCA planning and funding with SB 375	Relationship between PCA projects and SB 375. What are the goals?	What is the amount of \$ needed to fully support the PCA program?	What are the barriers to the implementation of PCA projects? How can we better support them?	What are the barriers to the implementation of PCA projects? How can we better support them?	How can PCA program provide resilience benefits?

FIGURE 2-5 TAC Meeting #1 Mural Discussion Notes



## KEY TAKEAWAYS FROM THIS CHAPTER

- Partners and stakeholders find the existing program valuable for driving local and regional conversations on conservation priorities, funding projects, and coming to consensus about local priorities and planning efforts.
- There is a need for greater access to information on the PCA program and greater accessibility to increase the diversity of nominating/ participating agencies.
- Priorities for the Refresh include greater alignment with state and regional programs and policies, like 30x30 and SB375 in particular, development of a more “data-driven” framework, and greater attention to how the PCA program can help support and advance climate resilience and adaptation goals.
- Participants indicated a desire to see the Refresh benefit equity-priority communities through greater communication and access to the program and through development of metrics to prioritize PCAs in places that will benefit underserved areas.







Photo: Karl Nielsen



# 04.

## DRAFT VISION, MISSION AND GOALS FOR THE REFRESHED PCA PROGRAM

## 4.0

# DRAFT VISION, MISSION AND GOALS FOR THE REFRESHED PCA PROGRAM

This chapter includes a draft of the refreshed PCA program’s vision, mission and objectives which have been informed by analysis done to-date, as well as through workshops and surveys with stakeholders and reviewed with input from the TAC. The core-value priorities and related Plan Bay Area 2050 environmental strategies are also defined.

## MISSION

The PCA Program assists Bay Area governments and agencies in advancing conservation planning efforts, funding projects, and taking action for a healthy, resilient, and equitable Bay Area.

## VISION

**“By the year 2050, the Priority Conservation Area Program will ensure the region’s biodiversity, natural resources, open spaces, agricultural lands, clean water and clean air are resilient to a changing climate and enjoyed by all.”**

## GOALS

- Implement a regional land use pattern which supports the objectives of Plan Bay Area 2050 as well as applicable state and regional strategies for conservation and climate change adaptation including: Conservation Lands Network; Estuary Blueprint; Sea Level Rise Adaptation Funding & Investment Framework; and, Pathways to 30x30.
- Provide a platform for local governments in partnership with individuals, community groups, organizations and Tribes to plan, share best practices and develop shared strategies for land conservation that are equitable and inclusive.
- Disseminate scientific information and data regarding regional conservation priorities including regionally important habitat areas and wildlife linkages, agricultural lands, regional recreation, urban greening, and climate adaptation in an understandable and usable way that facilitates good policy and planning decisions.
- Provide specific tools and funding analyses for local governments and stakeholders to achieve priority conservation goals, including when updating Open Space Elements of a jurisdiction’s General Plan.





Photo: Karl Nielsen



Photo: Bay Nature



## PROPOSED PCA TYPES, DEFINITION, AND DRAFT OBJECTIVES

### 4.1 REFRESH PRIORITIES

The stakeholder engagement resulted in the emergence of three primary priorities based on core values for the refresh: climate resilience, equitable access to open space, and the protection of biodiversity in the environment. Each of these is aligned with specific environmental strategies from Plan Bay Area 2050 and serves as the foundation for the draft elements for a data-driven framework in the following chapters.

In order to provide a science-based approach to the existing PCA classifications, each type is first defined by identifying its distinct objectives for the region. While there is overlap across the existing PCA types in terms of their potential benefits, focusing on the prominent unique features of each ensures comprehensive coverage across the program. The draft definition, objectives, and relevant plans, policies, and programs for the four existing classifications – natural lands, agricultural/working lands, regional recreation, and urban greening – are presented, in addition to a proposed fifth classification, climate adaptation.

#### Natural Lands

##### Definition\*:

Areas critical to the functioning of wildlife and plant habitats, aquatic ecosystems, and the region’s water supply and quality.

##### Draft Objectives:

Protect the most essential lands and wildlife corridors needed to sustain regional biodiversity and critical ecosystems.

- Protect a full representation of the Bay Area’s habitats in robust amounts to ensure long-term resilience of the region’s biodiversity.
- Enhance watersheds including priority stream corridors, wetlands, and groundwater recharge areas.
- Maintain and enhance wildlife corridors and habitat connectivity.

##### Relevant Plans, Policies, & Programs

- Plan Bay Area 2050 Strategies EN 4-6
- Conservation Lands Network
- Pathways to 30x30
- SB 1425, Stern. Open-Space Element Updates

#### Agricultural / Working Lands

##### Definition\*:

Farmland, grazing land and timberland that support the region’s agricultural economy and provide additional benefits such as habitat protection and carbon capture.

##### Draft Objectives:

Protect lands that have high ecosystem service values in terms of providing and/or having significant potential to provide carbon sequestration service, and healthy soil, water, and food in the region.

- Protect important farmland, grazing land, and timber land uses.
- Maintain areas of high carbon stock and enhance low-carbon stock areas with multi-benefit management.
- Support the long-term sustainability of agriculture in the Bay Area economy and ensure continued access to locally grown food.

##### Relevant Plans, Policies, & Programs

- Sustainable Agricultural Lands Conservation Program
- Plan Bay Area 2050 Strategy EN 4-5
- Cortese-Knox Hertzberg Act 2000, Gov. Code §56301
- Farmland Mapping and Monitoring Program
- Natural and Working Lands Climate Smart Strategy

\* AS DEFINED IN THE 2014 PCA UPDATE



## Regional Recreation

### Definition\*:

Existing and potential regional parks, trails, and other publicly accessible recreation facilities.

### Draft Objectives:

Protect and expand trails, parks, and open spaces that ensure regional and local public health and wellbeing; promote equitable access to those recreational areas.

- Complete and enhance access to the Regional Trails Network.
- Acquire new regional open spaces available for recreation and expand park access in already protected lands where appropriate, particularly in locations supporting Equity Priority Communities.
- Create new parks and enhance existing parks, particularly in Equity Priority Communities and areas with limited access to outdoor recreation.

### Relevant Plans, Policies, & Programs

- Plan Bay Area 2050 Strategy EN 6
- San Francisco Bay Trail Project
- Bay Area Ridge Trail Project
- Bay Area Water Trail Project
- Statewide Comprehensive Outdoor Recreation Plan
- BATC Regional Trails Network

## Urban Greening

### Definition\*:

Existing and potential green spaces in cities that improve community health, capture carbon emissions, address stormwater, and enhance the public realm.

### Draft Objectives:

Provide more access to green spaces within urban context and support urban resilience by increasing tree cover, surface permeability, expanding green infrastructure, and mitigating extreme heat.

- Expand tree cover in urban areas with limited shade, particularly in areas with high numbers of extreme heat events and in equity priority communities.
- Expand green stormwater infrastructure projects particularly in areas with low surface permeability or other stormwater management issues.

### Relevant Plans, Policies, & Programs

- Plan Bay Area 2050 Strategy EN 1, 6
- San Francisco Estuary Blueprint – Actions 19, 23
- DNR Urban Greening Program
- Farmland Mapping and Monitoring Program

## Climate Adaptation

### Definition:

Under development.

### Draft Objectives:

Prioritize lands within the high climate hazards risk zones in terms of sea level rise, wildfire, and extreme heat for adaptation and mitigation measures.

- Protect and prepare areas that provide habitat migration opportunities, particularly for marsh and other shoreline systems when sea levels rise.
- Manage very high fire risk natural and working lands to reduce the intensity and spread potential for future wildfires.
- Integrate climate data to ensure long-term community and ecosystem resilience in Natural, Agricultural/Working, Regional Recreation, and Urban Greening areas.

### Relevant Plans, Policies, & Programs

- Plan Bay Area 2050 Strategy EN 1, 4-6
- Bayland Habitat and Goals Report
- CA Wildfire and Forest Resilience Action Plan
- SF Bay Restoration Authority
- San Francisco Estuary Blueprint
- California Climate Adaptation Strategy
- BCDC Bay Adapt Strategy



## KEY TAKEAWAYS FROM THIS CHAPTER

- The Priority Conservation Area (PCA) Program has established three primary priorities based on stakeholder engagement: climate resilience, equitable access to open space, and biodiversity protection. These priorities align with specific environmental strategies from Plan Bay Area 2050 and serve as the foundation for a draft data-driven framework.
- The PCA Program’s vision, mission, goals, and objectives have been defined in accordance with these priorities and have been informed by workshops and surveys with stakeholders. The program seeks to provide a platform for local governments, individuals, and community groups to develop shared conservation strategies that are inclusive and equitable.
- The program aims to disseminate scientific information and data regarding regional conservation priorities and provide specific tools and funding for stakeholders to achieve priority conservation goals. The refreshed program is proposed to be divided into five refined or new classifications: natural lands, agricultural / working lands, regional recreation, urban greening, and climate adaptation.





Photo: Karl Nielsen



# 05.

## DRAFT ELEMENTS OF A DATA- DRIVEN FRAMEWORK



# 5.0 DRAFT ELEMENTS OF A DATA-DRIVEN FRAMEWORK

The following chapter includes an overview of how a data-driven approach could work to define the objectives and data indicators associated with each of the existing PCA classifications, **natural landscapes, agricultural lands, regional recreation,** and **urban greening**, in addition to a newly proposed fifth classification, **climate adaptation**. Similar to Plan Bay Area 2050 - equity and resilience are core cross-cutting themes across these classifications. The following analyses and series of maps is the result of that process.

## 5.1 DRAFT REGIONAL DATA

While there is quite a bit of overlap across the existing PCA types in terms of their potential benefits, the data-driven analysis focuses on the prominent unique features that distinguish each classification to ensure comprehensive documentation of PCA values and benefits across the region.

The goals for each classification have been informed by stakeholder engagement, Plan Bay Area 2050 strategies, and regional guidance documents including the Conservation Lands Network, Baylands Habitat Goals Report, and others.

As shown in Table 5-1: Draft Regional Data on the following page, partners and stakeholders helped identify the latest publicly-accessible sources of data that can be used to indicate potential areas within the region that could help meet each goal. Starting with an exhaustive collection of all potentially relevant regional data, the collection was further shortlisted through conversations with various partners, stakeholders and data specialists. The stakeholder

conversations provided a foundation for reaching a broader consensus on regionally-accepted data sources to consider for the PCA Refresh. The data sources and methodology for weighting and potentially prioritizing datasets will be refined through subsequent analyses and engagement on the “Path Ahead”.

## 5.2 A SCIENCE-BASED, DATA-DRIVEN APPROACH

By defining each PCA classification and associated objectives, and then identifying potential data sources and indicators separately, the PCA framework can be easily updated and visualized to reflect new developments in science and metrics. This science-based approach to the data-driven framework will allow the PCA evaluation process to be updated as needed over time.

The following sections describe why and how the data sources and indicators can be used to identify potentially eligible PCA areas across the region. Discussion on how this framework could be used in the future will be explored in the “Paths Ahead” portion of a future memo.

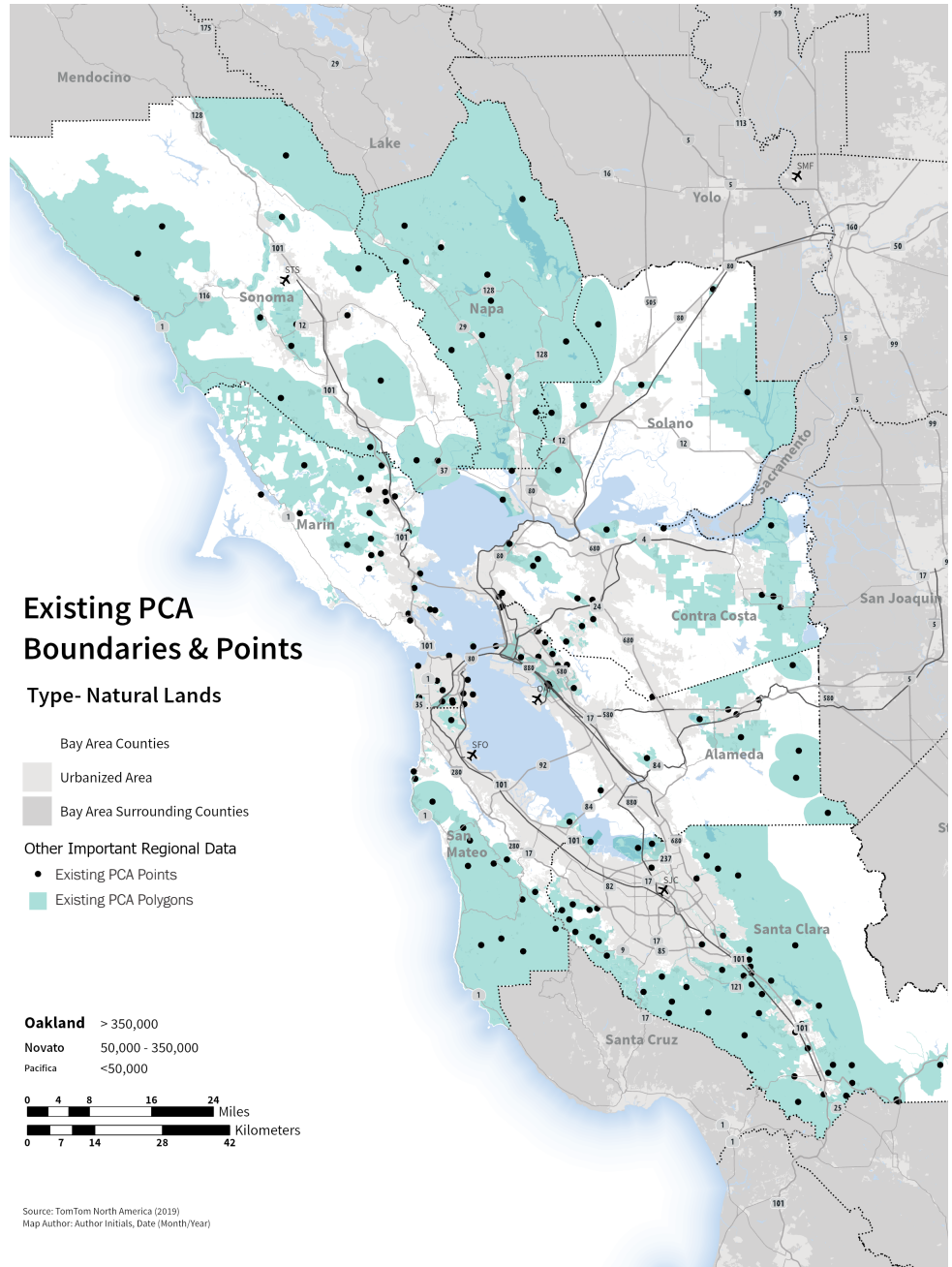
## 5.3 METHODOLOGY

For the data-driven analysis, the project team utilized the geographic information mapping system, ArcGIS Pro, to extract key indicators (attributes) from each of the distinct datasets recommended, reviewed, and selected for the proposed PCA types.

Through a series of analysis including intersect, extract, and union operations, among others, the spatial areas of all the data sources selected were cumulatively combined as one spatial areas (see Map NL-1, WL-1, RR-1, UG-1, and CA-1). The existing PCA points and polygons (Map 5-1) are then overlaid for overlap and gap analysis.

The degree of alignment between the old and refreshed framework will be further investigated as part of Memo 3.

At the current stage of mapping, no prioritization or weighting operations have been performed. This will be a critical part of the future analysis with incorporation of the inputs from regional stakeholders on data prioritization and the degree of overlap among data layers.



**MAP 5-1**  
Existing PCA Polygons and Points

## PCA DESIGNATION

## PRIMARY BENEFITS

### NATURAL LANDS NL

- Terrestrial ecosystems
- Aquatic ecosystems
- Water supply and quality
- *Habitat connectivity*

### AGRICULTURAL / WORKING LANDS WL

- Agricultural resources
- Agricultural economy
- *Carbon sequestration*

### URBAN GREENING UG

- Community health
- Recreation
- Climate resilience
- *Equity*

### REGIONAL RECREATION RR

- Recreation
- *Equity*

### CLIMATE ADAPTATION CA

- Climate resilience
- Community health
- *Ecosystem resilience*
- *Habitat migration*

*Italics* = New addition to PCA benefit / co-benefit framework identified in stakeholder engagement



## POTENTIAL CO-BENEFIT EXAMPLES

## DRAFT DATA

<ul style="list-style-type: none"> <li>• Climate Resilience</li> <li>• Compact Growth</li> <li>• Recreation</li> <li>• Critical habitat areas</li> <li>• Wetlands targeted for restoration</li> <li>• Riparian corridors</li> <li>• Watershed lands</li> <li>• Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Essential Lands, Important lands (CLN 2.0.1)</li> <li>• Bay Area Critical Linkages (CLN 2.0.1)</li> <li>• Resilient Sites (TNC)</li> </ul>
<ul style="list-style-type: none"> <li>• Wildlife habitat</li> <li>• Water supply and quality</li> <li>• Recreation</li> <li>• Climate and resilience</li> <li>• Compact growth</li> <li>• Farmland or grazing land</li> <li>• Timberlands</li> <li>• Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Existing Carbon Stock (Greenprint)</li> <li>• Food Production (Greenprint)</li> <li>• Grazing Lands (FMMP)</li> </ul>
<ul style="list-style-type: none"> <li>• Wildlife habitat</li> <li>• Water supply and quality</li> <li>• Recreation</li> <li>• Urban forest areas</li> <li>• Urban riparian corridors</li> <li>• Urban farms / gardens</li> </ul>	<ul style="list-style-type: none"> <li>• Areas of High Park Need (TPL Park Serve)</li> <li>• Park Deserts (CPAD 2022a)</li> <li>• Tree Canopy (NLCD 2016)</li> </ul>
<ul style="list-style-type: none"> <li>• Wildlife habitat</li> <li>• Water supply and quality</li> <li>• Climate and resilience</li> <li>• Community health</li> <li>• Regional trail network</li> <li>• Potential regional park sites</li> </ul>	<ul style="list-style-type: none"> <li>• Publicly Accessible Open Lands (CPAD/CCED)</li> <li>• Regional Trail Network (BATC)</li> <li>• Regional Active Transportation Data (MTC)</li> </ul>
<ul style="list-style-type: none"> <li>• Compact Growth</li> <li>• Recreation</li> <li>• Critical habitat areas</li> <li>• Wetlands targeted for restoration</li> <li>• <i>Urban-wildland interface</i></li> <li>• <i>Equity</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sea Level Rise (NOAA)</li> <li>• Fire Hazard Severity Zones (CalFire 2022)</li> <li>• Extreme Heat (Cal/Adapt)</li> <li>• Existing Carbon Stock (Greenprint)</li> <li>• Resilient Landscapes (TNC)</li> </ul>

**TABLE 5-1**

Draft Regional Data

lists out the five proposed PCA types and their respective data recommendations. Each of the proposed types with its associated benefits and co-benefits are complementary to one another. Specific indicators/ metrics within individual data layers are highlighted to distinguish and address different conservation priorities across the region.

# PERTINENT DATASETS FOR NATURAL LANDS PCAS

## DRAFT OBJECTIVES

Protect the most essential lands and wildlife corridors needed to sustain regional biodiversity and critical ecosystems.

- Protect a full representation of the Bay Area’s habitats in robust amounts to ensure long-term resilience of the region’s biodiversity.
- Enhance watersheds including priority stream corridors, wetlands, and groundwater recharge areas.
- Maintain and enhance wildlife corridors and habitat connectivity.

## LIST OF REGIONALLY SUITABLE DATA:

- Essential Lands, Important lands (CLN 2.0.1)
- Bay Area Critical Linkages – Linkage & Large Landscape Blocks (CLN 2.0.1)
- Resilient Sites (The Nature Conservancy)

## DEFINING THE DATA LAYERS

### 1. ESSENTIAL AND IMPORTANT REGIONAL HABITATS

The Conservation Lands Network (CLN) is the “make-up of the types, amount and distribution of habitats that comprise the most essential lands needed to sustain the biodiversity of the San Francisco Bay Area.” Many factors were considered in the development of the CLN, which include “the conservation targets (coarse and fine filter), goals for those targets,

land use, proximity to existing protected lands, and conservation suitability (ecological integrity) of the landscape, in addition to the expert opinion of a focus team scientists.” The CLN is complemented by the Bay Area Critical Linkages, which consists of “lands that are important for movement of particular focal species such as mountain lion, badger, and deer.”

The dataset consists of 7 major classes: essential, important, connector, contributor, cultivated, rural residential, and urban/ golf course. For the analysis, we are using polygons classified as essential and important to highlight and prioritize the most critical regional habitats for protection and conservation.

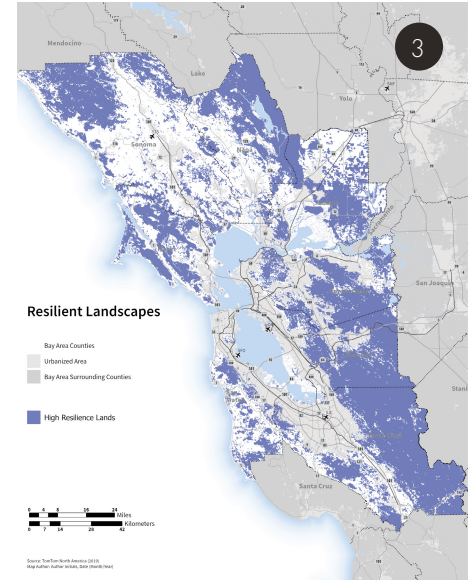
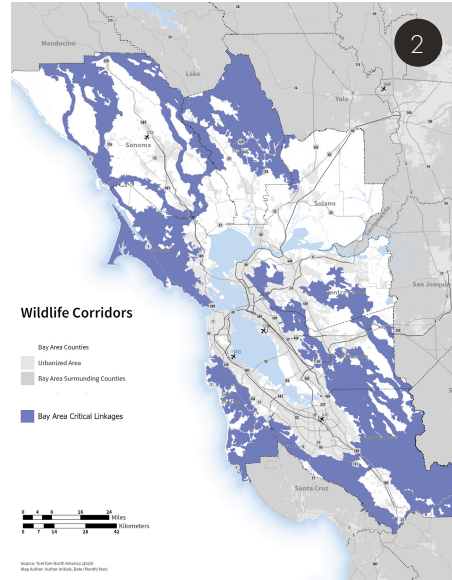
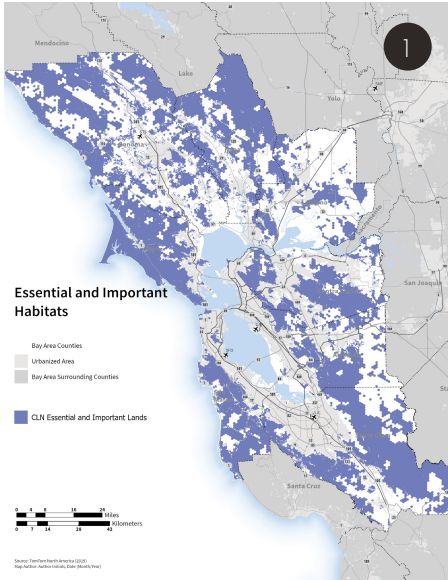
*(Excerpts from Greenprint website: <https://www.bayareagreenprint.org/glossary>)*

### 2. WILDLIFE CORRIDORS

This data layer consists of two main dataset: Large Landscape Blocks and Linkages Design.

According to the CLN website, Large Landscape Blocks are “areas of high ecological integrity that build upon





existing protected areas and serve as the Endpoints for the Critical Linkages.” For parcel delineation, The California Protected Areas Database (CPAD) and Conservation Easements (CCED) were used as foundation units for the greater Bay Area landscape.

Additionally, this data layer is complemented by the Bay Area Critical Linkages polygons. It is defined as “a network of habitat linkages designed for a number of focal species.”

When combined together, the dataset encompasses a wide range of regional wildlife corridors and areas with high biodiversity values.

*(Excerpts from Greenprint website: <https://www.bayareagreenprint.org/glossary>)*

### 3. RESILIENT LANDSCAPES

This dataset utilizes the Nature Conservancy’s Resilience Score metrics, which estimates “a land’s capacity to maintain species diversity and ecological function as the climate changes.” According to the official description on the

TNC website, “it was determined by evaluating and quantifying physical characteristics that foster resilience, particularly the site’s landscape diversity and local connectedness.”

Areas with higher-than-average resilience score and priority coastal marsh migration zones are selected to indicate high biodiversity values for future Natural Land PCAs consideration.

*(Excerpts from TNC website: <https://maps.tnc.org/resilientland/coreConcepts.html>)*

## HOW WE CAN USE THE DATA TO MEET THE OBJECTIVES

To maintain biodiversity long-term, it is essential to protect the diversity of habitat types and in quantities sufficient for future climate adaptation and biological functions of endemic species. CLN was developed by conservation experts from across the 10 counties of the greater Bay Area with updates every five to ten years since the launch of the first CLN 1.0 in 2011. There has also been consistent funding support from the State Coastal Conservancy and coordination with key agencies and stakeholders.

The sub-dataset of CLN2.0– Bay Area Critical Linkages: Large Landscape Blocks and Linkages Design – is critical to maintaining the ability of focal species to move between key habitat areas and limit further fragmentation of those landscape parcels.

Lastly, the Resilient Land dataset from the Nature Conservancy (TNC) is closely aligned with the refreshed

Natural Land PCAs’ long-term goal in climate resilience and biodiversity. Specifically, the goal of TNC “healthy lands” category is to conserve 1.6 billion acres of land worldwide by 2030, which includes most of the carbon-rich and ecologically-critical lands in the Bay Area. As such, the three key attributes selected here - Class 12 “More Resilient,” Class 13 “Slightly More Resilient,” and Class 14 “Priority Coastal Marsh Migration Space” - would help align with goals to protect lands that are most likely to maintain high species diversity and ecological function as the climate changes.

## KEY INDICATORS

- 1 Essential and Important Regional Habitats**  
*(Conservation Lands Network CLN 2.0.1, 2019)*  
 “Essential Lands,”  
 “Important Lands”
- 2 Wildlife Corridors**  
*(Bay Area Critical Linkages, Conservation Lands Network CLN 2.0.1, 2019)*  
 “Large Landscape Blocks,”  
 “Critical Linkages Design”
- 3 Resilient Landscapes**  
*(Resilient Landscapes, The Nature Conservancy TNC, 2020)*  
 Class 12 “More Resilient,”  
 Class 13 “Slightly More Resilient,”  
 Class 14 “Priority Coastal Marsh Migration Space”



# PERTINENT DATASETS FOR WORKING LANDS PCAS

## DRAFT OBJECTIVES

Protect lands that have high ecosystem service values in terms of providing and/or having significant potential to provide carbon sequestration service, and healthy soil, water, and food in the region.

- Protect important farmland, grazing land, and timber land uses.
- Maintain areas of high carbon stock and enhance low-carbon

stock areas with multi-benefit management.

- Support the long-term sustainability of agriculture in the Bay Area economy and ensure continued access to locally grown food.

## LIST OF REGIONALLY SUITABLE DATA:

- Existing Carbon Stock (Greenprint)
- Food Production (Greenprint)
- Grazing Lands (FMMP 2018)

## DEFINING THE DATA LAYERS

### 1. EXISTING LANDS WITH HIGH CARBON STOCK

This dataset indicates how much carbon could be stored in a land based on existing conditions. The nested data/indicators include:

1. Above ground Carbon Storage
2. Soil Carbon Storage
3. Urban Forest Carbon Storage
4. Sequestration of PM 2.5 by Vegetation
5. Sequestration of NO2 by Vegetation

Data ranges between 0.1 - 1. The higher the value is, the more carbon storage capacity a land has.

*(Excerpts from Greenprint website: <https://www.bayareagreenprint.org/glossary>)*

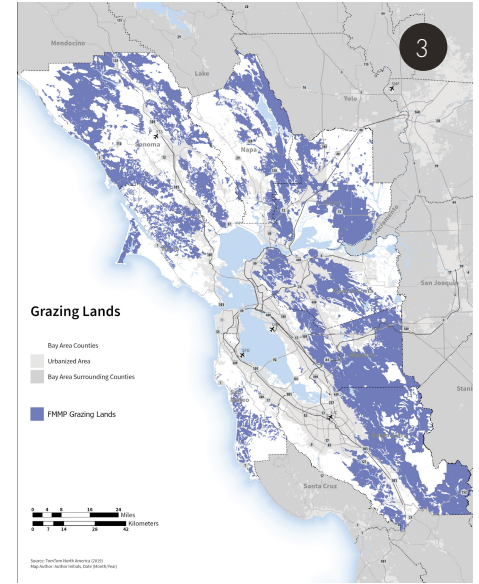
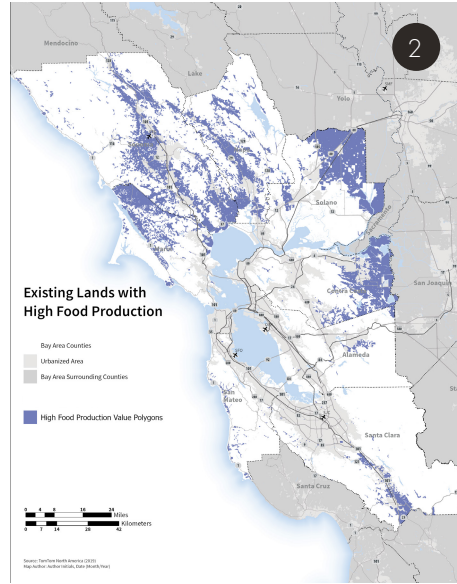
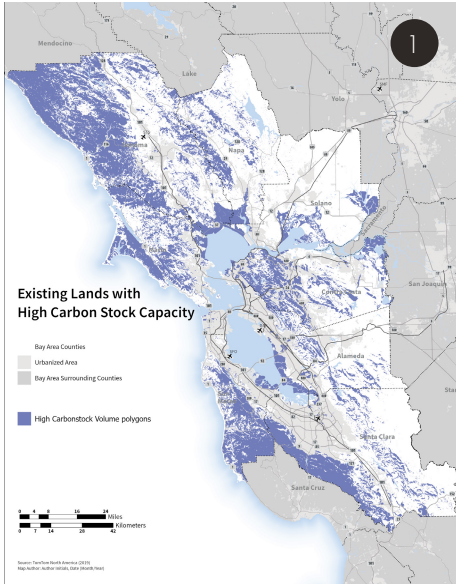
### 2. HIGH FOOD PRODUCTION LANDS

This data layer indicates the land's production value which combines data of FMMP agriculture land use (defined by Prime farmland, farmland of local and statewide importance, and unique farmland), climate, soil type, and irrigation capacity (if applicable) to currently support the production of food.

*(Excerpts from Greenprint website: <https://www.bayareagreenprint.org/glossary>)*

### 3. GRAZING LANDS

This data layer delineates land which falls under the grazing land category



of the FMMP data definition, on which “the existing vegetation is suited to the grazing of livestock.”

(Excerpts from FMMP website:  
<https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>)



## HOW WE CAN USE THE DATA TO MEET THE OBJECTIVES

The “existing carbon stock” dataset helps ensure the goal of providing clean air while reducing atmospheric carbon emissions. The Greenprint data on carbon stock incorporates both above and below ground carbon storage as part of their rigorous science-based research and metrics. The key indicator selected here would define lands as priority working land if their carbon capture value is greater than 0.8 metric ton.

The second dataset “Food production” by Greenprint contributes to the goal of providing healthy food to the regional population. Similarly derived from the Greenprint metrics, it aligns well with regional goals in working land conservation. The key indicator selected here would define lands as priority working land if their estimated economic value in food production is greater than 0.7 scoring units defined by the Greenprint method.

The grazing land dataset by FMMP is crucial to highlighting lands for regional food production, nutrient

cycling and livestock management led by local agricultural landowners. Highlighting landscapes suitable for grazing can thus help inform equitable land-use decisions both locally and regionally, to balance agricultural production with urban development.

The project team is still exploring appropriate groundwater datasets to identify priority areas for groundwater infiltration in the region. The Bay Area has many areas that rely on groundwater for urban and agricultural uses and maintaining those basins in a warmer future will require thoughtful management. It is anticipated that a groundwater dataset will be added to the final set of data.

## KEY INDICATORS

- 1 Existing Lands with High Carbon Stock**  
*(“Carbonstock.tif,” Greenprint Multi-benefit Raster, 2017)*  
 Cells with Value > 0.8 (0.8 - 1 metric ton)
- 2 High Food Production Lands**  
*(“FoodProduction.tif,” Greenprint Multi-benefit Raster, 2017)*  
 Cells with Value > 0.7
- 3 Grazing Lands**  
*(Farmland Mapping and Monitoring Program FMMP, 2019)*  
 “Grazing Lands”



# PERTINENT DATASETS FOR URBAN GREENING PCAS

## DRAFT OBJECTIVES

Provide more access to green spaces within urban context and support urban resilience in terms of increasing tree cover, surface permeability, expanding green infrastructure, and mitigating extreme heat.

- Expand tree cover in urban areas with limited shade, particularly in areas with high numbers of extreme heat events and in equity priority communities.
- Expand green stormwater infrastructure projects particularly

in areas with low surface permeability or other stormwater management issues.

### LIST OF REGIONALLY SUITABLE DATA:

- Priority Park Areas (TPL – Park Serve)
- Areas outside a half mile walking distance from a publicly accessible park (WRT created from CPAD 2022a)
- National Landcover Data Percent Tree Canopy (NLCD 2018)

## DEFINING THE DATA LAYERS

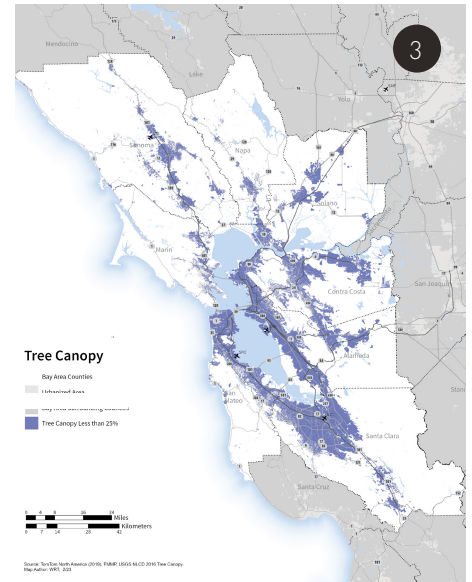
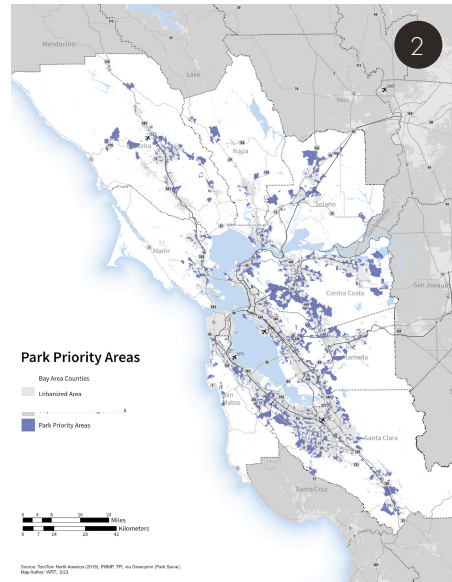
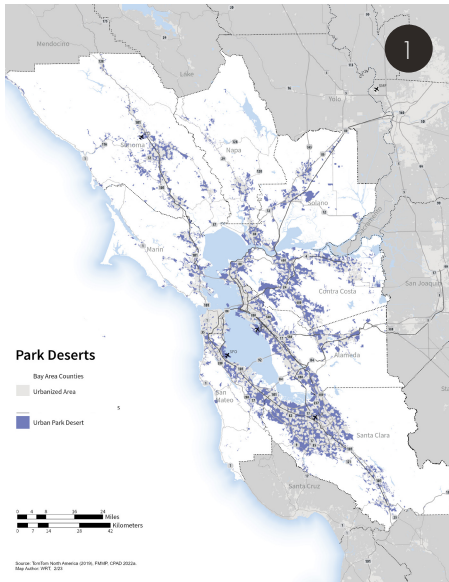
### 1. AREAS OF HIGH PARK NEED

This dataset utilizes the TPL’s Park Score tool: a web-based tool which determines the percentage of residents who live within a 10-minute walk of a local park, and identifies the neighborhoods most in need of new parks.

The Trust for Public Land calculated the areas most in need of parks as follows. “All populated areas in a city

that fall outside of a 10-minute walk of a park were assigned a level of priority, based on a comprehensive index of six equally weighted demographic and environmental metrics.” Census block groups (2021) were utilized and the metrics were calculated for each block group then they were normalized relative to each city, and averaged to create the park priority. The following metrics were used:

- Population density
- Density of low income households (households with income less than 75 percent of the urban area median household income)
- Density of people of color
- Community health (a combined index based on the rate of poor mental health and low physical activity from the 2020 CDC PLACES)
- Urban heat islands (surface temperature at least 1.25 degrees greater than city mean surface temperature from Trust for Public Land, based on 2021 Landsat 8 satellite imagery)
- Pollution burden (Air toxics respiratory hazard index from 2020 EPA EJScreen)



(Text from <https://www.tpl.org/parkserve/about>)

## 2. PARK DESERTS

This dataset was created by WRT, utilizing the California Protected Areas Database (CPAD 2022a). CPAD is “a GIS dataset depicting lands that are owned in fee and protected for open space purposes by over 1,000 public agencies or non-profit organizations.” This includes publicly accessible parks, preserves and trails managed by both private and public agencies of local, state, and regional levels. Since the purpose of the park desert dataset is to prioritize areas where urban residents do not have walkable access to open space, only

parks and protected open space in the CPAD that were indicated as “open access” were included in the analysis. Half-mile walksheds from open access park centroids were created using ESRI’s Network Analyst. An urban park desert was then derived as all areas within an urban area, but outside of the half mile walkshed (excluding park areas).

(Excerpts from: <https://www.calands.org/>)

## 3. TREE CANOPY

Tree canopy helps to control storm water runoff, reduce urban heat island temperatures, mitigate pollution, and provide other

benefits. The National Land Cover Tree Canopy Dataset estimates the percent of tree cover per 30m raster cell. Different cities have different standards for recommended tree cover. In some cases, 40 percent tree cover is recommended, but due to regional climates that is not always possible. Using the National Land Cover Tree Canopy dataset, for the Bay Area analysis, all cells with 25 percent or less tree canopy (not including water or emergent wetlands) are considered low tree canopy areas. Highly Impervious Areas were also evaluated and align closely to the Low Tree Canopy Areas indicated here.

(Excerpts from: <https://www.americanforests.org/article/why-we-no-longer-recommend-a-40-percent-urban-tree-canopy-goal/>)

## HOW WE CAN USE THE DATA TO MEET THE OBJECTIVES

Measuring an area’s current urban greening infrastructure can be difficult. There are not a lot of datasets that indicate where it is essential to provide additional urban green spaces. The Trust for Public Land, a well-known and respected non-profit that creates parks and protects land throughout the country, maintains a comprehensive database of local parks for more than 14,000 cities.

The TPL’s ParkServe dataset, utilizing those park locations, indicates priority park areas by census tract for cities within the Bay Area. While this dataset is useful for showing areas in need of urban greening, the census tract boundaries can be large in some areas. In order to account for that granularity the project team created an urban park desert dataset for the Bay Area utilizing CPAD’s parks with public access. Additionally, while parks and park access are essential to urban residents, there

are other urban greening measures that provide necessary ecosystem services, pollution control, flooding and extreme heat mitigation, that may not be captured by just examining park access. Street trees and other green infrastructure such as rain gardens, bioswales, and green roofs are also important aspects of urban greening.

The Multi-Resolution Land Characteristics (MRLC) consortium, a group of federal agencies who coordinate and generate consistent and relevant land cover information at the national scale, has created and maintained a “percent tree cover” dataset as part of the National Land Cover Dataset. This dataset, commonly used by many governments and researchers, shows areas that are lacking in street trees, and could benefit from additional tree planting.

## KEY INDICATORS

- 1 Areas of High Park Need**  
*(Park Priority Areas, The Trust for Public Land TPL, 2022)*  
 All Park Priority Areas
- 2 Park Deserts**  
*(California Protected Areas Database CPAD, 2022)*  
 Park desert within urban areas as indicated by all locations outside of a half mile walking distance from park center points.
- 3 Tree Canopy**  
*(Percent Tree Canopy, The National Land Cover Dataset NLCD, 2016)*  
 All areas with less than 25 percent tree canopy within urban areas (not including water or emergent wetlands).





# PERTINENT DATASETS FOR REGIONAL RECREATION PCAS

## DRAFT OBJECTIVES

**Protect and expand trails, parks, and open spaces that ensure regional and local public health and wellbeing; promote equitable access to those recreational areas.**

- Complete and enhance access to the Regional Trails Network.
- Acquire new regional open spaces available for recreation

and expand park access in already protected lands where appropriate, particularly in locations supporting Equity Priority Communities.

- Create new parks and enhance existing parks, particularly in Equity Priority Communities and areas with limited access to outdoor recreation.

## LIST OF REGIONALLY SUITABLE DATA:

- Publicly Accessible Open Lands (CPAD & CCED /MTC)
- Regional Trail Network (BATC/MTC)
- Regional Active Transportation Network (MTC)

## DEFINING THE DATA LAYERS

### 1. PUBLICLY ACCESSIBLE RECREATIONAL LANDS

The publicly accessible recreational land dataset consists of areas that have granted open access within the California Protected Areas Database (CPAD) & California Conservation Easement Database (CCED).

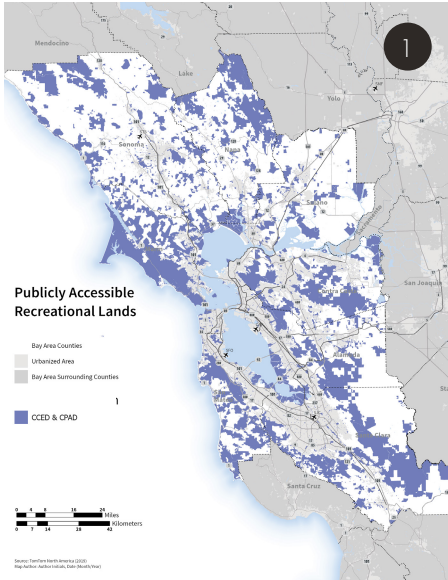
CPAD is “a GIS dataset depicting lands that are owned in fee and protected for open space purposes by over 1,000 public agencies or non-profit organizations.”

CCED contains “lands protected under conservation easements.”

This includes publicly accessible parks, preserves and trails managed by both private and public agencies at the local, state, and regional level.

This dataset also encompasses Officially Conserved Area (OCA)s as defined by MTC/ABAG

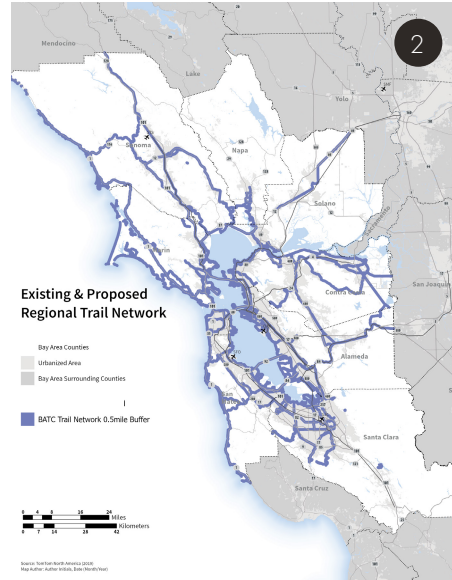
*(Excerpts from CA Lands website: <https://www.calands.org/>)*



## 2. EXISTING & PROPOSED REGIONAL TRAIL NETWORK

This dataset includes areas covered by both the existing and proposed regional trail network that provide recreational opportunities and easy access to open space for the larger communities of the Bay Area.

It aligns well with the goals of the refreshed Regional Recreation PCAs by addressing challenges faced by the Bay Area as a whole, such as “alleviating traffic congestion; increasing economic opportunity;

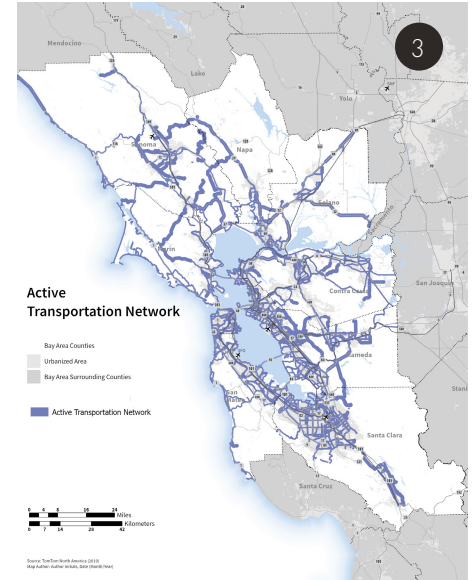


improving public health and safety (particularly in disadvantaged communities); and reducing greenhouse gasses and air pollution from vehicle traffic.”

*(Excerpts from Rails-to-Trails Conservancy website: <https://www.railstotrails.org/our-work/trailnation/bay-area-trails-collaborative/>)*

## 3. REGIONAL ACTIVE TRANSPORTATION NETWORK

This data layer “supports the Plan Bay Area 2050 strategy to build a Complete Streets Network and helps to meet goals for safety,



equity, health, resilience and climate change.”

In terms of equity, it provides more active transportation options to underserved communities and vulnerable populations. On top of that, it connects key regional destinations, corridors, and public transit, which are highlighted in the “Publicly Accessible Recreational Lands” data.

*(Excerpts from MTC website: <https://mtc.ca.gov/funding/investment-strategies-commitments/climate-protection/regional-active-transportation-plan>)*

## HOW WE CAN USE THE DATA TO MEET THE OBJECTIVES

To protect and expand trails, parks, and open spaces, we need to concentrate within the areas where public green amenities already exist and are consistently utilized by the residents. Therefore, for the first data layer, we have extracted existing parks and open spaces labeled with “open access” from the California Protected Areas Database (CPAD) & California Conservation Easement Database (CCED) as key indicators, to reach the goal of providing high quality recreational opportunities for regional users. Currently, this layer is potentially only relevant to identifying areas on existing protected lands to develop new access. However, if the refresh goal is to acquire new lands to provide local open space, this data will be able to inform where there are areas that are not eligible for acquisition (because they were already acquired). This also speaks to the relative lack of overlap with existing designated recreation PCAs as shown in Map RR-1.

The second dataset selected here, Regional Trail Network, is derived from the Bay Area Trails Collaborative (BATC). The recent update by BATC’s Trail Development & Stewardship Working Group and its regional partners has closely integrated a variety of trail network criteria, existing trail and active transportation plans from around the region, and the expertise of local trail managers, planners, and advocates. The ½ mile buffer we created here as part of the key indicators is equivalent to a 10-minute walkshed from and to those trails, which is a reasonable estimate of ranges to effectively access and utilize the trail resources. This resonates with the Regional Recreation PCAs’ goal of providing more equitable access to regional trails, which also enhances public health and wellbeing of the users.

The third data layer - Regional Active Transportation by MTC- further complements the previous two in bridging the gaps between the public open spaces and trails, providing accessible and safe transportation options to various communities as well as enhancing connectivity across all recreational facilities.

## KEY INDICATORS

- 1 Publicly Accessible Recreational Lands**  
*(Bay Area Trails Collaborative BATC / Metropolitan, 2022 Transportation Commission MTC)*  
 Areas within the ½ mile buffer from the trails
- 2 Existing & Proposed Regional Trail Network**  
*(Metropolitan Transportation Commission MTC, 2022)*  
 All Polygons
- 3 Regional Active Transportation Network**  
*(California Protected Areas Database CPAD, 2022 & California Conservation Easement Database CCED, 2022/ MTC)*  
 CPAD – “Open Access;”  
 CCED – “Open Access”





# PERTINENT DATASETS FOR CLIMATE ADAPTATION PCAS

## DRAFT OBJECTIVES

**Prioritize lands within the high climate hazards risk zones in terms of sea level rise, wildfire, and extreme heat for adaptation and mitigation measures.**

- Protect and prepare areas that provide habitat migration opportunities, particularly for marsh and other shoreline systems when sea levels rise.
- Manage very high fire risk natural and working lands to reduce the intensity and spread potential for future wildfires.

- Integrate climate data to ensure long-term community and ecosystem resilience in Natural, Agricultural/Working, Regional Recreation, and Urban Greening areas.

## LIST OF REGIONALLY SUITABLE DATA:

- Sea Level Rise (NOAA) - To be updated with latest MTC/BCDC data (Note: Final Sea Level Rise Framework data is now available and will be integrated in summer 2023)
- Fire Hazard Severity Zones (CalFire, 2022)
- Extreme Heat (CalAdapt)
- Existing Carbon Stock (Greenprint)
- Resilient Sites (The Nature Conservancy)

## DEFINING THE DATA LAYERS

### 1. SEA LEVEL RISE AND FLOODING

This dataset is a placeholder awaiting updates from the

collaborative MTC/BCDC effort which will include both sea level rise and flooding extents. Low lying elevations within this dataset will indicate areas with the potential for marsh migration and associated carbon sequestration benefits.

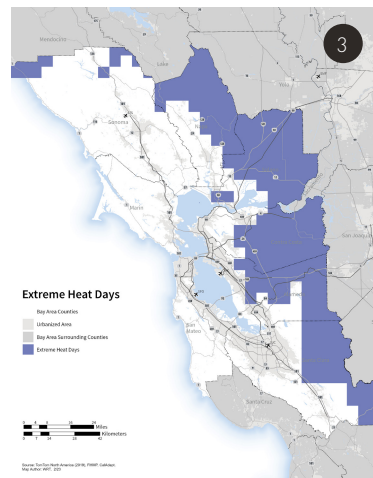
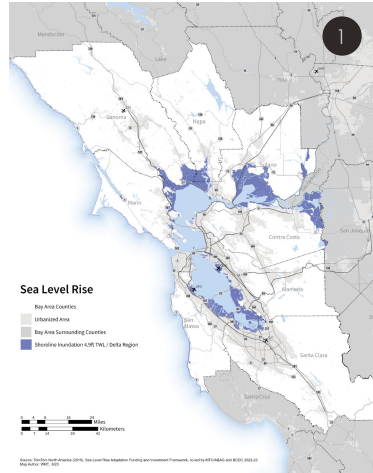
### 2. FIRE HAZARD SEVERITY ZONES

“Hazard’ is based on the physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfire, or fuel reduction efforts”. (CalFire) With that in mind, the higher the severity zone, the higher the likelihood of a wildfire occurring within a 30-50 year period. Areas essential to target for climate adaptation efforts are indicated in this dataset as areas of High and Very High fire hazard severity zones.

### 3. EXTREME HEAT

This dataset is a subset of CalAdapt’s average number of extreme heat days dataset that is using the 2100 projection for the lower-emissions trajectory in which greenhouse gas emissions level off around the middle of the 21st century and by the end of the

century are lower than 1990 levels. All areas with 15 or more extreme heat days are included. The raster cells are rather large for the Bay Area, making this dataset less than ideal, if another dataset with finer grained data were available, it could be subbed in here. The extreme heat dataset, like many others, is not intended to mark an entire area as requiring a PCA, but rather to inform opportunities and challenges for each area in the region. For example, the overlap of extreme heat and urban greening opportunities could lead to focused efforts to both green and cool hot spots in the region.



Note: Final SLR Framework data is now available and will be integrated in the summer 2023.

## 4. EXISTING LANDS WITH HIGH CARBON STOCK

This dataset indicates how much carbon could be stored in a land based on existing conditions. The nested data/indicators include:

- Above ground Carbon Storage
- Soil Carbon Storage
- Urban Forest Carbon Storage
- Sequestration of PM2.5 by Vegetation
- Sequestration of NO2 by Vegetation

Data ranges between 0.1 - 1. The higher the value is, the more carbon is stored.

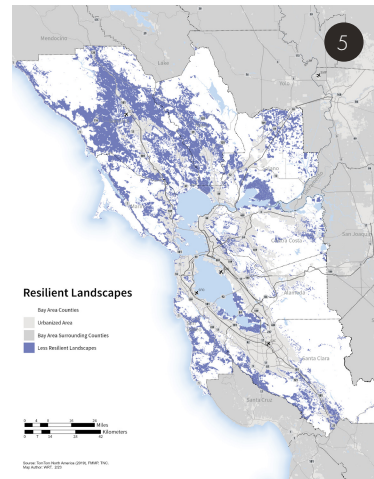
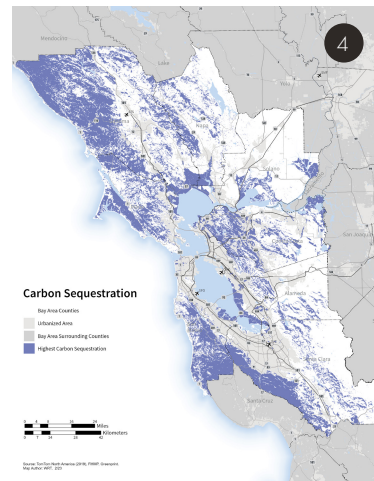
(Excerpts from Greenprint website: <https://www.bayareagreenprint.org/glossary>)

## 5. RESILIENT LANDSCAPES

This data layer utilizes the Nature Conservancy’s Resilience Score metrics to estimate “a land’s capacity to maintain species diversity and ecological function as the climate changes. It was determined by evaluating and quantifying physical characteristics that foster resilience, particularly the site’s landscape diversity and

local connectedness.” Areas with lower-than-average resilience score and Vulnerable tidal complexes are selected to indicate areas of low resilience.

(Excerpts from TNC website: <https://maps.tnc.org/resilientland/coreConcepts.html>)



## HOW WE CAN USE THE DATA TO MEET THE OBJECTIVES

Examining datasets related to climate change impacts, with both current and future projections, can sometimes be daunting. Climate change impacts are far-reaching and diverse, from sea level rise to increasing fire severity, extreme heat to extreme flooding and more. So many governments, organizations, and researchers compile datasets that are meant to indicate areas with the greatest risk and the greatest opportunities for mitigation. While sifting through those datasets, some with similar methodologies, many of them overlapping, a decision was made to utilize the most commonly known and best respected datasets available related to sea level rise, fire hazards, extreme heat, carbon stock, and current land resiliency. The sea level rise data currently used is a placeholder; the MTC/BCDC sea level rise and flooding dataset is currently under development and will represent the best sea level rise and flooding predictions for the Bay Area.

The California Department of Forestry and Fire Protection (CALFIRE), is dedicated to fire prevention and protection and in order to support their mission they periodically update their Fire Hazard Severity Dataset.

CalAdapt is a collaboration between state agencies and university and private sector researchers in California that is dedicated to providing access to peer-reviewed data regarding climate change impacts. Their projected extreme heat days dataset indicates lands in the Bay Area that will be more frequently impacted by higher temperatures. Carbon sequestration is essential to mitigating climate change impacts; the best dataset indicating areas of current carbon sequestration is GreenPrint's existing carbon stock dataset, created using many indicators. Additionally, the Nature Conservancy, a well-respected conservation organization, provides a dataset that indicates areas currently less resilient and in need of the most protection as the climate changes. While there are a multitude of other datasets available that indicate similar things, these are

the datasets that were chosen at this point in time. In the future, as science and technology change, better and similarly respected datasets may become publicly available. When this framework is updated, it is expected that those datasets should be used instead of these in order to provide a clear indication of the lands most in need of prioritization in this category.

## KEY INDICATORS

- 1 Sea Level Rise and Flooding**  
*(In process: MTC/BCDC Sea Level Rise and Flooding dataset)*  
TBD
- 2 Fire Hazard Severity Zones**  
*(Fire Hazard Severity Zones, CalFire, 2022)*  
“High” and “Very High”
- 3 Extreme Heat**  
*(Average Number of Extreme Heat Days, CalAdapt, 2018)*  
15 or more extreme heat days per year
- 4 Existing Lands with High Carbon Stock**  
*(“Carbonstock.tif,” Greenprint Multi-benefit Raster, 2017)*  
Cells with Value > 0.8 (0.8 - 1 metric ton)
- 5 Resilient Landscapes**  
*(Resilient Landscapes, The Nature Conservancy TNC, 2020)*  
Class 18 “Slightly less resilient (terrestrial or coastal)”,  
Class 19 “Less resilient (terrestrial or coastal)”,  
Class 32 “Vulnerable tidal complex”

# EQUITY INDICATORS

**Equity is a priority that crosses all typologies. It is essential to consider historically disadvantaged communities when planning for all PCA designations.**

## LIST OF REGIONALLY RECOMMENDED DATA:

- Equity Priority Communities, MTC (2021)
- Disadvantaged Communities - CalEnviroScreen (2021)

## DEFINING THE DATA LAYERS

### 1. EQUITY PRIORITY COMMUNITIES

“Formerly called “Communities of Concern,” Equity Priority Communities are census tracts that have a significant concentration of underserved populations, such as households with low incomes and people of color” (MTC). The Equity Priority Communities indicate communities (census tracts) that may have historically faced disadvantage and underinvestment due to their background or socioeconomic status. The data are updated every four years as part of the updates to Plan Bay Area. “The Equity Priority Communities framework helps MTC make decisions on investments that meaningfully reverse the disparities in access to transportation, housing and other community services” (MTC).

The Equity Priority Communities are determined by the following indicators:

- People of Color (70% threshold)
- Low-Income (28% threshold)
- Limited English Proficiency (12% threshold)
- Seniors 75 Years and Over (8% threshold)
- Zero-Vehicle Households (15% threshold)
- Single Parent Families (18% threshold)
- People with a Disability (12% threshold)
- Rent-Burdened Households (14% threshold)

If a tract exceeds both threshold values for Low-Income and People of Color shares or exceeds the threshold value for Low-Income and also exceeds the threshold values for three or more variables (#3 to #8), it is an Equity Priority Community.

*(Excerpts from <https://mtc.ca.gov/planning/transportation/access-equity-mobility/equity-priority-communities>)*



## 2. DISADVANTAGED COMMUNITIES

Overall CalEnviroScreen scores are calculated from the scores for two groups of indicators: Pollution Burden and Population Characteristics. Pollution Burden scores, are created using indicators from the Exposures and Environmental Effects components of the CalEnviroScreen model. Population Characteristic scores are created using indicators from the Sensitive Populations and Socio Economic Factors of the CalEnviroScreen Model.

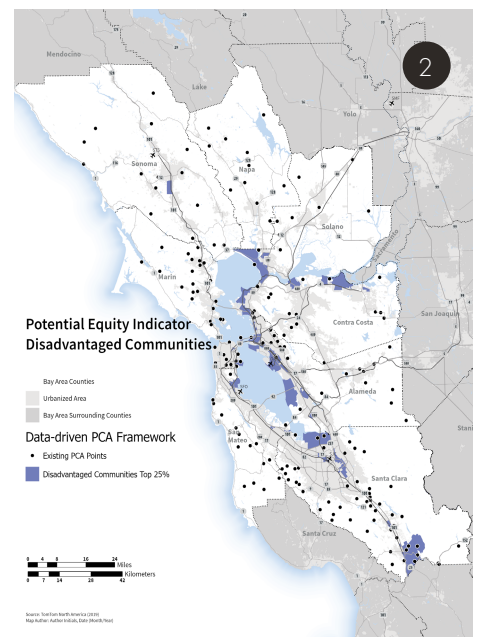
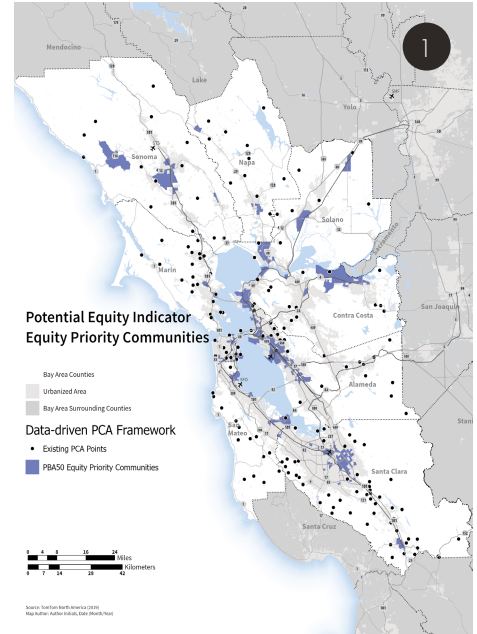
Using the final CalEnviroScreen scores, Disadvantaged Communities include the following:

- Highest 25 percent of overall CalEnviroScreen scores
- Demographic data gaps with highest 5 percent cumulative pollution burden scores
- Tracts with 2017 DAC designation as disadvantaged
- Lands under the control of federally recognized Tribes

(Excerpts from <https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40report2021.pdf>)

## HOW WE CAN USE THE DATA TO ADDRESS EQUITY CONSIDERATIONS

Considering equity is essential when making decisions related to conservation and climate resiliency. There are two well-known datasets for the Bay Area that indicate a need for considering equity. MTC's Equity Priority Communities and CalEnviroScreen's Disadvantaged Communities are both widely used and supported datasets.



CAL ENVIRONSCREEN  
KEY INDICATOR:  
**1. POLLUTION  
BURDEN**

Exposures

- Ozone Concentrations
- PM 2.5 Concentrations
- Diesel PM Emissions
- Drinking Water Contaminants
- Children’s Lead Risk from Housing
- Toxic Releases from Facilities
- Traffic Impacts

Environmental Effects

- Cleanup Sites
- Groundwater Threats
- Hazardous Waste
- Impaired Water Bodies
- Solid Waste Sites and Facilities

CAL ENVIRONSCREEN  
KEY INDICATOR:  
**2. POPULATION  
CHARACTERISTICS**

Sensitive Populations

- Asthma Emergency Department Visits
- Cardiovascular Disease (Emergency Department Visits for Heart Attacks)
- Low Birth-Weight Infants

Socioeconomic Factors

- Educational Attainment
- Housing-Burdened Low-Income Households
- Linguistic Isolation
- Poverty
- Unemployment

**POLLUTION BURDEN**

Average of Exposures and Environmental Effects



**POPULATION CHARACTERISTICS**

Average of Sensitive Populations and Socioeconomic Factors



CalEnviroScreen Score



## **KEY TAKEAWAYS FROM THIS CHAPTER**

- The objectives for each classification have been informed by stakeholder engagement, Plan Bay Area 2050 strategies, and regional guidance documents including the Conservation Lands Network, Baylands Habitat Goals Report, and others.
- By first defining each PCA classification and associated objectives, and then identifying potential data sources and indicators separately, the PCA framework can be easily updated and visualized to reflect new developments in science and metrics.
- This chapter describes why and how the data sources and indicators can be used to identify potentially eligible PCA areas across the region.



Photo: Karl Nielsen



# 06.

## CONSIDERATIONS FOR THE PATH AHEAD AND NEXT STEPS



## 6.0 CONSIDERATIONS FOR THE PATH AHEAD AND NEXT STEPS

By bringing in new data and information to identify strengths and limitations of the existing PCA program, the PCA framework can be updated to more effectively manage the network of agriculture, parks and open space in the region today, and make strategic investments to achieve a broader set of conservation goals in the decades ahead. As the project team transitions to the second and final round of partner and stakeholder engagement, primary focus areas for Memo 3: The Path Ahead are detailed below, including key considerations and preliminary recommendations. In this final phase of the Refresh, the project team will continue shape PCAs as a complementary counterpart to the growth geographies that together will make up the regional land use pattern.

### REFINING THE DATA-DRIVEN FRAMEWORK

Working together with partners and stakeholders it will be essential to ensure that the appropriate data sources and objectives have been identified for PCA categories. These regional resources will be compiled and reviewed to document stakeholder priorities for the region.

This work will include an evaluation of how weighting of indicators can be further incorporated into the framework to aid in the identification and prioritization of conservation areas. Tools like polling, and sensitivity testing of weighted variables will inform the engagement process during the next series of stakeholder meetings in summer and fall 2023.

### NOMINATING, EVALUATING, AND DESIGNATING PCAS 2.0

The project team recommends that the local nomination process at the heart of the existing PCA planning framework be preserved. As was detailed in Chapter 2, there are simply too many use cases and needs across the Bay Area's varied

and diverse jurisdictions to try and cover through a singular top-down approach. As was relayed during the Round 1 partner and stakeholder engagement process, locals often have a better understanding of their local planning context and priorities.

However, in light of the mapping challenges identified in previous chapter, it will be critical to supplement local planning processes with guidelines, resources and tools to support improved identification and mapping of PCAs. This could include, for example, making data layers – such as those identified in the preceding chapter – available via MTC/ABAG's Open Data portal.

In addition, the project team believes it will be important to further supplement local nominations with a regionally defined PCA data layer, reflecting the highest conservation priorities across the five PCA categories as identified in concert with partners and stakeholders. The purpose of this regional PCA layer would be leverage the best science to fill gaps and to align the planning framework more closely with key regional and state policy goals.

The preliminary staff proposal can be thought of as analogous to the Regional Growth Framework revamp introduced in Chapter 1. As part of that process, a locally driven PDA

nomination process was preserved, but the growth framework was also expanded to include geographies such as Transit Rich Areas and High Resource Areas, which were identified through objective criteria.

## FUNDING PCA PROJECTS

A final major component of Memo 3: The Path Ahead will explore how to fund PCA projects, including a deeper dive analysis of this existing PCA grant program.

To comply with federal requirements, the project team will need to recommend revisions to the OBAG 3 PCA grant award process to clarify MTC's role in project selection and eliminate formula suballocations. However, the proposed process will maintain an emphasis on funding conservation needs outside of regional population centers, which are targeted for Priority Development Area investments through other OBAG 3 programs, through the use of investment targets or other weighting criteria.

That said – recognizing a broader program scope and goals, as well as limitations on use of federal transportation dollars – there is a need to “expand the pie” and explore state, federal and other funding resources and partnerships that can support a greater diversity of PCA

project types. The goal here would be to build off the successful model with the State Coastal Conservancy.

As such, Memo 3 will look to canvass other fund sources, evaluate eligibility requirements, see how and where these fund sources align with the proposed refreshed PCA framework, and work to ensure that the regional priorities designated through the PCA program are speaking to partner policy and funding priorities.

## NEXT STEPS FOR THE PCA REFRESH AND PIVOTING TO IMPLEMENTATION

Next steps and key remaining milestones for the PCA Refresh include the following:

- Round 2 of partner/stakeholder outreach, including a second workshop and survey (Summer 2023)
- Memo 3: The Path Ahead to focus on final framework revisions and funding considerations (Fall 2023)
- Final data/mapping products (Fall 2023)
- Final report of major findings and recommendations (Winter 2024)

With the anticipated release of the final report in Winter 2024, there will be a number of action items to be taken by ABAG and MTC policy boards to support implementation of the refreshed PCA planning framework. These include:

- ABAG consideration and adoption of the revised PCA planning framework (Winter 2024)
- ABAG solicitation of a new round of PCA nominations (Winter to Spring 2024)
- MTC and SFEP update of OBAG-3 PCA grant guidelines (To Be Determined)
- MTC and SFEP PCA project solicitation (To Be Determined)



Association of  
Bay Area  
Governments



Metropolitan  
Transportation  
Commission

