



Bay Area  
Regional  
Collaborative



# GRAND BAYWAY

+SAN PABLO BAY

+SR 37

## SR 37 PUBLIC ACCESS SCOPING REPORT

A group of people, including a woman in a large black hat and sunglasses, are walking on a dirt path. A small white dog is running in the foreground. The background is a hazy, natural landscape.

## **FUNDING SPONSOR**

In 2017, on behalf of BARC, MTC submitted a successful a Caltrans SBI Climate Adaptation grant application to further advance concepts developed for SR37 and the surrounding area during the Resilient by Design Bay Area Challenge (RBD). An SBI Project Management Team (SBIPMT), managed by BARC staff, with representation from MTC/ABAG, BCDC, Caltrans and the State Coastal Conservancy (SCC) selected The Grand Bayway proposal by team Common Ground for further study and allocated \$200,000 to advance important goals related to mobility, public access and public outreach within the San Pablo Baylands, based in part on concepts identified by the Common Ground team during the RBD Challenge.

## **SBI PROJECT MANAGEMENT TEAM**

- BAY AREA REGIONAL COLLABORATIVE
- MTC/ABAG
- CALTRANS
- SF BAY CONSERVATION AND DEVELOPMENT COMMISSION
- STATE COASTAL CONSERVANCY

## **TEAM COMMON GROUND:**

- TLS LANDSCAPE ARCHITECTURE
- ATLAS LAB
- ALTA PLANNING AND DESIGN
- CIVICKNIT
- EXPLORATORIUM
- RANA CREEK DESIGN

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## WHAT IS THIS REPORT?

**SR37 Public Access Scoping Report identifies the current state of public access within the San Pablo Baylands, including facilities for trails, developed park and open space, hunting, and water recreation, and recommend alternatives that could lead to a comprehensive, interconnected and resilient system over time. The Report is intended to provide specific scoping direction for ongoing SR37 Planning Efforts. This study will also aim to expand awareness of adaptation and resilience considerations and multi-beneficial public access opportunities within and leading to the San Pablo Baylands.**

**The objective of the report is to identify opportunities and constraints for land and water based trails and recreation. Driven by the project's goals, guiding principles, and project engagement, this report will identify a phased approach to regional connectivity with key next step opportunities.**

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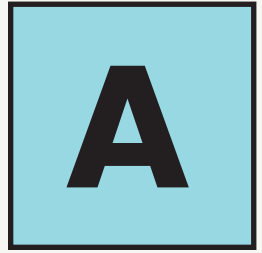
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# **NAVIGATION BAR**

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+BAYLANDS

# STUDY CONTEXT

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# OVERVIEW

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## PLANNING BACKGROUND

In 2015, the county-wide transportation planning agencies in Solano, Napa, Sonoma, and Marin counties signed an MOU that committed them to work cooperatively on SR37 improvements and established a 12 person, 4-County Policy Committee, with three representatives from each county. This was initiated by a Caltrans study of SR37 mobility improvements, beginning with a Phase I UC Davis Stewardship Study in 2012, followed by a Caltrans Transit Concept Report in 2015, and a 2nd phase of the UC Stewardship Study, entitled State Route 37 Integrated Traffic, Infrastructure and Sea Level Rise Analysis in 2016.

In 2016, MTC, in partnership with the 4-County Policy Committee, authorized a two-phase Design Alternatives Assessment (DAA). The 1st phase evaluated the corridor between U.S. 101 and I-80, and in 2017, MTC agreed to lead the 2nd phase of the DAA, which focuses on Segment B, including preparation of a Caltrans Project Initiation Document (PID) for that section.

The DAA is supported by an SR37 Project Delivery Team (SR37 PDT) comprised of staff from the four county transportation agencies, Caltrans, and MTC. In addition, a Technical Advisory Committee (TAC), comprised of 4-County transportation agency

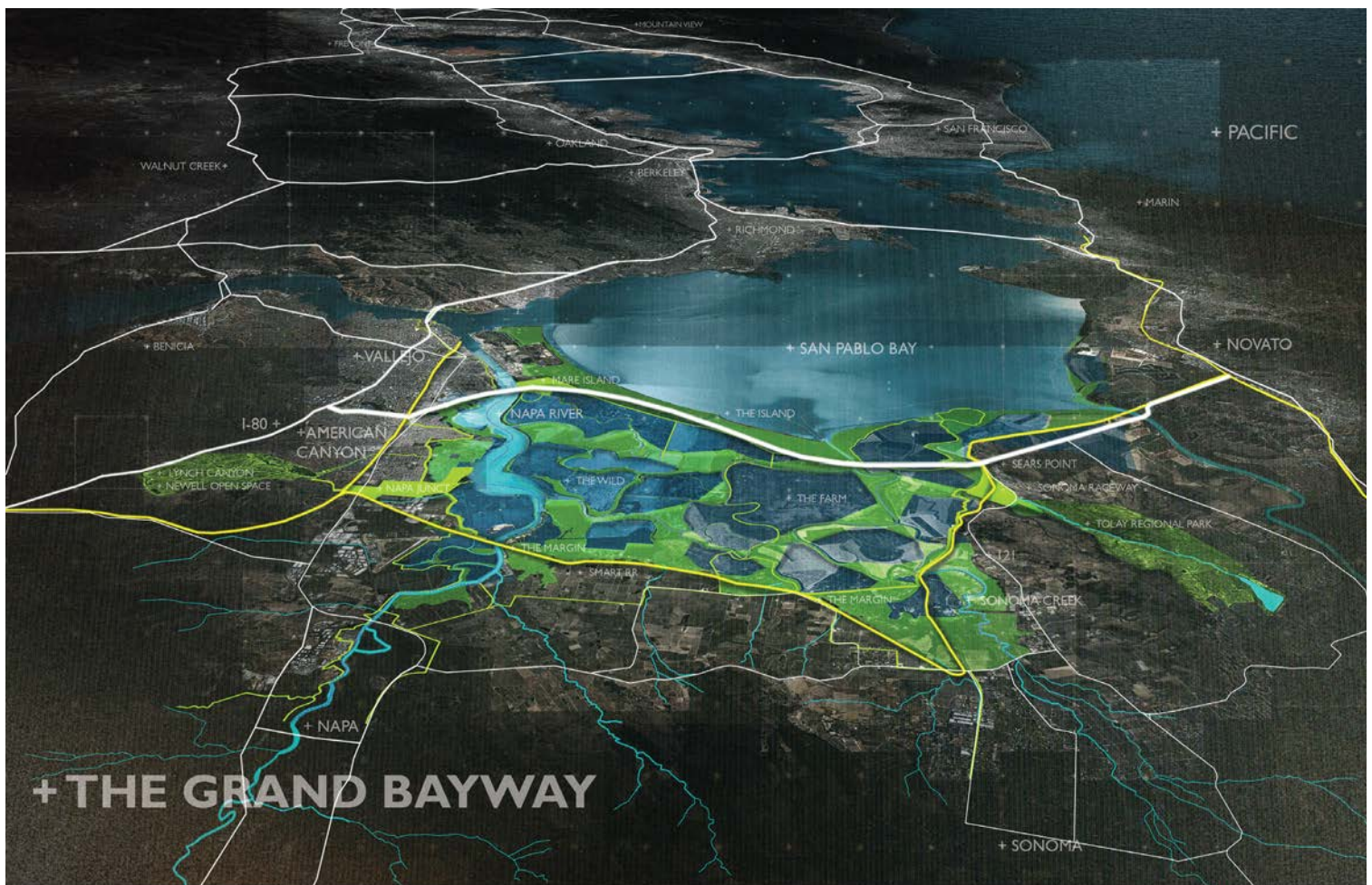
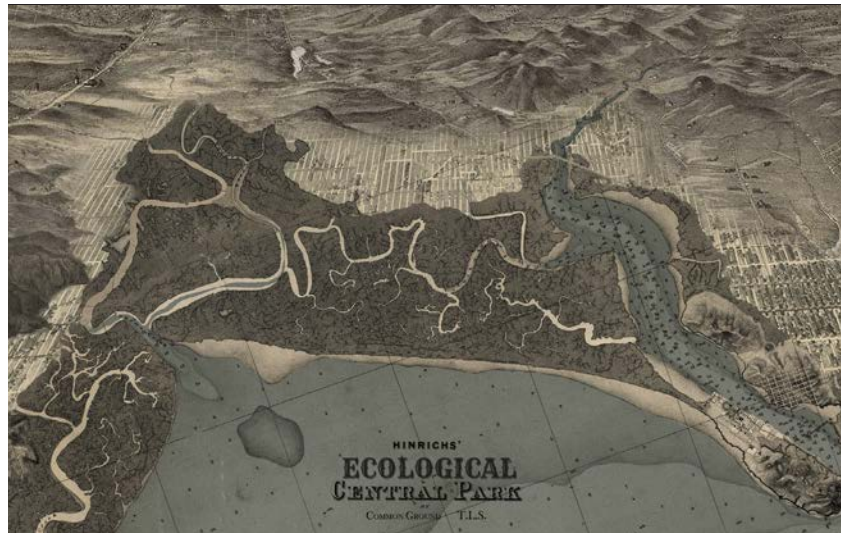
staffs, consultant representatives, non-governmental scientists, and federal and state agencies' staff, meet at key intervals to review work done by project consultants. A larger Stakeholder Committee (SC), comprised of federal and state regulatory agencies' staff, non-governmental agency staffs, and user group representatives, provides additional review and input.

In 2017, on behalf of BARC, MTC submitted a successful Caltrans SBI Climate Adaptation grant application to further advance concepts developed for SR37 and the surrounding area during the Resilient by Design Bay Area Challenge (RBD). An SBI Project Management Team (SBIPMT), managed by BARC staff, with representation from MTC/ ABAG, BCDC, Caltrans and the State Coastal Conservancy (SCC) selected The Grand Bayway proposal by team Common Ground (1 of 3 RBD sites) for further study and allocated \$200,000 to advance important goals related to mobility, public access and public outreach within the San Pablo Baylands, based in part on concepts identified by the Common Ground team during the RBD Challenge.

The report will be reviewed and approved by the SBI PMT after review and comment from the SR37 Project Delivery Team and other key partners.

## GRAND BAYWAY BACKGROUND

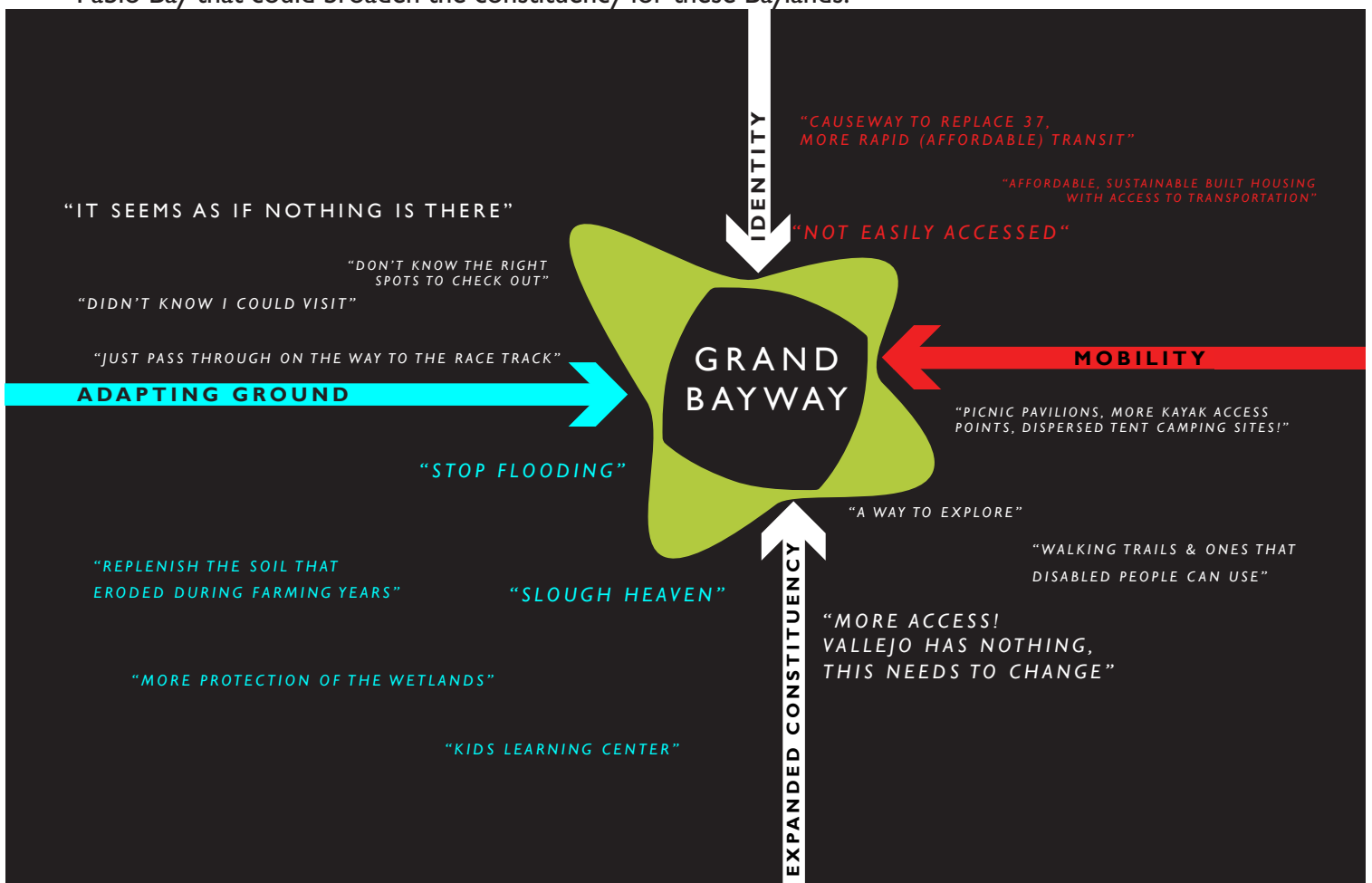
The Common Ground team was first charged with understanding the complexity and urgency of addressing the issues with highway 37. The intricacies of negotiating among many management plans, grasping complex governance structures, the impending threat of sea level rise, and the upfront costs all pose significant challenges and present hard questions for planning a multi-benefit, long term infrastructure project. As can often be the case with complex challenges, the Common Ground team took the opportunity to 'make the problem bigger' to solve it; we expanded the scope to include the entire San Pablo Baylands to the north as a way to contextualize the highway and the surrounding areas at a holistic, ecologically and socially relevant scale.

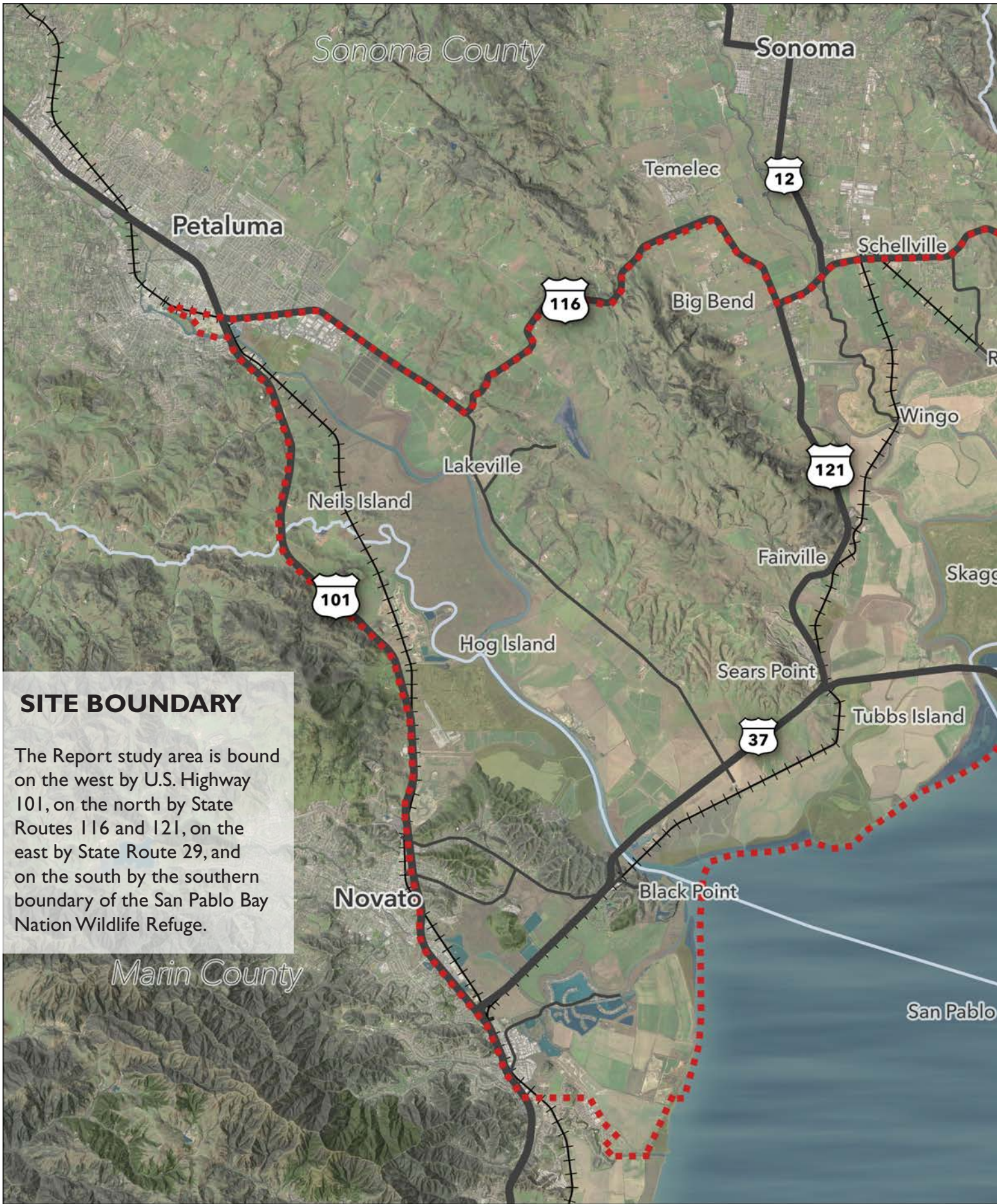


The team worked to understand the surrounding stakeholders and their concerns with the highway planning, as well as the extent of the ecological impact. The “Grand Bayway” came to stand for the regional significance of the entire zone including “flows of people, flows of water”, not just the highway project alone. The expanded holistic scale of planning was recognized as relevant to the MTC and BARC missions within the region, which presented the exciting opportunity to continue and build upon our initial work.

The Grand Bayway identified four guiding principles, derived from the Resilient by Design Goals, the Bayland Report Goals, SR37 Goals from the SR37 Policy Committee Corridor Plan, and a set of Community Goals refined from nine months of regional public outreach, to serve as the backbone for our research. The four guiding principles are:

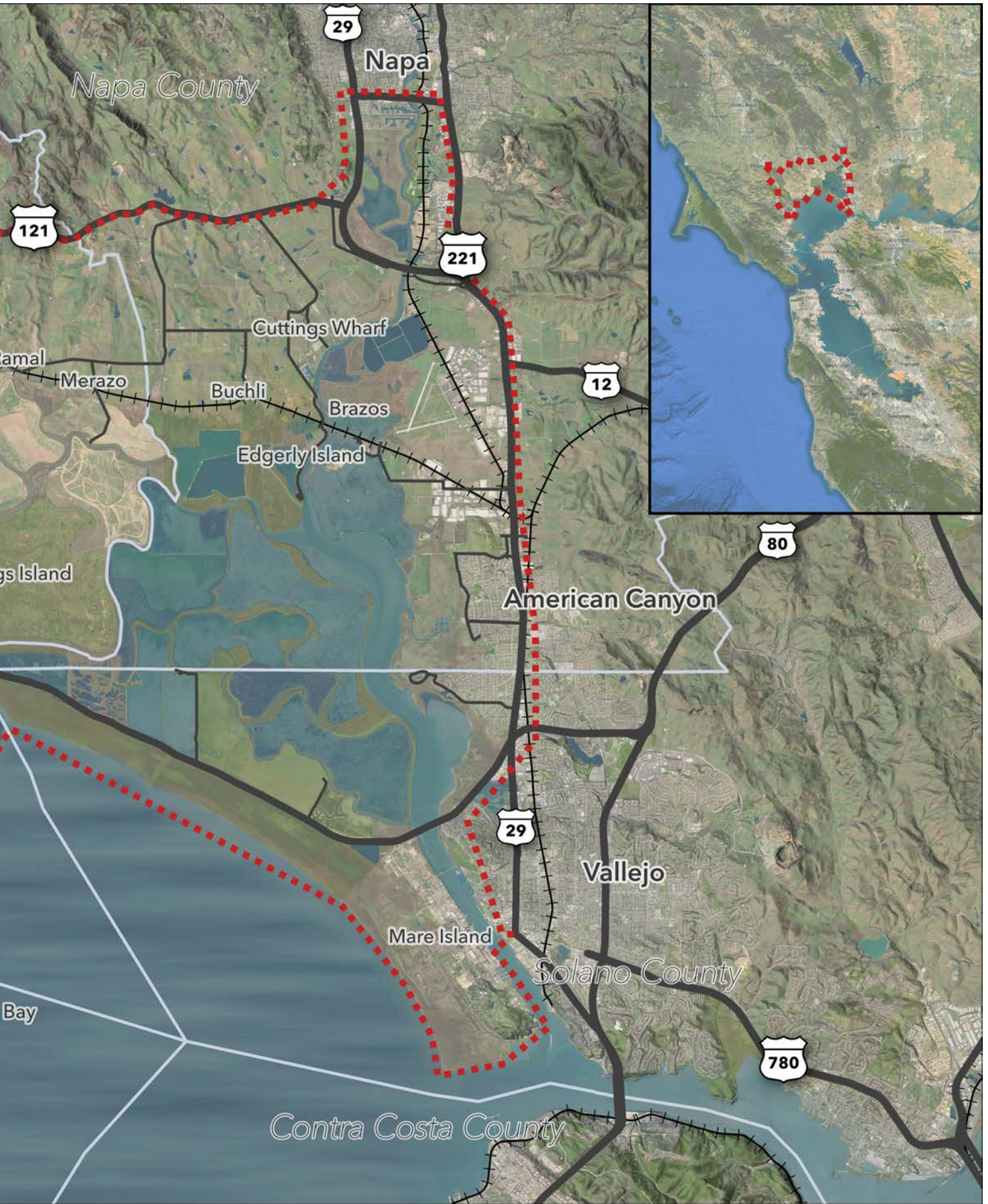
- **IDENTITY** - Strengthen the identity of the San Pablo Bay Region to encourage a better understanding of the Baylands as a major ecological and educational resource.
- **ADAPTING GROUND** - Provide new strategies for adaptation of the San Pablo Baylands in response to sea level rise to protect sensitive habitats and maintain critical biodiversity.
- **MOBILITY** - Create long-term, resilient opportunities to connect across the San Pablo Baylands with discrete inter-modal connections to adjacent communities.
- **EXPAND THE CONSTITUENCY** - Provide more equitable access to the diverse communities of San Pablo Bay that could broaden the constituency for these Baylands.





### SITE BOUNDARY

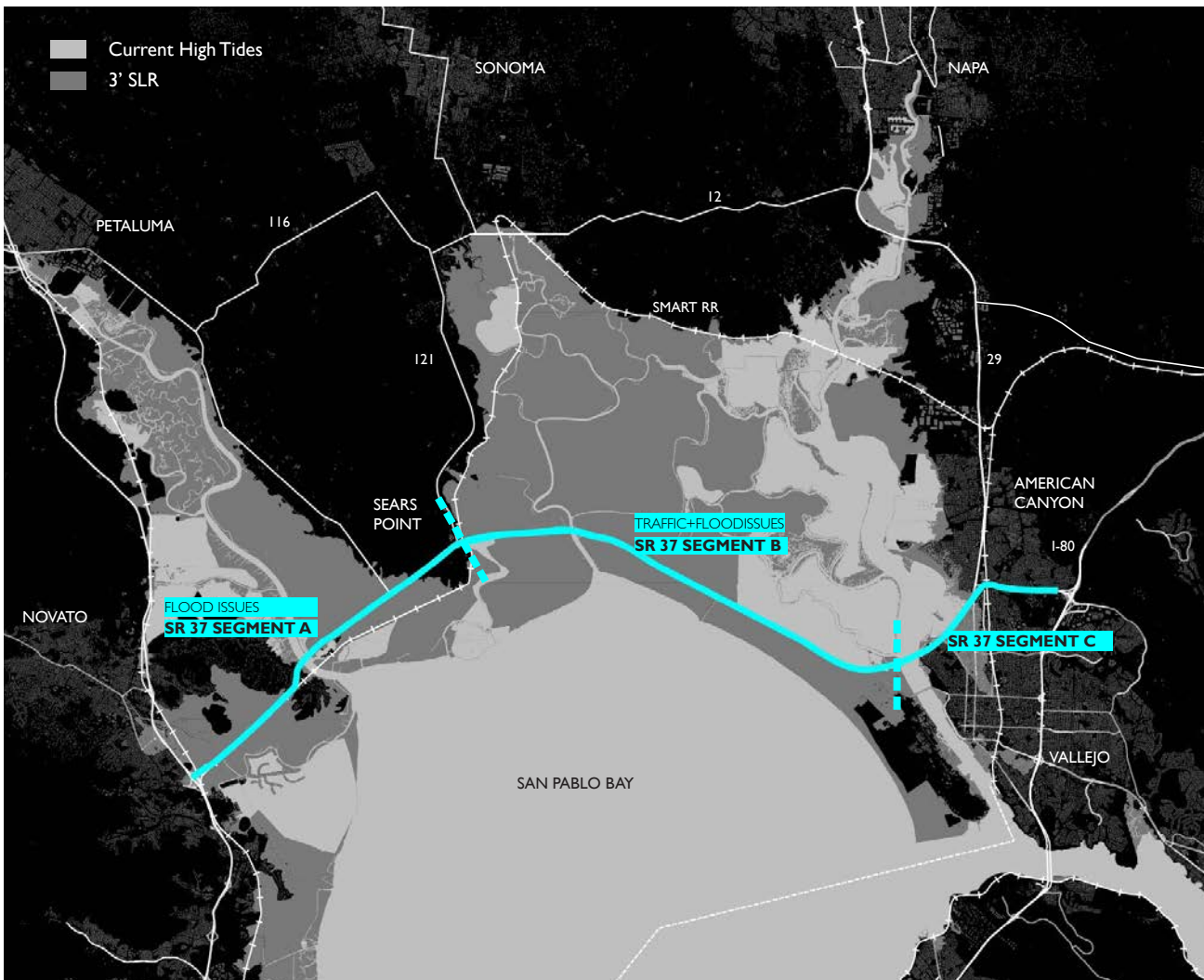
The Report study area is bound on the west by U.S. Highway 101, on the north by State Routes 116 and 121, on the east by State Route 29, and on the south by the southern boundary of the San Pablo Bay Nation Wildlife Refuge.



## COMMUNITY CONTEXT

This vast acreage of diked, subsided baylands is undergoing steady renewal by various enterprising, hard-working parties with great organizational will. Community residents that know about these Baylands place great value on the richness, biodiversity, and scale of this last remaining large-scale marsh complex. Many unfortunately only know of the landscape by sitting in traffic on SR37 - wondering what the future holds along the 19 mile stretch of low-lying road. The relationship of nearby communities and SR37 are inextricably linked in the following ways:

- SR 37 connects Solano and Marin counties, with about 55% of daily trips either starting or ending in Solano or Marin.
- This trend is only expected to continue: Projected growth in Solano County’s residential population and Marin County’s job growth will further increase traffic volumes on this highway, especially with Solano expected to have the highest population increase of any Bay Area county by 2035.
- Approximately 2/3 of all trips on SR 37 are made by those earning at/below the median income.



SLR Map sourced showing 2100: 84” SLR+100yr storm from: maps from ART (Adapting to rising tides) Bay Area Sea Level Rise and Shoreline Analysis Maps using

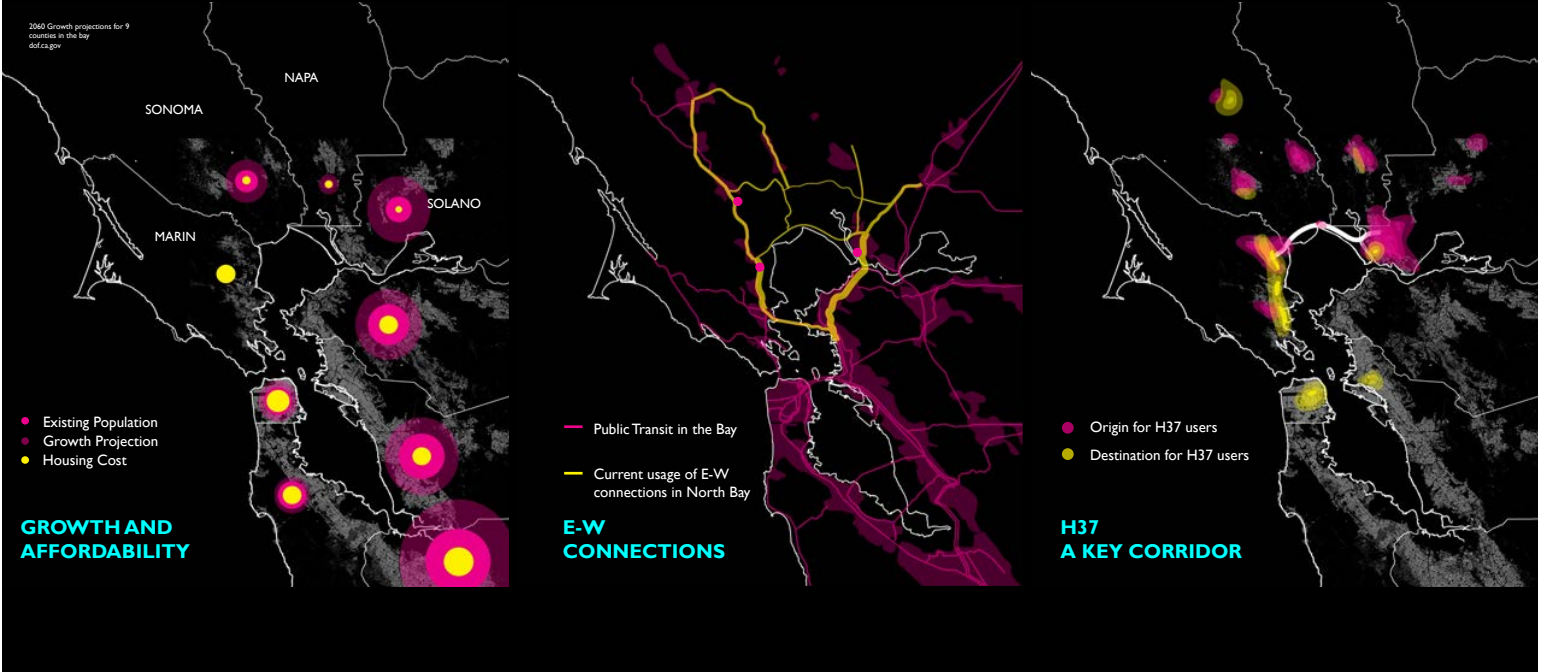
- California Shoreline Mapping Project (CSMP) (OPC 2016) by USGS, NOAA – for terrain data
- FEMA San Francisco Bay Area coastal study (DHI 2013) – for hydrodynamic modeling data)

- In an emergency scenario, this portion of the North Bay will lack a viable East-West connection. People currently traveling on SR 37 would divert to already congested parallel routes either to the north or south of SR 37, resulting in increased travel time for current users of SR 37 as well as the people already using other major east-west connections, such as I-580, SR 12, SR 29 US 101, I-80, SR 116, and SR 121. These parallel routes are already operating at capacity and experience severe congestion today.

The North Bay remains the most affordable housing market in the region, and both the housing and job markets are projected to grow the most in the next 50 years.

East/West connections are currently inadequate, but are necessary to connect decentralized cities in the North Bay that lack public transit.

As of today, SR 37 is key lifeline for many communities to get to work.



# BAYLANDS HISTORY

**The San Pablo Baylands are an important part of the San Francisco Estuary, one of the largest on the West Coast of North America.**

Their unique physical and biological condition results from the Baylands location where the saline Pacific waters mix with freshwater from the Sacramento and San Joaquin Rivers and four local watersheds that drain through the vast alluvial delta formed by them. Their ecological significance was amplified in 2013 when the estuary, including the Baylands, was added to the Ramsar List of Wetlands of International Importance. The list represents the keystone responsibility of the of the treaty signed in 1970 as part of the Ramsar Convention, which commits nations around the globe to develop and maintain an international network of wetlands that conserve global biological diversity and sustain human life.

## Historic Context

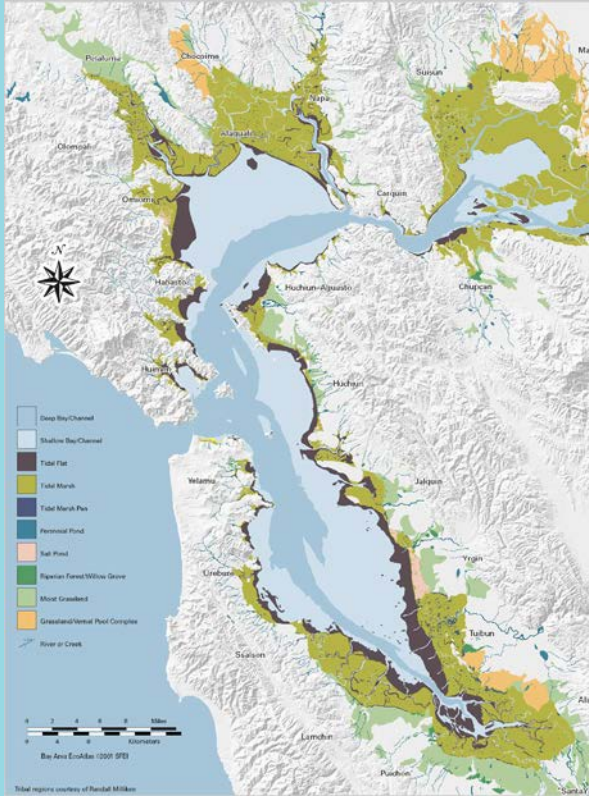
For thousands of years the Baylands served as the homeland for almost 20,000 Patwin and Coast Miwok people. The principal subsistence activities of indigenous tribes were hunting, fishing, and the gathering of wild plants. They utilized native marshland vegetation for many beneficial purposes, including village structures, fishing boats and nets, and functional baskets. Colonization and land dispossession accelerated with Spanish Mission system in the 1700's and further deepened after the United States took control of California in 1848.

## Evolution of the Baylands

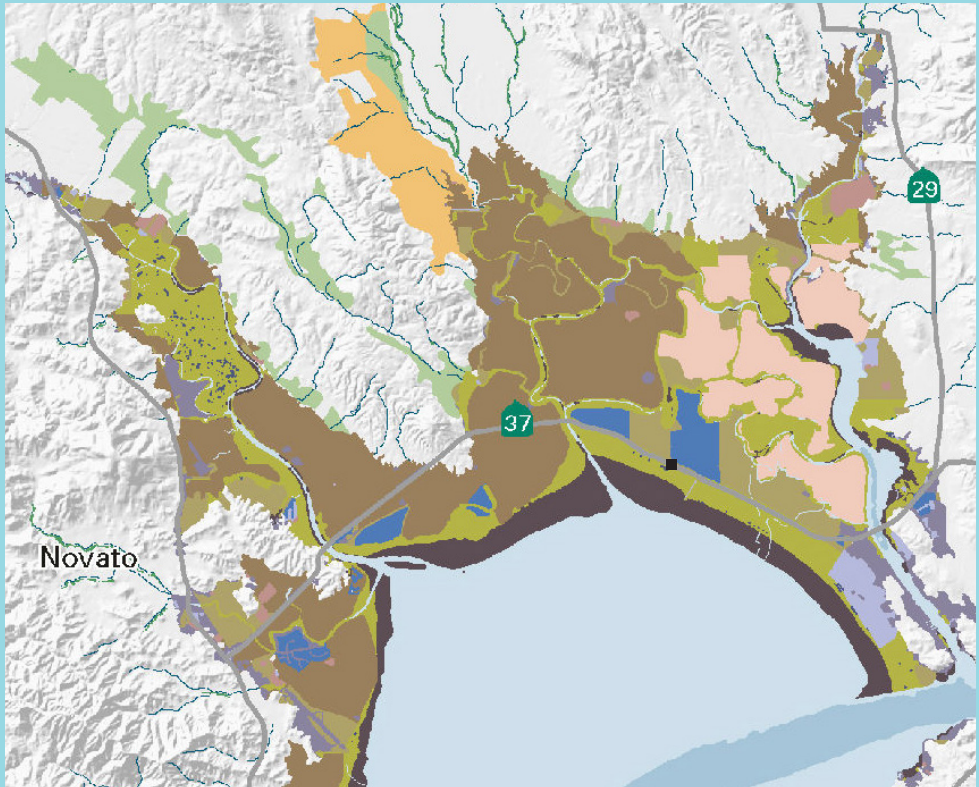
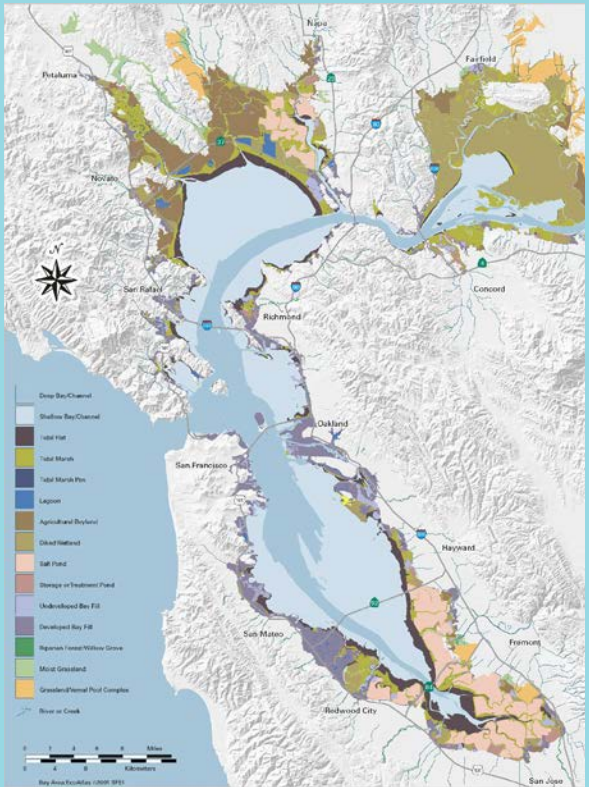
Beginning in the 1880s, large segments of the Baylands' rich mosaic of wetlands were converted into agricultural fields by constructing a system of perimeter levees. Early agriculture north of San Pablo Bay included oats, barley, wheat, wine grapes, prunes and cherries. In the 1950's, an additional 7000 acres were converted into solar salt farm ponds, which continued until the start of the 21st century. In the 1980s, traditional pastureland began being converted to vineyards, when it was recognized that the shallow, dense clay soils of the area produced Chardonnay and Pinot noir grapes of notable quality. In the 1920s, what is now SR-37 was constructed, further separating the Baylands hydrologic connectivity from San Pablo Bay.

Like much of the country, the San Francisco Bay estuary was impacted by the rise of urbanization and suburbanization following WW II. Large sections were filled for suburban development, and it became increasingly polluted from sewage and industrial waste. The environmental movement of the late 1960s and the policy gains that resulted were reflected in California's McAtteer-Petris Act in 1970. The legislation created the Bay Conservation and Development Commission (BCDC), whose mission from the beginning combined protection of the bay's environmental resources with a requirement to maximize public access to its shoreline. From these origins, BCDC has continued to promote science-based resource planning to support regulatory oversight of development.

# 1857 SHORELINE CONDITIONS SF BAY AREA: SFEI



# CURRENT SHORELINE CONDITIONS SF BAY AREA: SFEI



## Planning Efforts in the San Pablo Baylands

About that time, the effort to reverse over a century of wetland degradation was propelled by a willingness to publicly acquire bayland properties and begin restoring their historic ecological function. The San Pablo National Wildlife Refuge was authorized by Congress in 1974 to protect, enhance, and restore tidal and upland environments of San Pablo Bay, especially where opportunities exist to expand or link tidal wetlands to uplands and freshwater seasonal wetlands.

In the 1970's, California also initiated acquisition of salt pond lands that now comprise the Napa Sonoma Marshes Wildlife Area. In 1987 Senate Bill 100, was passed into law directing the Association of Bay Area Governments (ABAG) to develop a plan for a regional trail system including a specific alignment for the Bay Trail. The Bay Trail Plan, adopted by ABAG in July 1989 is a planned 500-mile walking and cycling path around the entire San Francisco Bay. It includes a proposed alignment; a set of policies to guide the future selection, design and construction of routes; and strategies for implementation and financing. Since its inception, the Bay Trail Plan has enjoyed widespread support in the Bay Area.

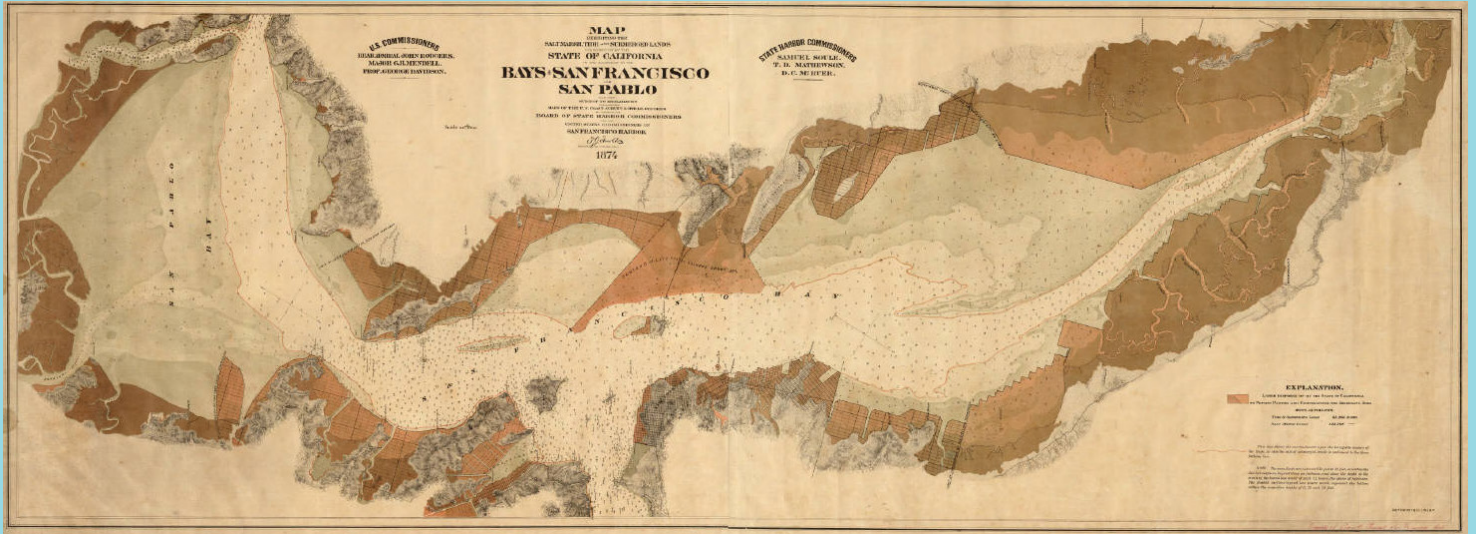
In addition to the Bay Trail, the San Francisco Bay Area Water Trail is working to programmatically enhance regional access, safety, and stewardship of San Francisco Bay for non-motorized small boaters (kayaks, stand up paddleboards, kiteboards, outriggers, etc.) by facilitating a network of launching and landing sites across the region. In the San Francisco Bay Area Water Trail Act (AB 1296), the California State Legislature declared that “the San Francisco Bay and the surrounding watershed lands [are] one of the most valuable natural resources of the state” and that “water-

oriented recreational uses are an integral element of the recreational opportunities that span the San Francisco Bay Area and add to the community vitality and quality of life that the citizens of the region enjoy”.

## Baylands Ecosystem Habitat Goals

By the early 1990s, scientists and resource agency managers recognized the need to develop regional scale habitat protection goals. The Goals Project began in 1995 and involved more than 100 participants representing local, state, and federal agencies, academia, and the private sector. In 1999, the effort resulted in publication of the Baylands Ecosystem Habitat Goals report. It became the guide for restoring and improving the Baylands and adjacent habitats of the San Francisco Estuary, and its strategic approach continues to influence studies and resource planning around the bay.

As the Baylands Ecosystem Habitat Goals report was developing, Congress passed the National Wildlife Refuge System Improvement Act of 1997. The National Wildlife Refuge System is the world's largest collection of lands specifically managed for fish and wildlife conservation. Unlike other Federal lands that are managed under a multiple-use mandate, the Refuge System is managed to fulfill the specific purpose(s) for which each refuge was established. The Improvement Act established an appropriate use and refuge compatibility process for determining other compatible uses, such as public access. It also required preparation of a comprehensive conservation plan for each refuge by 2012. The San Pablo National Wildlife Refuge Comprehensive Conservation Plan was adopted in 2011.



## Ecological Restoration and Public Access

Meanwhile, BCDC was researching the relationship between resource protection and maximizing public access. In 2001, it published a report entitled, *Public Access and Wildlife Compatibility*. That work resulted in amendments to the agency's guiding policy document, the Bay Plan, which was followed in 2005 with the BCDC Shoreline Spaces Public Access Design Guidelines. Overall, BCDC policies seek to avoid adverse impacts on wildlife while utilizing siting, design, and management techniques to allow for public access.

Given its substantial ownership of San Pablo Baylands, the California Department of Fish and Wildlife have created a Land Management Plan (LMP) to managing the San Pablo Bayland's 7,000 acres of diverse fish, wildlife, and plant habitats for their ecological values and for habitat-compatible use by the public. The Napa Sonoma Marshes Wildlife Area Management Plan was completed in 2011 and is expected to be in effect until 2026. CDFW have extensive habitat restoration projects that have been completed in the project study area, and has managed two major restorations that comprise over 10,000 acres of restored habitat.

While the resource strategies embedded in the adopted plans of these two major resource land agencies play a central role in both ecological restoration and public access, there are other partners whose work has contributed greatly. The Sonoma Land Trust acquired a 2300 acre property in the Sears Point area and undertook restoration

of tidal marsh, diked marsh, riparian, vernal pools, seasonal marsh, and grasslands.

The California Coastal Conservancy is currently constructing tidal and seasonal wetland improvements on 1840 acres of land in the Novato Creek watershed, named Bel Marin Keys V after the subdivision phase its acquisition averted. In both Marin and Sonoma counties, the Marin Audubon Society has acquired diked parcels and restored them to benefit special status bird and fish species. Today, each of the four counties that touch the San Pablo Baylands support ecological restoration efforts, and a strong preservation and restoration consensus exists for the Baylands. Along with this restoration is a strong commitment to providing the public with opportunities to experience this landscape through existing and planned Bay Trail and Water Trail facilities.

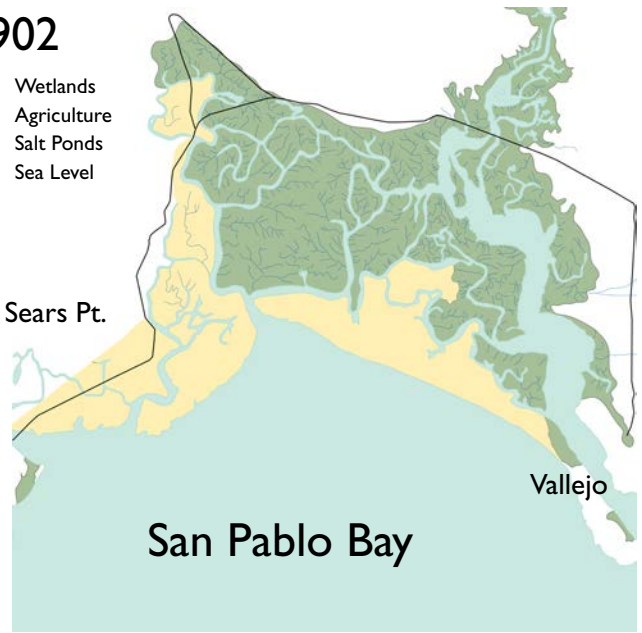
1863

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level



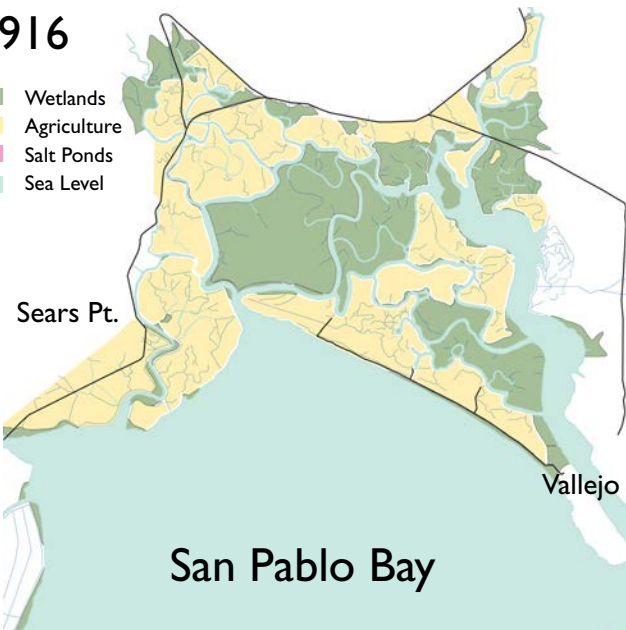
1902

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level



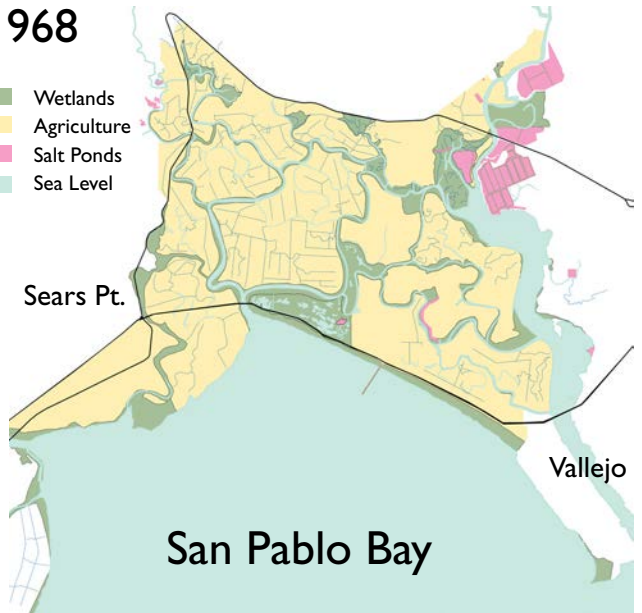
1916

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level



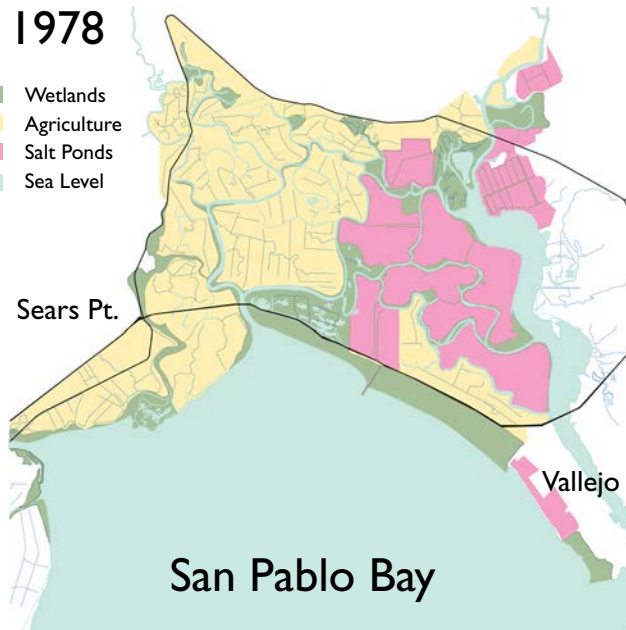
1968

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level



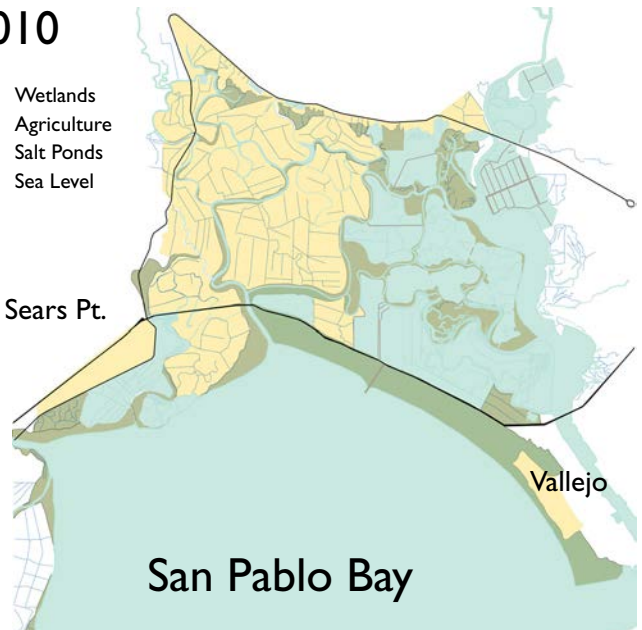
1978

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level



2010

- Wetlands
- Agriculture
- Salt Ponds
- Sea Level





## SEA LEVEL RISE AND CLIMATE CHANGE

**The San Pablo Baylands are already impacted by both flooding due to incremental sea level rise, and occasional dike failure.**

These baylands present both a significant opportunity for ecosystem protection and enhancement as well as one of the biggest opportunities for natural-systems based resilient solutions for San Francisco Bay.

The richness of its biodiversity, and dynamic systems would be a loss to Bay Area residents who place great value on the beautiful natural places that make the Bay so special. Based on previous outreach from the RBD Bay Area Challenge, the general public would also like to know more about this unique place and be able to enjoy increased access. Bay Area communities would benefit from better functionality from regional transportation, including SR37, Sonoma Marin Area Rail Transportation agency (SMART), the Bay Trail and the Water Trail, with which proper coordination could create public access that also maintains protection of the Baylands' sensitive ecosystems.

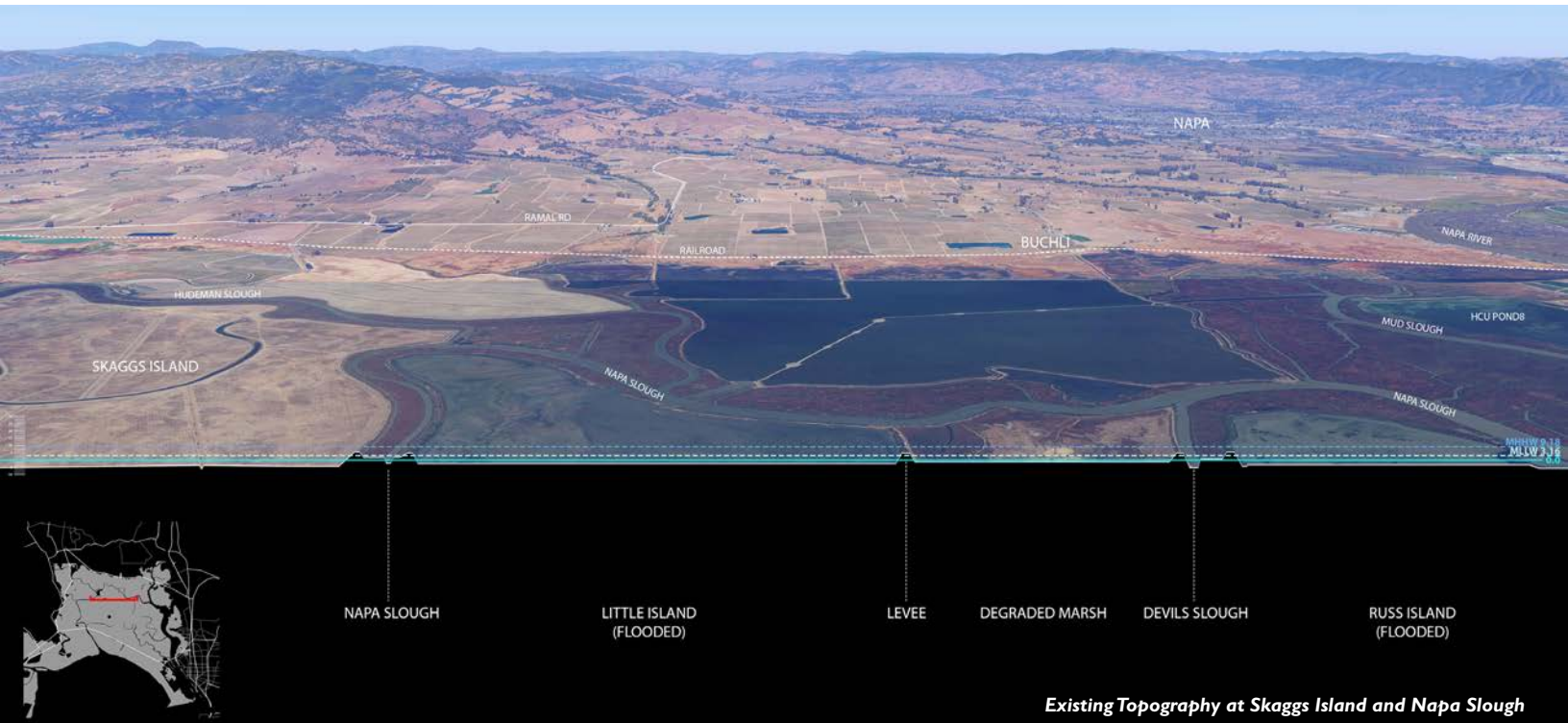
While various factors will play a role in the level of inundation - weather conditions, sedimentation rates, space for the marsh to migrate, among other factors, **in the absence of action, this large-scale marsh, one of the last of its kind, will be inundated by sea level rise.**

In the face of Sea Level Rise, transportation infrastructure and Baylands restoration need to be in full coordination. Improvements for SR37 will be a transformative investment into this part of the bay and it can be leveraged for **larger, more holistic solutions - if we can sufficiently raise the stakes and motivate broader interest.** The highway was originally a convenient cart road along a wave-created berm. Normally one would not hope to see a highway on such a shifting and transitory landform, but the highway is not going away. Like all SLR initiatives, canceling a negative is not an adequate story to generate interest from policy makers and funding sources. We need a narrative that converts the problem into a great transformation that benefits access, communities, and the Bay ecology.

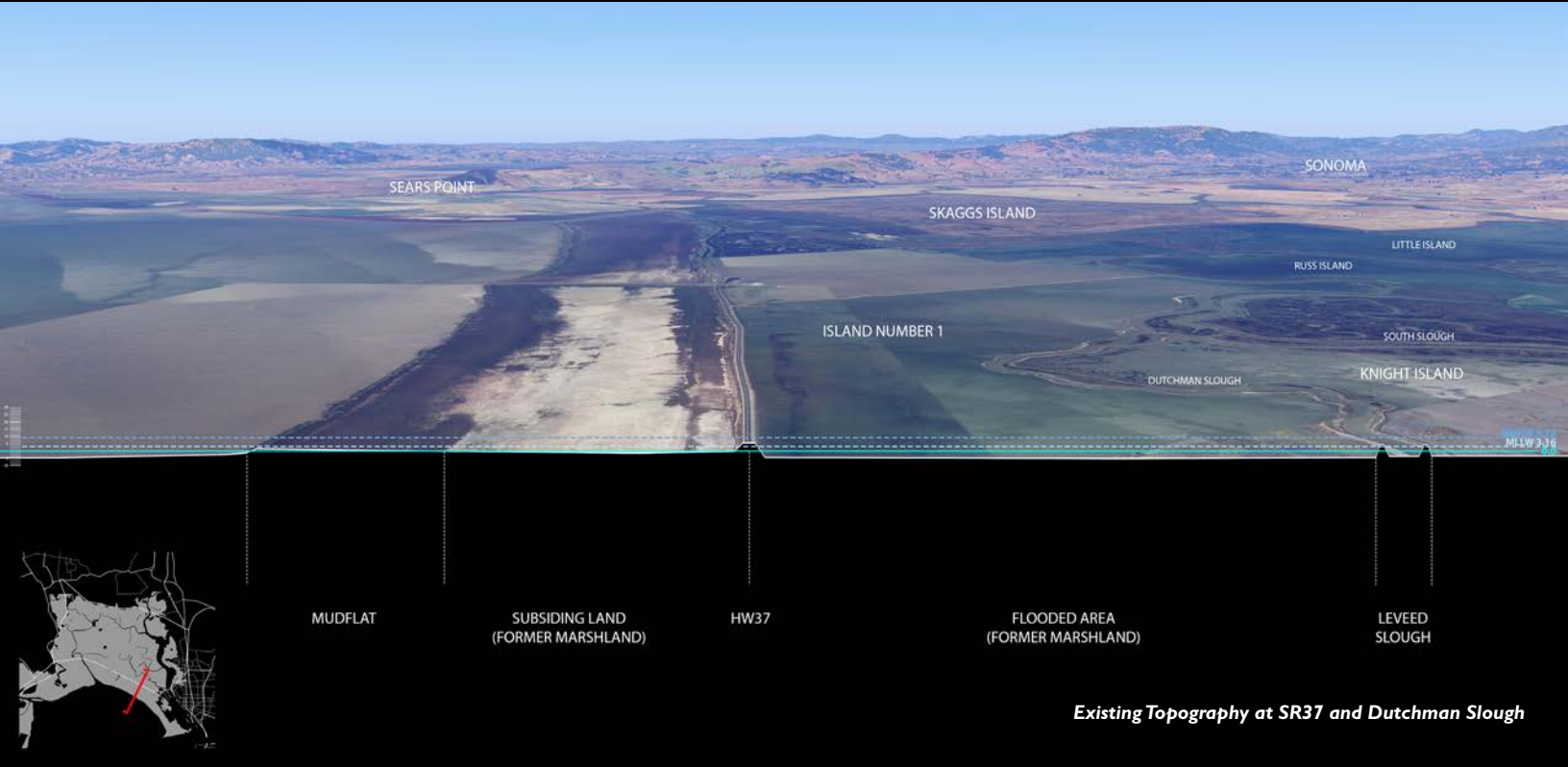


*Petaluma marsh water trail (photo courtesy of the SF Bay Trail & Water Trail)*

Conservation, connectivity, and coordination are key tenets towards a more resilient San Pablo Baylands (North Bay). A resilient approach involves coordination of investments in light of sea level rise. Inextricably linked to this infrastructure are sensitive, yet productive, wetlands that serve as a major public amenity and ecological asset that can help buffer SLR and storm surge impacts.

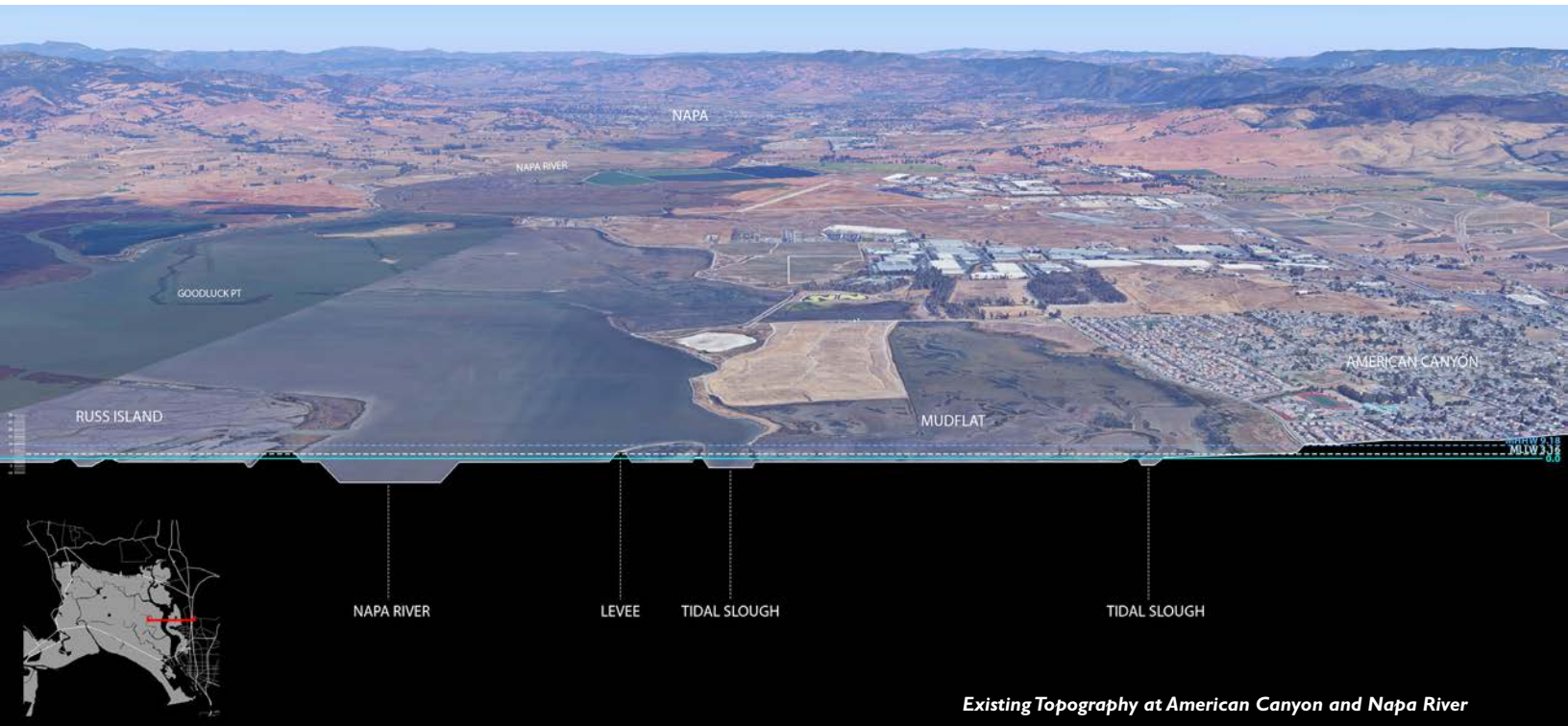


*Existing Topography at Skaggs Island and Napa Slough*



*Existing Topography at SR37 and Dutchman Slough*

Historically, marshlands and wetland ecosystems were present around the margins of the entire San Francisco Bay. Alternating headlands and lowlands comprise the topography of the bayshore landscape, while marshes filling in the low lying areas. Cordgrass and pickleweed dominate here, providing rich habitat for many organisms including endangered species and species of special concern. Today, the San Pablo Baylands is the largest section of the bay margin with potential to grow, improve, and enhance these crucial marsh ecosystems. There is a huge opportunity to work with the natural processes in the baylands to make the landscape more hospitable to wildlife and build a more resilient connective access infrastructure.





## Unique North Bay Dynamics

The ecology of the San Pablo Bay differs from the southern portions of the bay in the exchange of fresh and saline water. The sediment dynamics in SPB are also unique, with a shallow, muddy shelf present throughout the majority of the bay. A clockwise current or gyre transports sediment and most sections of the shoreline are accreting over both short and long timescales. Recent research indicates that the Hayward and Rogers Creek Fault are likely connected beneath San Pablo Bay, raising the probability for a large magnitude earthquake in this fault zone.

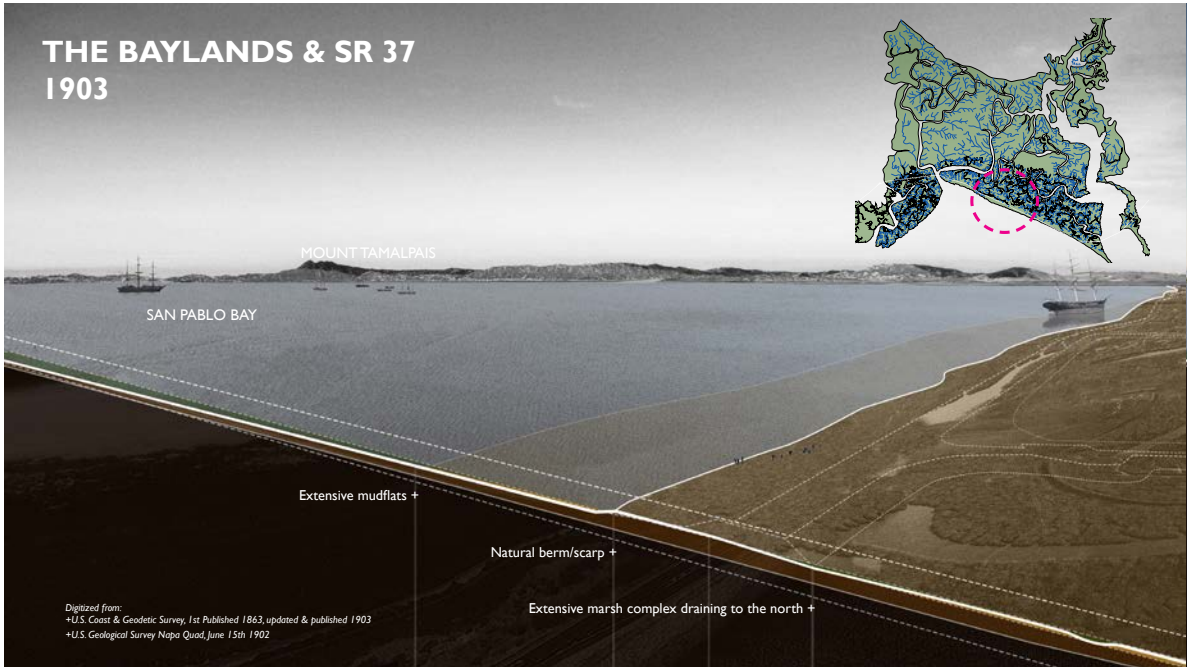
The main channel of San Francisco Bay bends north into San Pablo Bay cutting close to the headlands of Point Richmond bringing relatively clear ocean water close to the shore. The main channel bottom is sandy and bordered by some of the best-developed eel grass beds in the Bay Area. The rest of San Pablo Bay is a large, shallow, muddy bowl with shallow muddy channels connecting to the rivers and creeks to the north. These tributary channels converge in the central bay creating a slightly deeper region where sturgeon congregate. Shallow mud is suspended by wind waves almost every day blocking light that would be required for eel grass beds.

## SR37 Berm Dynamics

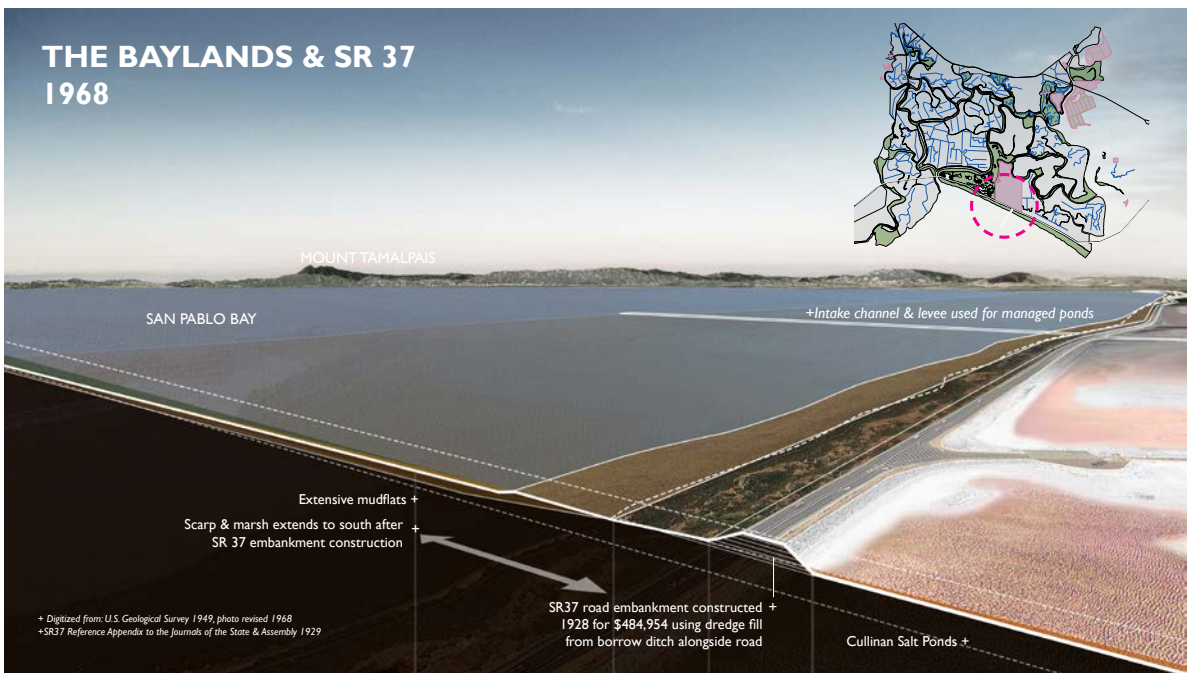
The natural berm at the southern edge of San Pablo Baylands on which SR 37 is built is formed by wave-deposited sediment. Sediment is pushed northward by the San Pablo Bay gyre (currents that move water clockwise around SPB) and the prevailing northerly winds push waves up onto this berm. This feature has existed for thousands of years and there has never been full tidal exchange between San Pablo Bay and the marshes to the north. Much of the berm and “strip marsh” we see today is comprised of sediment and fine gravel flushed through the delta by hydraulic mining in the mid and late 19th century which grew the berm further into San Pablo Bay. Any new highway or public access solution should account for this highly dynamic by allowing any marsh transitions to proceed unimpeded.

As sea level rises, more ocean water will fill the bay, tributary wetlands and the shallow channel systems will cut deeper, and tideheads will move inland. Sea level rise will also likely cause levee failures, and with these breaches come an increase in tidal prism that will require the creek mouths to widen considerably to allow for these increased flows. Any new infrastructure investment will need to take these factors into account. If the new SR 37 spans Tolay Creek and Sonoma Creek, longer spans will be needed to traverse these widened channels.

# THE BAYLANDS & SR 37 1903

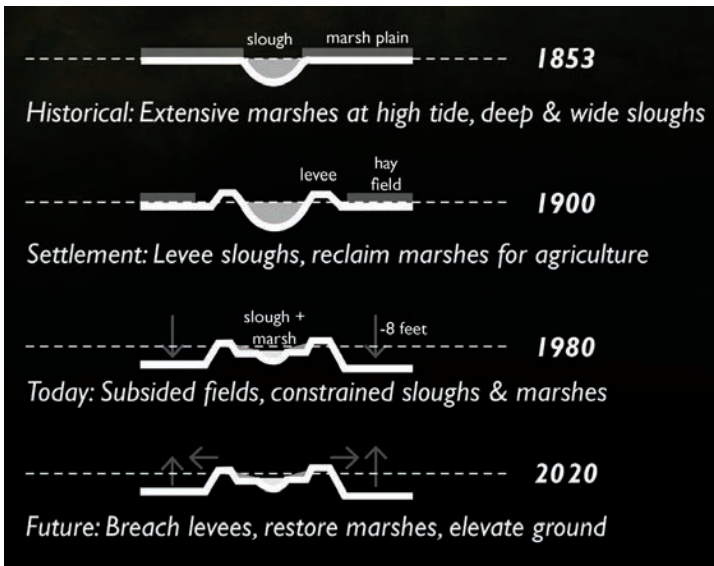


# THE BAYLANDS & SR 37 1968



# THE BAYLANDS & SR 37 Today





## Topography and Sediment Dynamics

The core of the site contains two large zones with distinct marsh ecosystems and habitat – the western baylands that have been farmed and the eastern baylands that were used for salt ponds. The large portion of the site that was farmed for over 100 years lost much of the peat in the soil and had no input of sediment during that time, resulting in areas of land subsidence up to 7 feet. Restoring these areas by conventional means would consume a huge amount of resources - imported sediment as well as money to achieve ecological goals. The challenge of a sediment deficit and a dearth of time to prepare land for sea level rise will likely require a focused research on finding more innovative ways to:

- **Budget existing sediment resources to greatest effect**
- **Design ways to redirect sediment in flood events**
- **Direct sediment through both natural and artificial processes to existing marshes and future retreat zones.**

The geomorphic setting of the San Pablo Baylands provide unique opportunities for sea level rise adaptation. Compared to the rest of the San Francisco Bay margin, the watersheds that feed the North Bay are large and sediment-rich. Large flood

events bring sediment down from the surrounding uplands and deposit it onto alluvial fans. Finer sediments work their way into the sloughs and channels occupying the marsh plain. Fine sediment from San Pablo Bay also deposits in the marshlands, fed by the clockwise current and northward winds that built the strip marsh bordering SR 37 and Mare Island. **The legacy of diking and draining the baylands for agriculture, development, and salt harvesting has left an imprint on the landscape; in some areas the land has subsided three to seven feet below sea level.** While the system is relatively sediment rich, there is not enough in the system to fill these massive voids.

**Faced with sediment deficits and increasing sea-level rise, sensitive habitats will likely have to adapt and migrate across a complex mosaic of bayland habitats – and habitat connectivity will be critical.** Habitat connectivity is a term commonly used in landscape ecology to describe the degree of connection between nearby or adjacent habitat areas. Distinct habitat areas are frequently referred to as ‘habitat patches’. If the connection between these patches is not good, the resultant fragmentation can lead to loss of diversity within a given population of a species and potentially local extinction of that species from one or both patches. Even for fairly mobile species, a roadway can present a significant barrier to movement between patches.

## Marin County officials issue local state of emergency issued due to Highway 37 flood damage



By Debora Villalon, KTVU

Posted Feb 16 2019 10:21AM PST  
Video Posted Feb 16 2019 10:20AM PST  
Updated Feb 17 2019 02:07PM PST

The challenges of managing sediment, sea level rise, financial resources, and protection of sensitive habitats while facing resource and land management complexities are significant. With these many unknowns and challenges, public access can sometimes slip down the list of priorities. The importance of including public access as a piece of well-rounded restoration efforts only become more critical with a changing climate and sea-level rise. Public access and the associated place-based education is a form of learning that engages people in their local environment from the perspectives of history, ecology, and individual place-making perspectives. **Research in environmental psychology confirms that when we make connections to place we feel motivated to get involved with current predicaments. We develop a sense of agency and meaning that helps us become stewards actively involved in future thinking, place-making and inclusive responses to climate changes.** Place and human identity are deeply linked. These connections are needed to build and foster a lively community around the future of the marshlands and their importance to the surrounding landscape and neighborhoods. Why not observe and enjoy the tidal changes and wildlife each every day and in every season? Why not build a community of learning and appreciation around watching the wetland restoration that is so vital to the future? And because the restoration process is iterative,

STORM

WB Hwy 37 in Novato closed until Saturday due to flooding



Westbound Highway 37 will remain closed in Novato until Saturday following a levee breach.

By Amy Hollyfield  
Friday, February 15, 2019

our connection to landscape will be in some ways more intimate as we personally witness these changes as they happen.

### Summary

In summary the San Pablo Baylands represents unparalleled resource for the region and a difficult challenge in the face of climate change in sea level rise.

- **In comparison to the other stretches of the Bay Area, where urban and infrastructural conditions about bayland marshes the various Bayland ecologies have the best opportunity to freely migrate upland in response to sea-level rise.**
- **The San Pablo Baylands offer relatively good opportunities for upland and transitional habitat zones adjacent to marshes that include agricultural lands, vineyards and protected regional greenbelts.**
- **1/3 of the Bay's fluvial sediment supply comes from the Sonoma and Napa watersheds.**
- **Unique opportunity to make connections to develop a sense of agency and meaning that helps communities become stewards actively involved in future thinking and inclusive responses to climate changes.**

# SEA LEVEL RISE

SONOMA

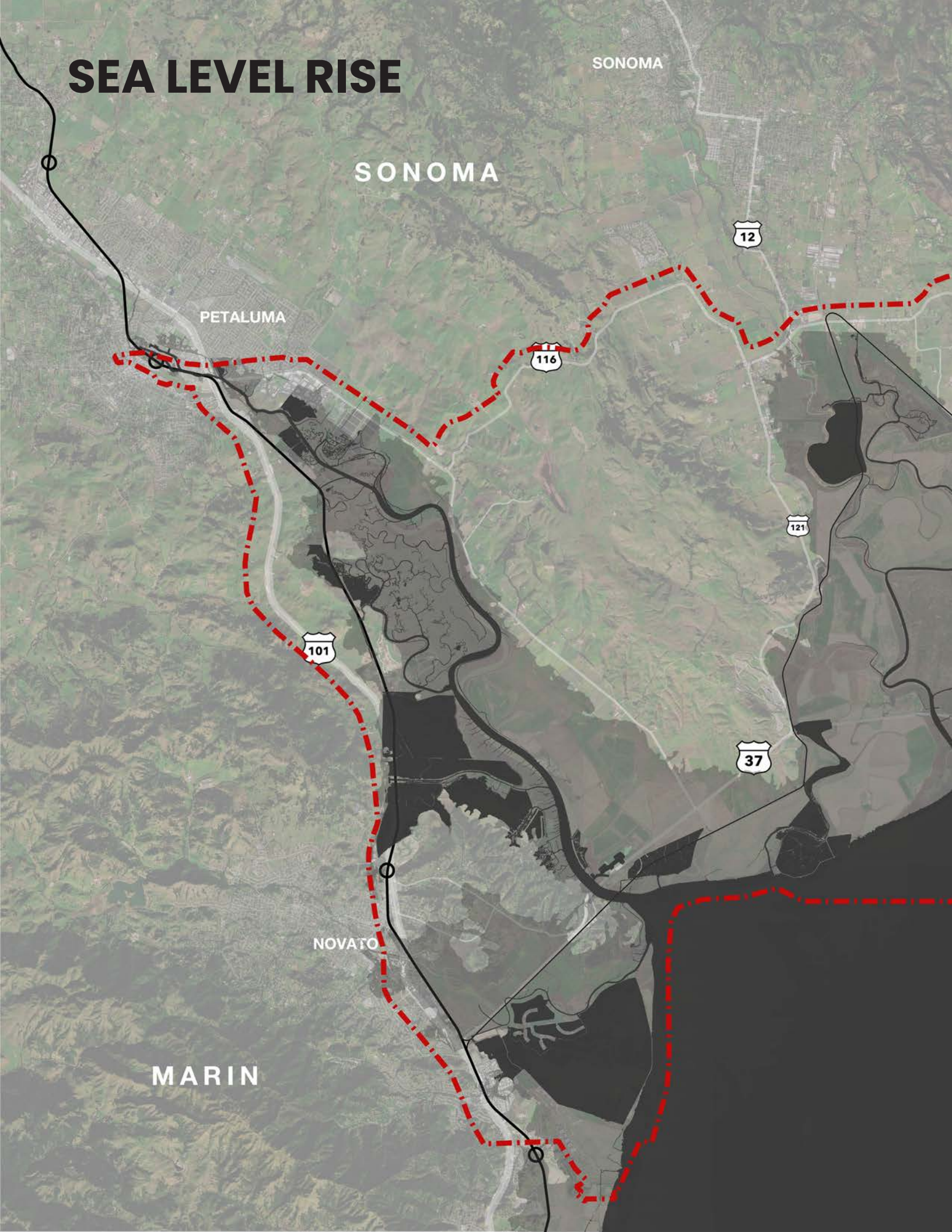
SONOMA

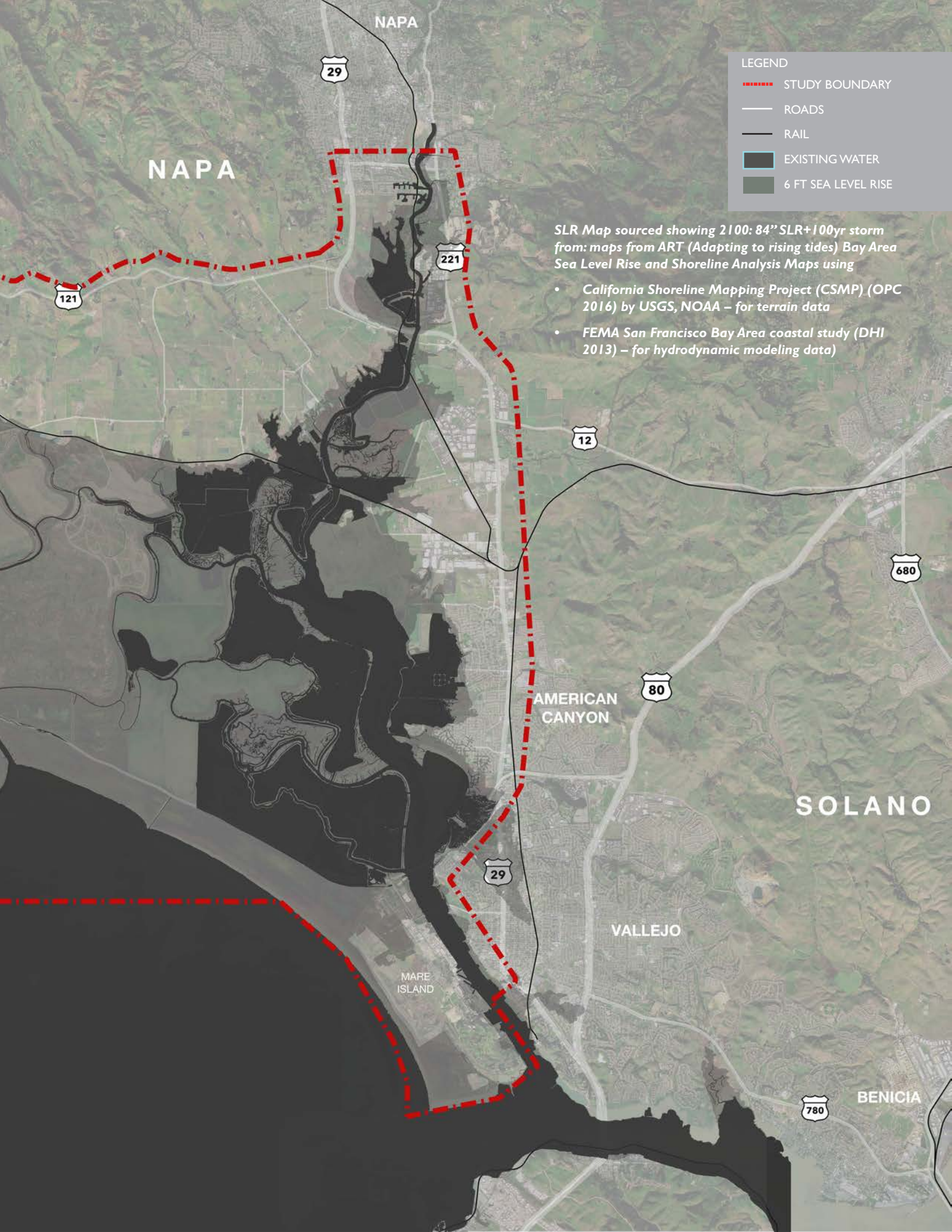
PETALUMA



NOVATO

MARIN





LEGEND

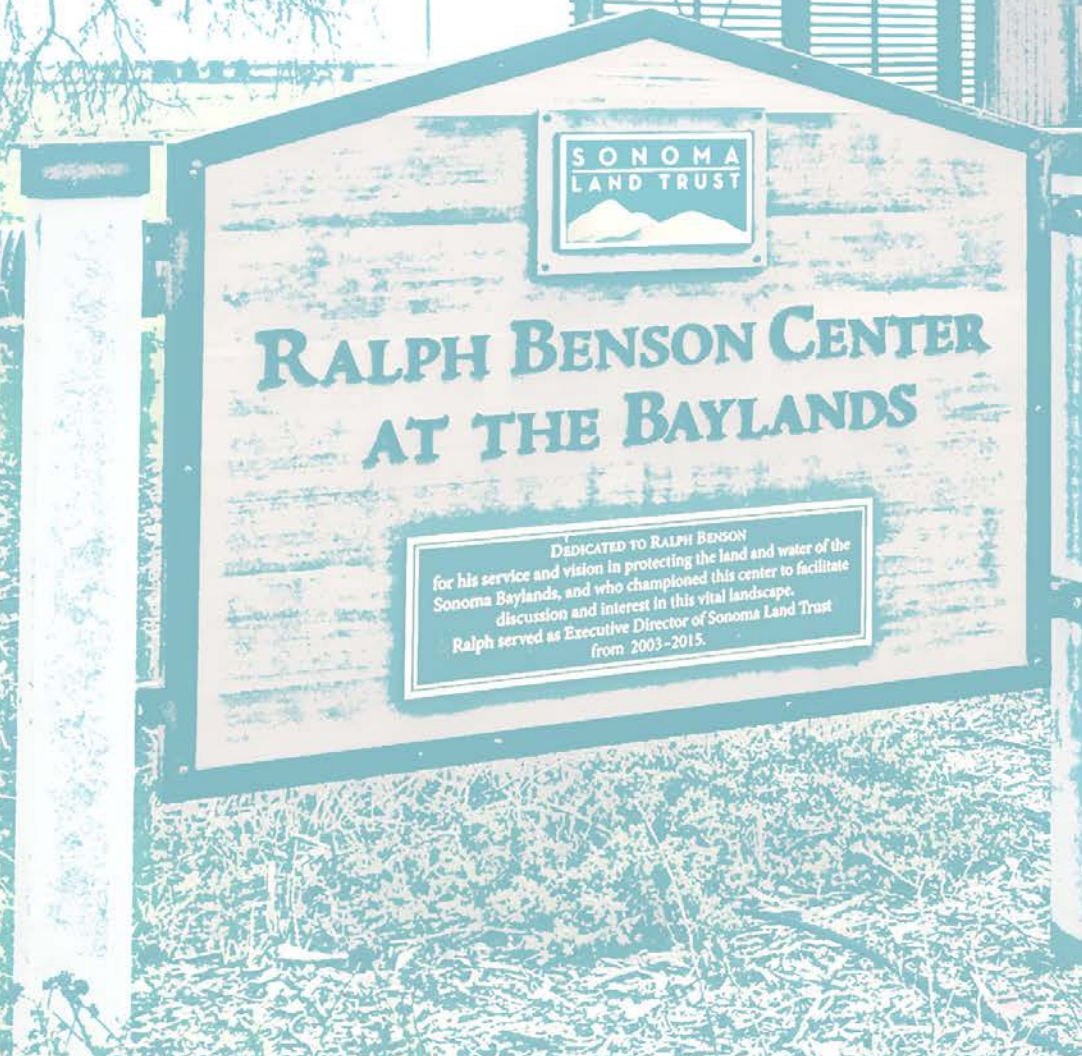
- STUDY BOUNDARY
- ROADS
- RAIL
- EXISTING WATER
- 6 FT SEA LEVEL RISE

SLR Map sourced showing 2100: 84" SLR+100yr storm from: maps from ART (Adapting to rising tides) Bay Area Sea Level Rise and Shoreline Analysis Maps using

- California Shoreline Mapping Project (CSMP) (OPC 2016) by USGS, NOAA – for terrain data
- FEMA San Francisco Bay Area coastal study (DHI 2013) – for hydrodynamic modeling data

## **NAVIGATION BAR**

- A. STUDY CONTEXT**
- B. SAN PABLO BAYLANDS IDENTITY**
- C. EXISTING PUBLIC ACCESS**
- D. PUBLIC ACCESS GOALS**
- E. TRAIL DESIGN GUIDELINES**
- F. PUBLIC ACCESS ALTERNATIVES**
- G. NEXT STEPS**
- H. APPENDIX**






**B**

**SAN PABLO  
BAYLANDS  
IDENTITY**

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An aerial photograph showing a large reservoir with a dam in the foreground. The water is a deep blue, and the surrounding land is a mix of brown and tan, indicating dry or semi-arid conditions. In the distance, there are rolling hills and mountains under a clear blue sky. The text is overlaid on the left side of the image.

**An identity and narrative  
is needed to articulate  
the power of time and  
change that has defined  
this region, and to help  
locals, visitors, and  
passers through, to find a  
sense of connection and  
stewardship.**

## A LANDSCAPE OF CHANGE AND IMAGINATION

On a drive along SR 37 from US 101 to SR 29 (Novato to Vallejo) the landscape intrigues and excites. Every day, the ebb and flow of the tides, wildlife, and human activity creates a moving spectacle across the San Pablo Bay and highlands. On this stretch of roadway one travels through tidal marshes, farms, vineyards, rivers, sloughs, and levees. One passes a raceway and equestrian park, an abandoned harbor, various boat launches, military installations, industrial zones and a range of enigmatic historic bridges and artifacts. Each view has its own story to tell.

This landscape serves as a record of millennia of human and natural evolution. The slow and continuous patterns of change have been informed over time by the interventions of people

with different beliefs, goals, motivations and perspectives. With the culmination of 50 years of conservation efforts and planning currently underway to reconsider SR 37, now is the time to gather the human and ecological stories and give this landscape more legibility. Histories of human labor, struggles and dreams could be revealed and celebrated as we turn toward the future of ecological transformation. Now is the time, as sea level rise will soon flood many of these features, to actively document and plan how these stories can be not only preserved but made present and visible to the public. Now is also the time to highlight this landscape as a laboratory for ecological and topographic experiments to maintaining historical biodiversity as the waters rise.

*“I GREW UP FIVE MILES FROM SAN  
PABLO BAY AND NEVER EVEN KNEW IT  
WAS THERE...”*

# BUILDING A CONSTITUENCY: THE BAYWAY

Through the Resilient by Design Bay Area Challenge in 2018, Common Ground proposed to strengthen the identity of the San Pablo Bay Region to encourage better understanding of these Baylands as a major ecological, educational, and communal resource. What to call this place depends on who you're talking to. Even whether it should have a singular identity is an open question. And who is this place for? What we know is that there are numerous constituencies here. There is a hard-working community devoted to ecological restoration. There is a community of bikers, hikers, and kayakers seeking to explore this region. There are surrounding communities such as Vallejo, American Canyon, and Novato that urgently need to get to their jobs by traversing this landscape. These cities, which will grow dramatically over the next 30 years, seek equitable access to jobs, regional recreational and educational opportunities for their current residents as well as new families and businesses that seek to move there. Planning for this area needs to respond to all these communities at the same time.

In our discussions about identity we landed on many names that emphasize different priorities.

*Ecological Central Park* – implying a regional / civic role for wetlands supporting habitat and recreation

*San Pablo National Baylands*– going further to promote a landscape of national significance protecting habitat while welcoming tourism and visitation, like Point Reyes National Seashore does.

*San Pablo Bay Refuge* – focusing on wildlife conservation as the core mission.

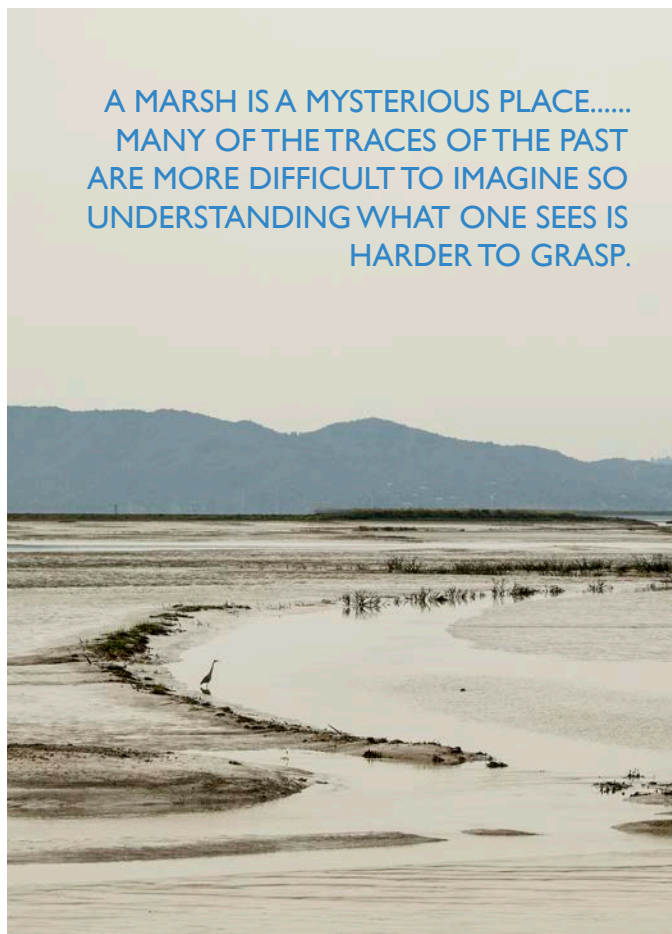
*The Baylands Union* – emphasizing partnership among stakeholders.

*The Grand Bayway* – the idea of movement of all things including the transportation imperative. This we chose for the competition.

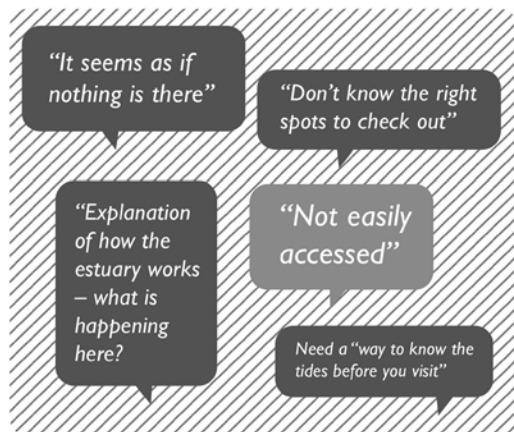
As was intended, this study has significantly deepened our understanding of the complexities and realities of the land and the actors, current and historical. Out of respect for that, we continue to suggest a singular identity and perhaps at this moment, we modify the word Bayway to BayWay - if it can help us extend the umbrella of meaning and identity as we go.

A new, **cohesive 'Place'** could inspire **connection and pride**, something like what Central Park does for New Yorkers or Yosemite does for Californians. It could **allow better coordination of planning and programming and allow for large-scale restoration and cultivation of the Baylands**. It would become an asset to local communities like Vallejo, Novato and American Canyon, and would provide value to the region and state. It could be the first of its kind; a restoration, transportation and sea level rise resilience project that could also take its place among the great natural treasures of our region.

A MARSH IS A MYSTERIOUS PLACE.....  
MANY OF THE TRACES OF THE PAST  
ARE MORE DIFFICULT TO IMAGINE SO  
UNDERSTANDING WHAT ONE SEES IS  
HARDER TO GRASP.



## WHY YOU HAVEN'T VISITED *the marshes around Highway 37...*



## *we asked you what name you use to* IDENTIFY THIS REGION



## PUBLIC ACCESS AND AWARENESS

Throughout this landscape there is a network of pedestrian, bike and water trails that seek to encourage visitation and connection - but despite the extraordinary hard work already done to establish them - they are presently only **partially connected and sometimes hard to find**. **More signage is needed, and more trailheads to invite exploration.** The lack of turn-offs or parking lots, and confusion about what lands are public or private also inhibits a sense of welcome. Though **SR 37 is often experienced as a high speed corridor, even these travelers describe the hints and glimpses of the landscape - of fishing piers, landing sites, hikers and hunters and great movements of wildlife, tidal change, and weather – as enticing them to stop and explore.**

Our community engagement revealed that while a majority of people we spoke with either passed through or lived nearby, most were not aware of the Baylands. Participants attributed this in part to lack of access, and to the perception that this place is not a recreational destination. The levees, old villages, and marshes that could draw visitation are largely unknown. Most are intrigued and would

like to visit and explore, but are not quite sure what they would do or where they would go. While connection and visitation to the Baylands was limited, this area does have other well-established activities people described. In the uplands, visitors may enjoy the landscape sipping wine at wineries or hiking, while others make a trip to the Sonoma Raceway or are drawn to the equestrian activities. In the marsh itself, there are hunters, fisherman, kayakers, birders, and hikers, though these activities were not widely reported as they are mostly confined to long-seasoned locals.

**Expanding visitation and cultivating connection to the marsh could start by ensuring new resilience measures include multiple access points.** New points of entry to observe and explore the marsh could enhance public understanding and foster a sense of participation and stewardship. Community members said they want access and places to go. They want maps and tide charts, they want to know what birds to look for, and where they can find the best vantage points. Creating these entry points for learning and exploring could be the first step to cultivating a cohesive identity.

## A CULTURE OF LEARNING

An identity and narrative is needed to articulate the power of time and change that has defined this region, and to help locals, visitors, and passers through, to find a sense of connection and stewardship. **The foundational goal for our project is to weave a common story and understanding of the San Pablo Bay from the rich cultural, social, and ecological histories of this landscape.**

Human identity and place are deeply linked. Throughout the Baylands, we suggest a narrative of time and place that would bring people together with these landscapes. Place-based education is a form of learning that engages people in their local environment from the combined perspectives of ecology and history – both the natural and built environment. Research in environmental psychology confirms that when an individual develops an understanding of place, personal connections are made and one gains confidence and motivation to get involved. We develop a sense of agency and meaning that helps us become stewards actively involved in future thinking and placemaking.

**The future resilience of any region depends upon engaged and informed public, and a culture of learning and advocacy.** Key to developing this culture is encouraging the integration of opportunities for informal education into all future projects. Partnerships between educators, school groups, local museums and libraries, advocates, policy makers, ecologists, restoration workers, developers and diverse community groups can create these opportunities and ensure they are rooted in community context, scientific accuracy, and relevance to civic issues. Public learning can take many forms for different age groups and backgrounds. By designing a mix of experiences; exhibits, excursions, field stations, instruments, tools, and maps, and including diverse perspectives and histories, we can reach a wide audience and create an inviting and engaging experience. **Resilience cannot be achieved by design, restoration and infrastructure strategies alone – it must be fostered through the human connection to this place.** We need to foster a feeling of home for both current and future residents. In fact the future resilience of any region depends upon an engaged and informed citizenship.



The foundational goal for our project is to weave a common story and understanding of the San Pablo Bay from the rich cultural, social, and ecological histories of this landscape.



Sears Point (photo courtesy of the SF Bay Trail)

# PUBLIC ACCESS REFLECTIONS

This project has centered on public access primarily in the form of pedestrian, bike and water trails. The discussions focused on connecting trail segments, taking advantage of existing or temporary levees for trails while restoration is in process or utilizing highway improvements to add lanes for pedestrians and bikes. **Dialogue is ongoing on what public access is, where and when it should happen and what form it should take.** While the stakeholder groups including - the Sonoma Land Trust and the California Department of Fish and Wildlife incorporate education programs—in the form of youth groups on field trips from local schools, camp days, talks about restoration and wildlife at local urban venues—there are still many concerns about the closeness of people to sensitive habitats, as well as maintenance of trail systems that may only be temporary as the restoration projects advance. There is concern that visitors might have expectations regarding access and not understand why their favorite trail might be closed or eliminated due to sea-level rise. Within the restoration sector there are clear concerns that human presence along trails near wildlife habitats will cause a disturbance and adversely affect wildlife.

These considerable drawbacks might also be public learning opportunities. Environmental educators grapple with the reality that people often feel somehow separate from nature, as if human society and the natural world are two separate domains. To learn to live more sustainably we could first understand our natural conditions. We could learn the story of human survival through time – so we can begin to design a future that could grow to sustain both geographic change and future populations. **An education partnership could be designed to introduce visitors to the conservation processes underway and provide clear guidelines for behavior.** Perhaps something like a “Bill of Rights for Wildlife,” could be authored. In this way people could learn more about the wildlife and seasonal habitats in these

sensitive zones and what kinds of human conduct is required. They could be invited to understand how and why sea level rise will be altering these landscapes for decades to come and the key role the Baylands provide in protection. Appropriate access might include temporary trail closures during nesting seasons, or open viewing platforms at reasonable distances as is currently practiced at Don Edwards Park in the South Bay. **While it's clear that access should be limited for safety, for wildlife protection and for marsh migration, clearer guidelines could be established by wildlife professionals working more closely with educators to advance a way for visitors to think ecologically toward a resilient future.**

WHAT NAME would you use to identify this region?  
¿QUÉ NOMBRE usaría para identificar este región?  
??

HAVE YOU VISITED the marshes around Highway 37? Why? ¿HA VISITADO los pantanos del Highway 37? ¿Por qué?  
yes - kayaking extensively  
Cullinan ranch is beautiful



What would you like to see in the Baylands IN THE FUTURE? ¿Qué le gustaría ver en Baylands EN EL FUTURO?  
more access  
Vallejo needs to improve  
Denico is seen as the good place - this needs to change. Vallejo has potential

WHAT NAME would you use to identify this region?  
¿QUÉ NOMBRE usaría para identificar este región?  
Drive along 37  
SO DM & HAWAII

HAVE YOU VISITED the marshes around Highway 37? Why? ¿HA VISITADO los pantanos del Highway 37? ¿Por qué?  
NO - But I see the birdlife



What would you like to see in the Baylands IN THE FUTURE? ¿Qué le gustaría ver en Baylands EN EL FUTURO?  
Small boats to bring people  
around the Bay - Cultural  
Tourism - More info about the area

# INFORMAL EDUCATION

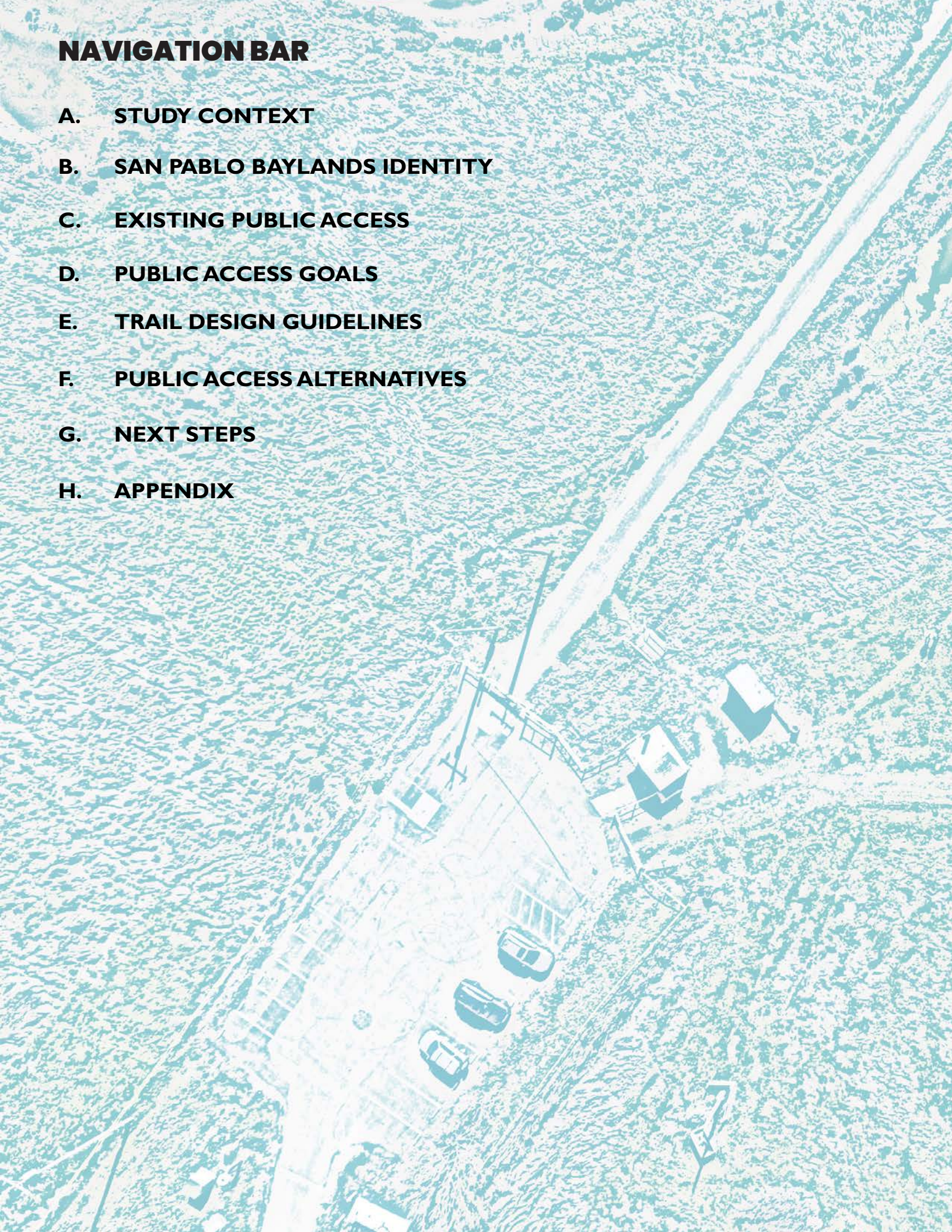
Modes of both formal and informal learning could be enhanced through partnerships with universities, schools, community centers and libraries. Each entity might evolve their own curriculums and share a series of outdoor classrooms or educational field stations much like the Baylands Center at Sears Point. These centers might also be used by restoration staff and scientists, or as gathering spaces during tours for policy makers, local leaders and other professionals.

**Improving signage and developing a series of outdoor “exhibits” or monitoring instruments might also encourage citizen data collection, as well as on-the-spot understanding for hikers, kayakers and other casual recreational users.** The Exploratorium (many contemporary museums) employ a form of public education called informal learning. This inquiry-based pedagogy (for both adults and youth) invites and encourages self-directed, and/or group learning outside of a classroom setting. In recent years we have embraced place-based methodologies to explore unique ways to connect learners to their local landscapes. These projects are partnerships, formed outside the museum walls engaging with people in their own communities. The intention is to introduce science and social based ideas within specific cultural/neighborhood contexts. While generalized principles are incorporated to establish a shared environmental education strategy – it is clear that the impacts of climate change will be experienced differently depending upon specific landscape conditions. In this way each community experience is often unique requiring specialized and collaborative approaches. **It is through these partnerships that public learning and education might foster a community of resilience around the future of our region.**



# NAVIGATION BAR

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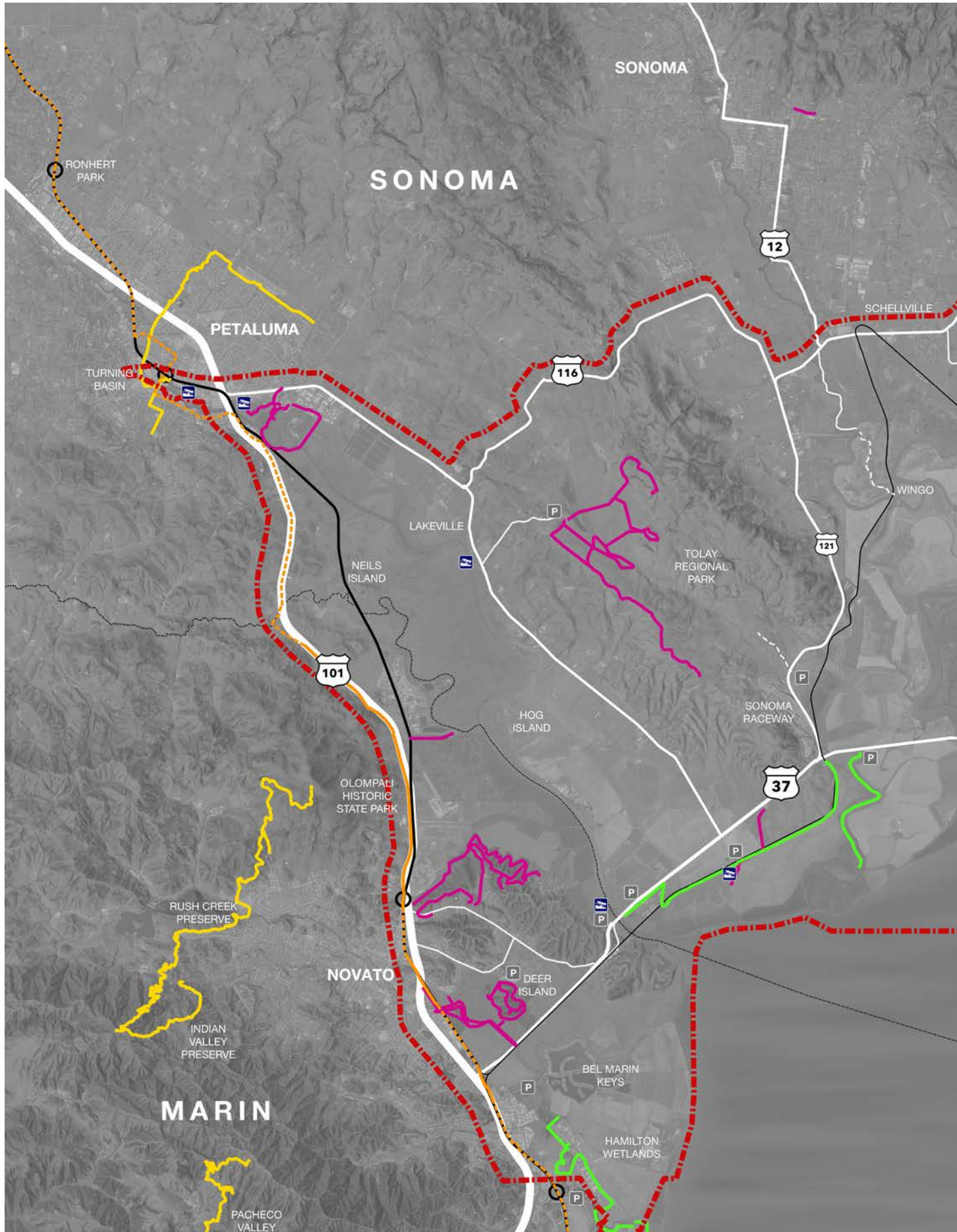


**EXISTING**

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**PUBLIC ACCESS**

# EXISTING ACCESS AND AMENITIES



**GIS SOURCES**

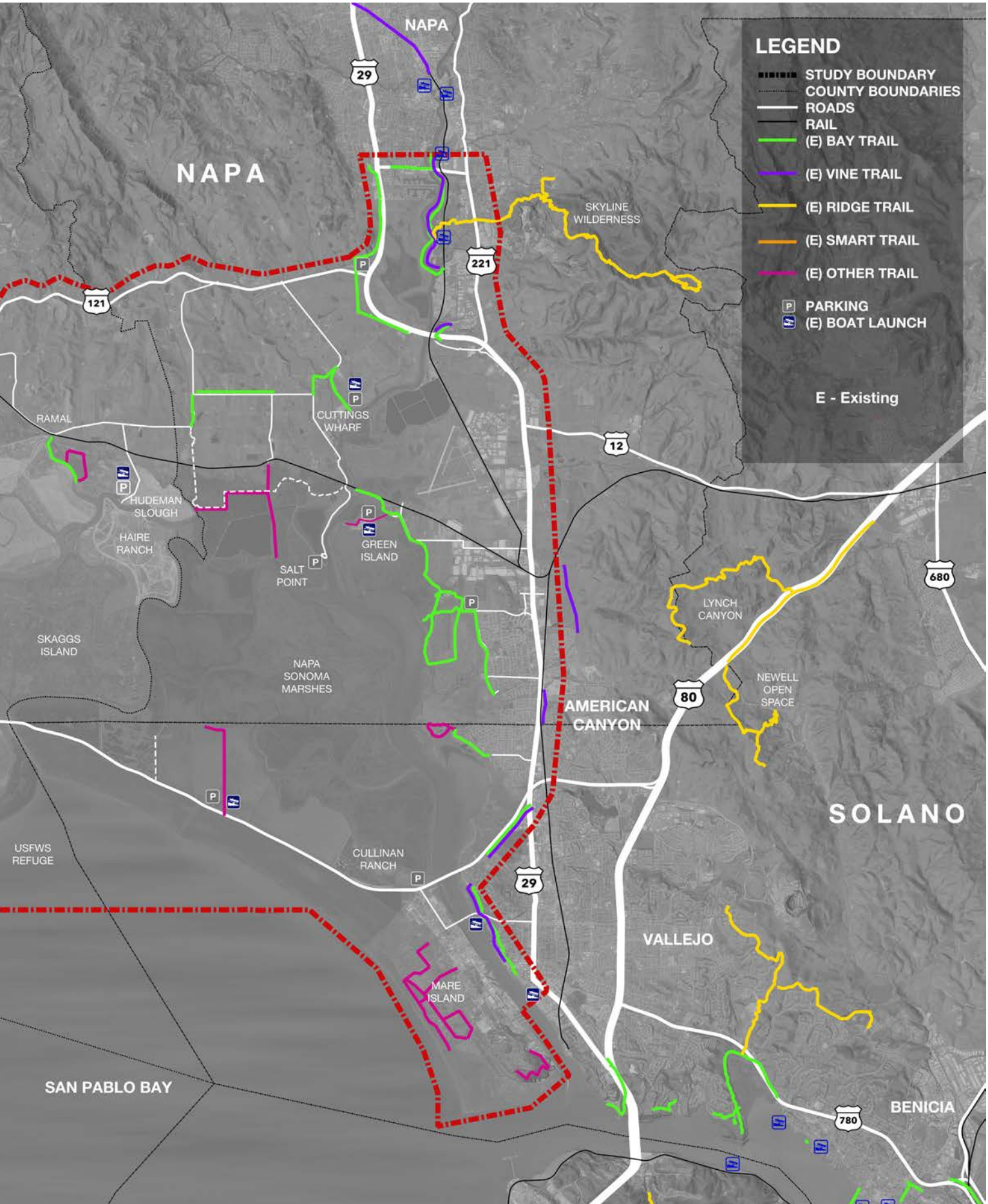
- Bay Trail
- Vine Trail
- Bay Area Ridge Trail
- SMART Pathway (Marin County Bicycle Coalition)

**OTHER SOURCES**

- Tolay Lake Regional Park Master Plan
- Rush Creek OSP
- Deer Island OSP + Adjacent Trails around Duck-bill and Heron's Beak Pond

•SPBNWR

- San Pablo Bay Trail
- Hudeman Slough Map
- SFBJV Map





Sears Point (photo courtesy of Sonoma Land Trust)

# EXISTING

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## EXISTING PUBLIC ACCESS

Local governments and resource land managers have a dual commitment to ensure that public access to the Baylands is provided for a wide range of recreational and educational activities, including hunting, fishing, boating, wildlife observation, native plant re-vegetation, biking, and hiking. This is reflected in the state management plans and General Plans of the counties and the adjacent cities of Novato, American Canyon, and Vallejo. It also is documented in these agencies bicycle and pedestrian plans. Sonoma County Regional Parks has adopted the Sonoma Integrated Parks Plan, a comprehensive plan that identifies trails, parks, and campsites including the planned expansion of the Hudeman Slough facilities on Skaggs Island Road.

In addition to local government support, several agencies are responsible for development and management of regional trails. The most notable of these is the San Francisco Bay Trail and Water Trail. At the eastern boundary of the study area, the Napa Valley Vine Trail is a planned 47-mile multi-use path from the Vallejo Ferry terminal to Calistoga. On the western side of the study area, the Sonoma Marin Area Rail Transportation agency (SMART) is developing a rail trail that generally parallels its tracks from Larkspur to Cloverdale. The Ridge to River Trail is an east-west spur that ties Bay access in Napa County to its segment of the Bay Area Ridge Trail along Napa's eastern ridgeline.

In addition to trails, a number of public park and open space sites exist in close proximity to the San Pablo Baylands.



- San Francisco Bay Trail**
- Paved
  - - - Dirt/Gravel
  - On Street
  - · · Planned
- Other Regional Trails**
- Existing
  - - - Planned

# San Francisco Bay Trail

Over 350 miles of adventure by foot or by wheel



## SOLANO COUNTY

In Solano County, the City of Vallejo manages a boat launch site off Curtola Parkway, just south of its waterfront Independence Park. There are also privately developed public trails on the west side of Mare Island, including Mare Island Scenic Vista Trail in the Mare Island Shoreline Heritage Preserve, the currently closed Mare Island Preserve Historic Southshore Trail, and the four mile long Mare Island San Pablo Bay Walking Trail. There are ongoing efforts to plan and implement two well used, multi-use regional trails—the San Francisco Bay Trail and the Napa Valley Vine Trail—through the City of Vallejo with a low stress, convenient, and family friendly facility.

There are a seven vehicular public access points along State Route 37. These include the entrance to Port Sonoma, the Elliot Trailhead at the terminus of Lakeville Highway, the Tolay Unit Parking Lot in NSMWA, Sonoma Creek, Cullinan Ranch, and Mare Island. There is vehicular access at Skaggs Island Road with only limited public access at scheduled times for special events. These sites have a combination of Caltrans, CDFW, and USFWS responsible for access and maintenance.

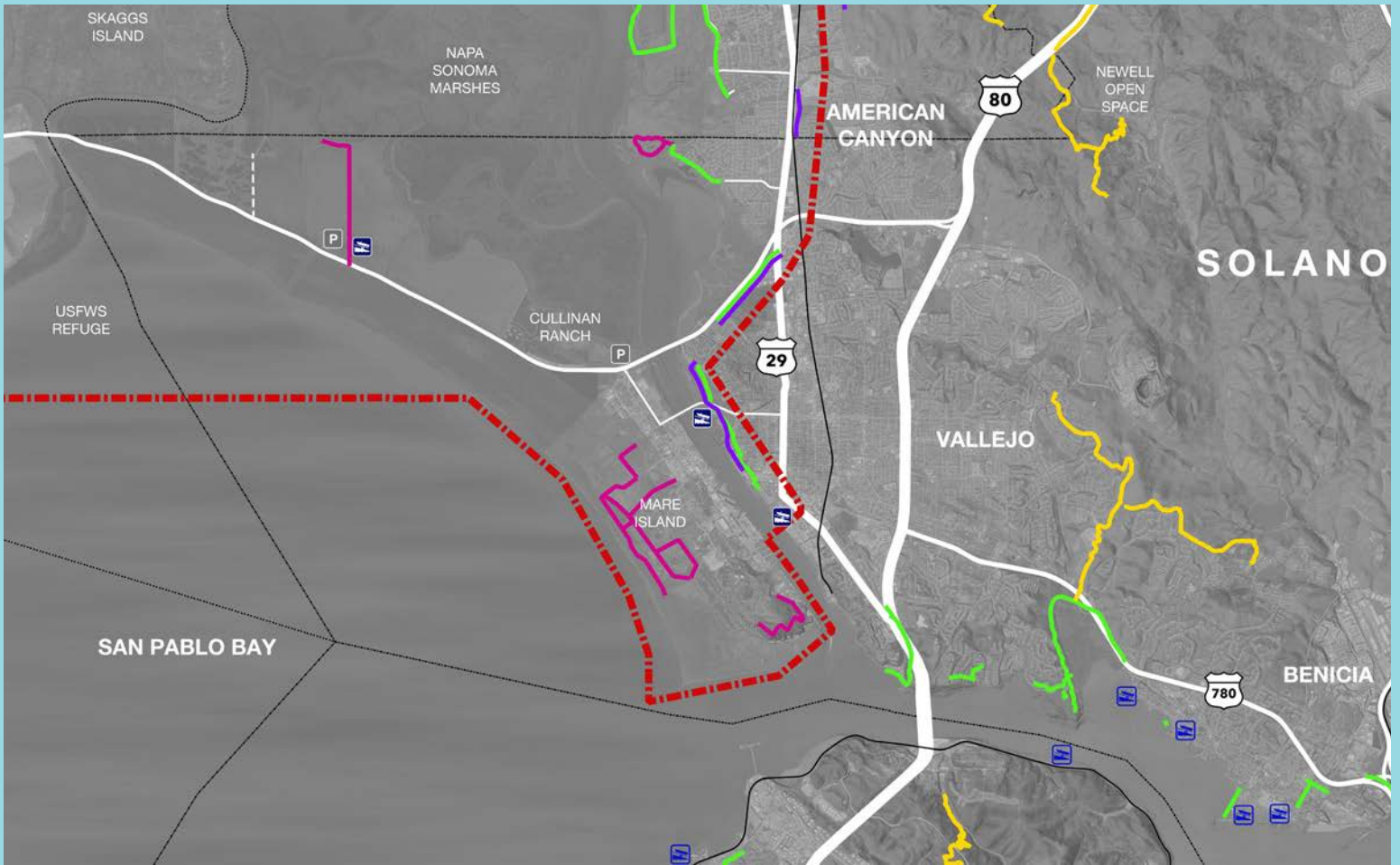
### Water Trail Sites

West Ninth Street:

- The West Ninth Street Boat Launch provides a great launch to explore nearby destinations, including the Benicia State Recreation Area and shores of the Carquinez Strait Regional Shoreline.
- Manager: City of Benicia
- Launch Type: Ramp and High-freeboard docks
- Facilities: Parking, restrooms, picnic tables, clubs



Vallejo Waterfront Bay Trail





**Cullinan Ranch (photo courtesy of the Water Trail)**



**Signage and orientation at Cullinan Ranch**



**Baylands off of SR37 (photo courtesy of the Water Trail)**



**Vallejo near Ferry Terminal**



**Mare Island Shoreline Heritage Preserve**



**Mare Island Shoreline Heritage Preserve**

# NAPA COUNTY

In Napa County, CDFW provides parking and toilet facilities at the end of Buchli Road. They also own and manage parking, restrooms, a boat launch, and informal trails on the Napa River shoreline, at the end of Green Island Road. There is an expired Memorandum of Understanding with Napa County Open Space District which was set up to help with minor maintenance/clean up on this area.

The County owns and operates a public fishing pier, boat launch, parking, and restrooms on the shore of the Napa River, at the end of Cuttings Wharf Road.

The County also allows public roadside parking and access to informal trails that surround historic Pond #8 at the end of Milton Road which is owned by CDFW. A 1,700' segment of Bay/Napa River trail can be explored from a trailhead at the end of Soscol Ferry Road. The City of American Canyon maintains a trailhead with public parking, picnic tables, and restrooms at the intersection of Eucalyptus Road and Wetlands Edge Road. From there, the City manages a loop trail around its historic landfill site on the shore of the Napa River, and the County manages 2.5 miles of Bay Trail to the north.

## Water Trail Sites

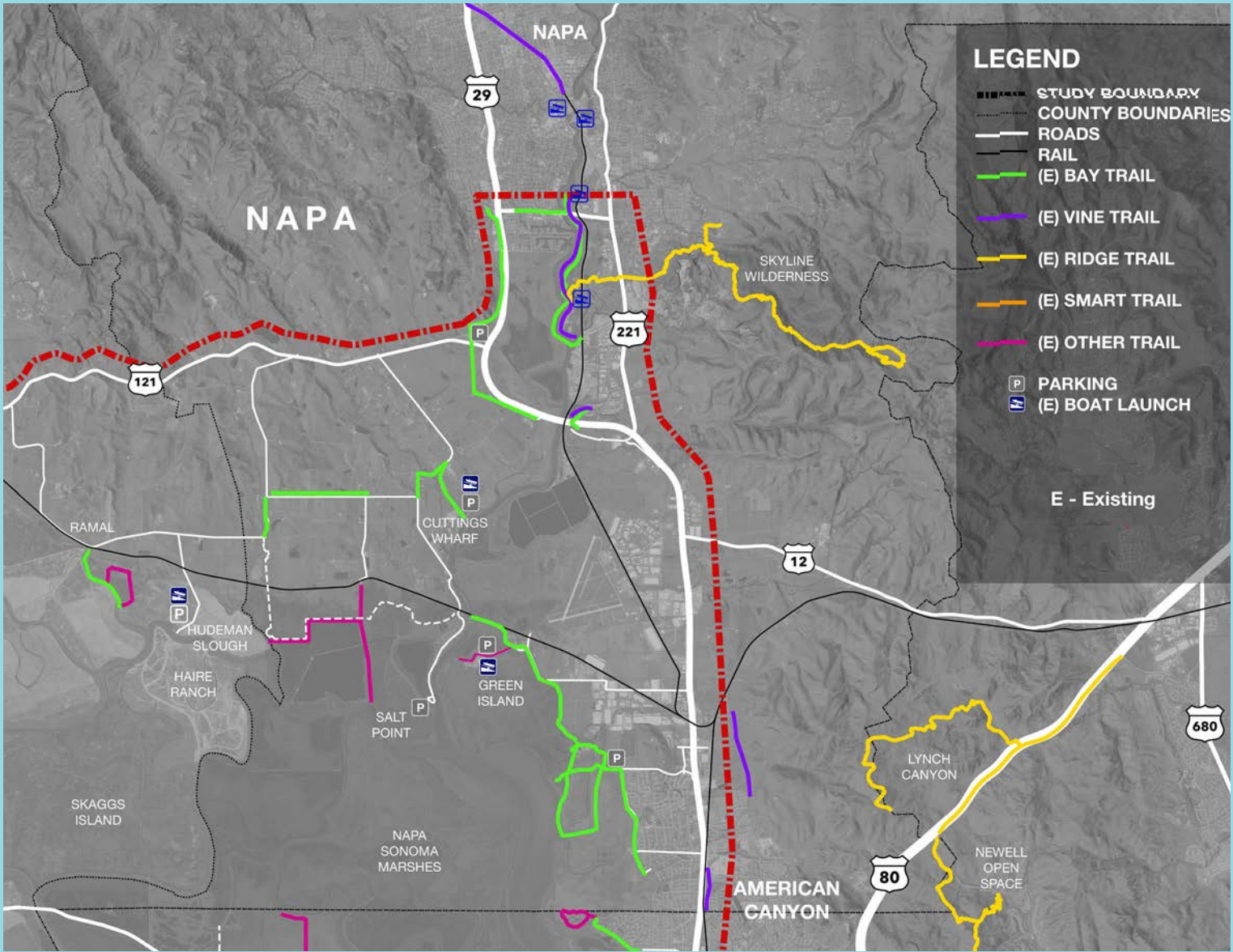
### Cuttings Wharf:

- Popular site for boating, birdwatching, and fishing on the Napa River.
- Manager: Napa County
- Launch Type: Boat ramp with two high freeboard docks
- Facilities: Parking, restrooms, picnic tables

### Downtown Napa Dock:

- While boating on the beautiful Napa River enjoy a break to dine and shop in downtown Napa.
- Manager: City of Napa
- Launch Type: Gangway with high freeboard dock and seasonal low freeboard dock
- Facilities: benches, trails, shops, restaurants, and hotels







**Cuttings Warf**



**Stanly Lane Trailhead**



**Green Island Parking/Trailhead**



**Napa River Water Trail ((photo courtesy of the Water Trail)**



**Wetlands and Napa River Bay Trail, City of American Canyon**



**Wetlands and Napa River Bay Trail, City of American Canyon**

## SONOMA COUNTY

In Sonoma County, the City of Petaluma has several over 7 miles of trails connecting several parks along the Petaluma River beginning at the Petaluma River marina near its southern city limit. These include the 165 acre Shollenberger Park, Alman Marsh, and the Ellis Water Recycling Facility. The City also owns the Petaluma River Turning Basin, a popular non-motorized boat launch site. Sonoma County Parks manages the 3400 acre Tolay Lake Regional Park, including over 11 miles of regional trails and a future route that will reach SR 121 just north of Sonoma Raceway. The private Gilardi's Marina has a public boat launch off Lakeville Highway. The Sonoma County Water Agency manages 2.5 miles of trail and a covered picnic area at their treatment reservoirs on Ramal Road. CDFW has several public access opportunities and parking in the Wildlife Areas of the NSMWA at its Wingo and Tolay Creek North Units. These minimal facilities primarily support parking for seasonal hunters.

### Water Trail Sites

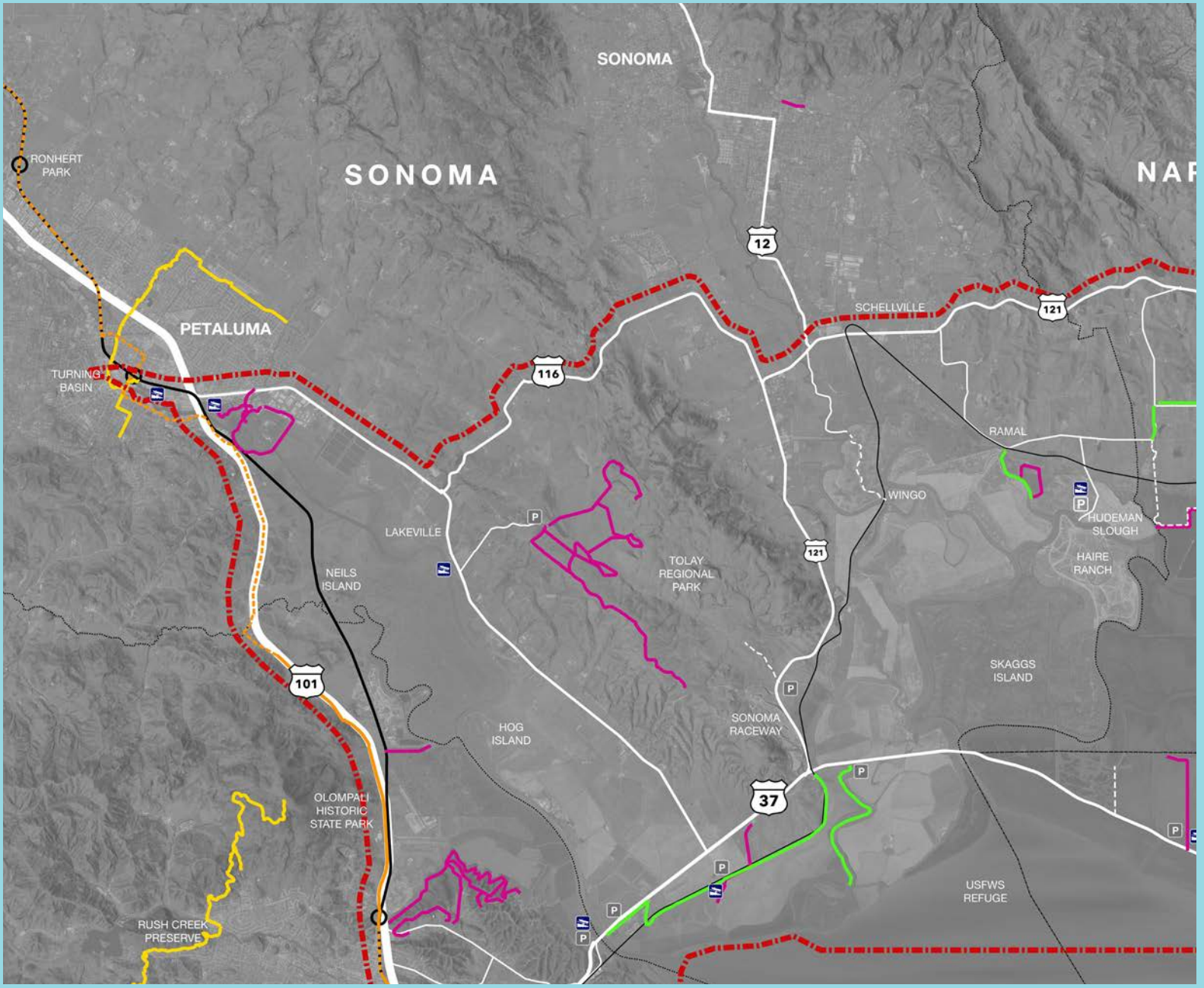
#### Petaluma Marina:

- This launch provides many amenities for paddlers and rowers to explore the Petaluma River.
- Manager: City of Petaluma
- Launch Type: Dock, ramp
- Facilities: Parking, restrooms, picnic tables, restaurants, hotel, gear rental and sales

#### Petaluma River Turning Basin:

- The Turning Basin is a popular launch located in the heart of downtown Petaluma.
- Manager: City of Petaluma
- Launch Type: Dock
- Facilities: Parking, picnic tables, nearby restaurants and vendors





**LEGEND**

- STUDY BOUNDARY
- COUNTY BOUNDARIES
- ROADS
- RAIL
- (E) BAY TRAIL
- (E) VINE TRAIL
- (E) RIDGE TRAIL
- (E) SMART TRAIL
- (E) OTHER TRAIL
- PARKING
- (E) BOAT LAUNCH

E - Existing



Skaggs Island Road limited yearly access



Hudeman Slough



Ralph Benson Center



Petaluma Dayon River (photo courtesy of the Water Trail)



Bay Trail Sears Point



Tolay Unit Parking Lot in NSMWA.

## MARIN COUNTY

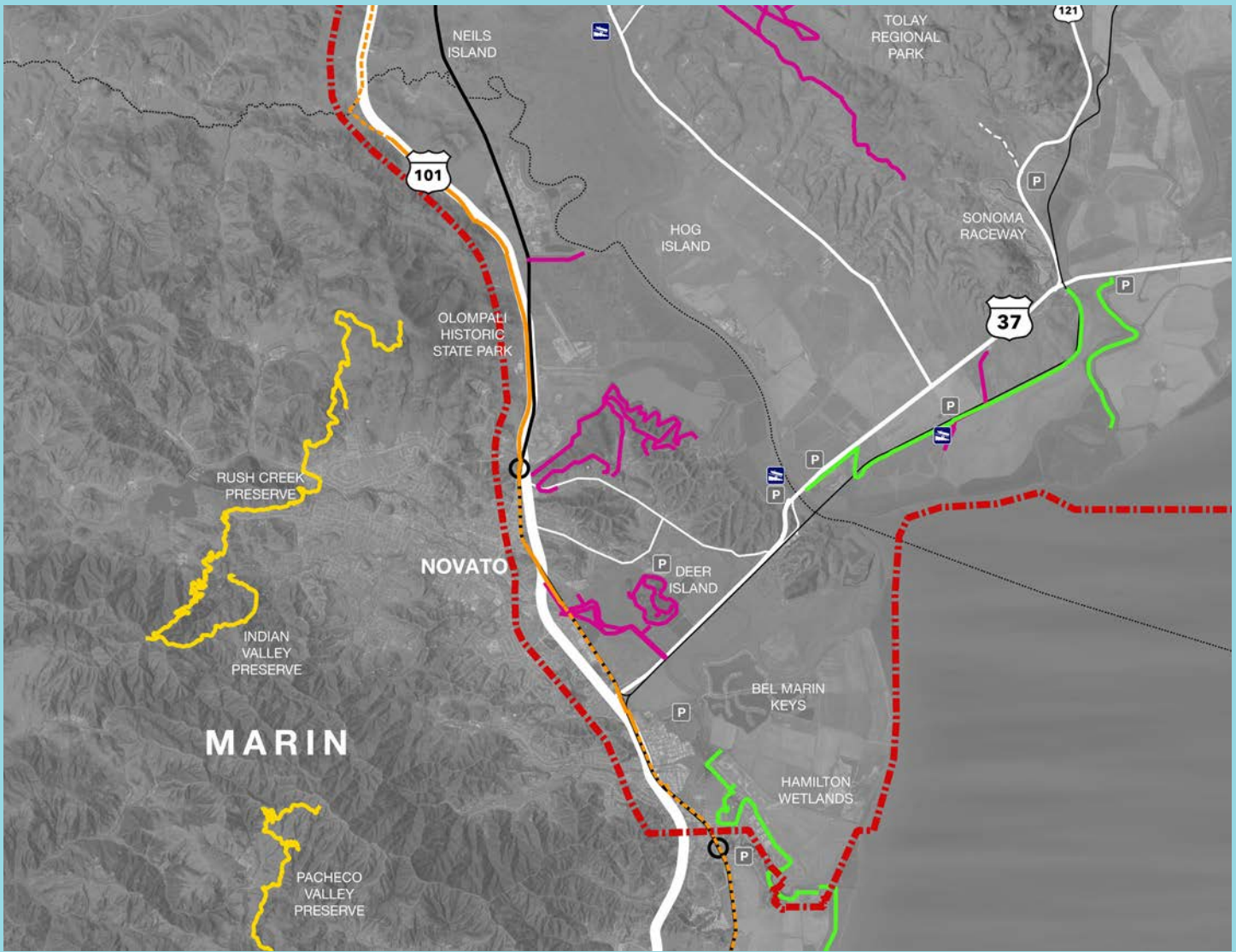
In Marin County, a public viewing area with environmental signage overlooks Pacheco Pond. Marin County Parks manages both Deer Island and Rush Creek Open Space Preserves, including a trail network within each. In addition Marin County Parks runs Blackpoint Boat Launch; a Bay Water Trail site with public restroom and picnic facilities. The City of Novato manages the small neighborhood Slade Park on the edge of the Novato Creek diked marshland. CDFW owns Day Island Unit of the Petaluma Marsh Wildlife Area, also in the Blackpoint community.

### Water Trail Sites

#### Black Point Boat Launch:

- This launch provides a perfect setting for paddlers and rowers to explore the Petaluma River and San Pablo Bay.
- Manager: Marin County Parks
- Launch Type: Dock, ramp
- Facilities: Parking, restrooms, fish-cleaning station, picnic table





**LEGEND**

-  STUDY BOUNDARY
-  COUNTY BOUNDARIES
-  ROADS
-  RAIL
-  (E) BAY TRAIL
-  (E) VINE TRAIL
-  (E) RIDGE TRAIL
-  (E) SMART TRAIL
-  (E) OTHER TRAIL
-  PARKING
-  (E) BOAT LAUNCH

E - Existing



**End of SMART bike path near SR37 and 101**



**Deer Island Trailhead**



**Black Point Boat Launch**



**Hamilton Wetlands Bay Trail**



**Hamilton Wetlands Bay Trail**



**Reservoir Hill Vista Trail, 1000 Hamilton Pkwy**



Petaluma Marsh (photo courtesy of the Water Trail)

## OPPORTUNITIES AND MISSING ACCESS

Along this system of rails and sloughs, the team investigated the stories of long deserted and hidden towns, landings, and railway stations in the Baylands. Many of these are named after settlers, operators, characteristics of the local environment and technology or long-holding indigenous people or place names.

Today most of these spots are intriguing ghost stations, still recorded on maps, each suggesting its story through the mysterious remnants and place names. Some of these enigmatic structures could be selected for restoration and repurposing as field stations for learning, public recreation facilities, wildlife stations, camps and other amenities. These sites could be nodes in a journey where through signage, exhibits, maps and public markings a connected narrative could be woven together connecting the past, present, and future Baylands. The indigenous names could reveal a memory or connection to the natural environment. Visitors could encounter and feel the stories of humans, wildlife, and landscape over time.

### Northern Mare Island

The northern tip of Mare Island is currently a flat and forlorn place that is visually dominated by the Napa River Bridge and elevated interchange. People arrive here from Vallejo and points south and east. To the north, Cullinan East is currently being restored and to the south are several low elevation empty lots and massive industrial warehouses.



### Guadalcanal Village

Named after a Pacific War campaign during World War II – codenamed Operation Watchtower, 1942-43. The success of this campaign on the island of Guadalcanal was considered a turning point for the US/Allies by stopping enemy expansion in the Pacific. Several residential housing developments on Mare Island were named after various war campaigns.



### Napa-Sonoma Marshes Wildlife Area

This area is influenced by tidal action from the mouth of the adjacent Napa River as well as freshwater from upriver. Although these lands were “reclaimed” for human use, they were occupied by diked salt ponds and, with the continued input of tidal water, there was less subsidence than farmed areas to the west where peat was removed from the soil. In recent decades, most of the salt pond levees have been breached for marsh restoration and these remain in various stages of recovery. Large areas of open water exist depending on the tides and seasonal events, overlain by the remains of breached levees. Many of these areas are already being managed for various ecological goals. At the same time, they are also most open to unpredictable changing conditions due to the strong influence of the Napa River and tides. Droughts, scouring flood events, upstream fires and runoff all effect the year to year sediment profile and water depths of these sloughs and marshes. This landscape contains some of the most valuable bird habitat that requires larger zones or “cells” without land-based human access.





### **Cullinan Ranch**

Perhaps the most publicly accessible site in the baylands, this site offers a small parking area, interpretive signage, and kayak launch facilities. The levee-top trail that extends into the marshes is frequented by fishermen and birders.

### **Western Baylands (Skaggs, Haire, Tubbs Islands, etc.)**

This area adjacent to Sonoma Creek was farmed for over a century. Agriculture aerated the soil and removed peat. The dikes cut off the supply of new sediment resulting in areas of land subsidence up to 7 feet below sea level. Restoring these areas by conventional means would consume a huge amount of resources (i.e. imported sediment as well as money) to achieve ecological goals. For example, restoring Skaggs Island to its pre-farmed elevation would require 40 million cubic yards of dredged sediment while the entire SF Bay produces only 1 million cubic yards per year.



### **Tubbs Island**

Brothers Alfred and Hiram Tubbs came to San Francisco from New Hampshire in 1850/53. Through various partnerships their company transported hemp from Asia and established Tubbs Cordage CO, the largest maritime rope-making firm on the Pacific Coast, (1854-1981). Among the company records are Tubbs family estate papers – 1902-1919, under Susan Tubbs (widow of Hiram) for the Tubbs Island Farm. Local lore confirms the connection between Tubbs Cordage and the naming of the island.



### **Richard Janson Bridge**

This bridge spans Sonoma Creek on SR 37. Janson was an Estonian immigrant and a retired merchant seaman who worked his way to California from Alaska on fishing boats. He lived near the mouth of Sonoma Creek in a houseboat called the arc. Known to be an enigmatic character – he also carved duck decoys out of redwood. He sold hundreds of these to local duck hunters. The bridge was named after him 15 years after his death in 1951. His decoys are now considered collectables. Some called him the Van Gogh of the marsh.

### **Sears Point**

Sears Point - Sears Point is named after Franklin Sears, a one time gold miner turned farmer whose family settled there in the 1850's. Much of his land was originally salt marsh which he diked and filled and is now once again being returned to salt marsh.



### **Sonoma Raceway**

The Raceway is actively used even when there are no race events, but during major race events, it can accommodate more than 100,000 visitors. During major events, visitors hold Winnebago tailgate festivities in the field across the road from their pedestrian visitor entry.



### Cougar Mountain

This landform above the Sonoma Raceway and Sears Point is the most visible landscape feature for miles around and affords incredible views of the baylands from the top.



### Toley Creek and Lake

Toley is the name of an indigenous leader whose people lived in the valley near Toley Lake. Now through the Toley Lake Regional Park, and the Graton Rancheria work is underway to restore the Toley Lake watershed, reveal the indigenous and ranching history here, as well as and create a trail from the uplands to the Bay.



### Fairville

There is not much left of this old landing/village except a massive old Eucalyptus hedgerow and possibly an old metal barn that could be a remnant. Ravenswood Winery occupies the site and it's not currently a public facility.

### Pacheco Pond

The only freshwater public pond in the San Pablo Bay Region which is currently accessible by car and soon to be connected through Bay Trail.



### Wingo

Louis Semino was the caretaker at Wingo a small settlement of now abandoned structures just down slough from Schellville. He and his family operated two drawbridges allowing trains and water transport to bring goods and people through the marsh to the uplands. Hunters and fisherman at times used other cottages.



### Carneros Region

As uplands meet the lowlands there is transitional zone of sizable dimension where things flatten out and gradually descend into tidal marshes. This margin less flood prone and more seismically stable and is coveted for vineyards, though they are vulnerable to saltwater incursion. Infrequently-used freight rail tracks traverse the southern edge of the stable ground and evidence of old train stops, landings, and other historical settlements can be found at Ramal, Merazo, Buchli, and near the mouth of Huichica Creek. In terms of marsh health, the margin is also home to areas with “elevation capital,” meaning that since they sit at a higher elevation, less sediment is required to allow marshes to migrate here in the future. Being adjacent to existing upland open space, these cultivated zones also allow easier habitat connections along streams as well as opportunities to unlock sediment bottlenecks, typically at rail and roadway culverts.



### Huchica Creek and Duhig Road

On lands adjacent to Huichica creek runs Duhig road. Huichica is thought to be the indigenous name for a burrowing owl. This land was originally mapped as part of the Rancho Huichica and still called the Huichica district today. Stewart Duhig was the grandson of James Duhig who settled in 1850 to grow hay and grain, and raise cattle and sheep. Over a century later, Stewart, having grown up on the farm wrote a local history, rich in stories of people and old farming techniques. His book called Huichica was self-published in 1990.



### Schellville

This is a town built around rail and highway crossroads. The road and rail present a major silt bottleneck on Sonoma Creek. Some inhabited structures and houses remain along with a restaurant, the Schellville Grill. This is the closest thing to a recognized Napa / Sonoma amenity site that motorists encounter on their way to wine country towns.



### Hudeman Landing

This historical landing site on Hudeman's Slough Boat Launch is located well off the road and rail that was used to move farm products and materials in an out by shallow draft scows. The boat launch is currently closed and needs to be renovated before it can be reopened for public use.



### Buchli

To transport hay and grain the local farmers used a combination of transport – draft bottom boats traveled the many sloughs, rivers and creeks to rail stops – including Buchli, Schellville and Fairville. Buchli station was named for the Buchli family who ran a dairy farm and planted rows of eucalyptus trees that ran from the dairy to the station.

### Railroad artifacts

Railroad artifacts - The railroad ties that formed the train tracks were split from redwood. They aged quickly under the weight of the frequent and heavy freight trains. Local farmers would often claim them to be re-used as fence posts that apparently can still be seen in the Huichica area along Ramal road.



**Brazos Bridge / Dutton Landing**

A historical landing site, this area is now dominated by the Brazos Rail Bridge, which remains in good condition.



**Green Island**

This small island hill in the marsh east of the Napa River has an old farmhouse replete with the classic two palm entry and surrounding gardens. The elevation affords views out on all sides and big grassy slopes down to water. While it's remote and hard to find, the site is accessible by car, and there's a public parking lot, restrooms, and a kayak launch.



**Napa Junction / Landfill Park**

This remains a key rail junction for freight trains and a staging ground for light industrial warehouses linked to the wine industry such as coopers and shippers that take advantage of proximity to the rail line and highway 29. Open land to the west includes a eucalyptus forest, creek, restored marshes, Wetlands Edge Park, and a publicly accessible capped landfill with a kayak launching point at the Napa River. This area already well used by American Canyon residents.



**Slaughterhouse Point**

A hard-to-find peninsula where apparently a slaughterhouse was once located away from human settlement, but is now covered with single family housing. There is a small piece of open space at the point on a rise above healthy marshes and slough connected directly to the Napa River. From this point, the 200' electrical transmission towers march across the marsh all the way to Sears Point.

**Deer Island Preserve**

Once part of the extensive wetlands of the Petaluma River delta, this hill is now this island among Petaluma marshes is a unique preserve with topography, views and oak groves. The island is currently detached from major trail networks in the North Bay.





## REGULATORY AUTHORITY

There are a multitude of federal, state, regional, and local government agencies with regulatory authority within the San Pablo Baylands.

Development of transportation, recreation, and park facilities may be subject to the following permitting authorities:

- **U.S. Fish and Wildlife Service (USFWS)/ National Marine Fisheries Service (NMFS):** Formal consultation for threatened and endangered species under Section 7 of the Federal Endangered Species Act could be required. Informal consultation or a Biological Opinion could be needed prior to approval of the final environmental document. USFWS is also a landowner that adds another layer of authority involved.
- **Federal Highway Administration (FHWA):** Concurrence that the Project conforms to the State Implementation Plan (SIP) in accordance with 40 CFR 93 could be required.
- **Interagency Air Quality Conformity Task Force:** Concurrence that the Project is not a Project of Air Quality Concern as defined by 40 CFR 93.123(b)(1), and conforms at the regional level to the Clean Air Act could be required. Consultation must be completed prior to applying to FHWA for air quality conformity determination.
- **State Historic Preservation Officer (SHPO):** There is a potential for adverse effects to cultural resources, and design options could be pursued that can avoid such effects. The Section 106 Programmatic Agreement between the Advisory Council on Historic Preservation, the FHWA, and the State Historic Preservation Officer (SHPO) requires SHPO concurrence on determinations of eligibility and findings of effect.
- **U.S. Army Corps of Engineers (USACE):** Access facilities may require a Preliminary Jurisdictional Determination identifying wetlands and other Waters of the United States within the Project footprint under Clean Water Act Section 404 and Section 10 of the Rivers and Harbors Act of 1899. Any work within jurisdictional areas could require a Section 404 Permit, and any work in, under, or over a navigable waterway could require a Section 10 permit. The expected timeframe is 6 to 12 months.
- **Regional Water Quality Control Board (RWQCB):** The USACE permit could require RWQCB approval of a Section 401 Water Quality Certification or Waiver. The RWQCB certification or waiver is approved following, or contingent upon, receipt of all federal permits, including the USACE authorization and agreement on wetland mitigation. Time required is a minimum of 3 to 6 months following



**US Army Corps  
of Engineers®**



USACE permit approval and agreement on mitigation. The Project could also require a Notice of Construction and Storm Water Pollution Prevention Plan agreement with RWQCB, which is typically obtained during the construction phase.

- **California Department of Fish and Wildlife (CDFW):** The CDFW may require a 1602 Agreement for a Streambed Alteration Agreement. Their jurisdiction could apply to the banks of a creek or waterway habitat affected by the Project. The definition of 'stream' does not generally include tidal sloughs or other tidally-influenced areas. They could require 6 months minimum following receipt of a complete application and agreement on mitigation. An Incidental Take Permit may be required for impacts. CDFW is also a landowner that adds another layer of authority involved.
- **San Francisco Bay Conservation and Development Commission (BCDC):** BCDC jurisdiction is located along the Bay shoreline, which occurs along the southern portion of the project study area. Coordination with BCDC will also be necessary pursuant to Coastal Zone Management Act consistency requirements.
- **United States Coast Guard (USCG):** Bridge permit or approval that the existing Bridge Permit maintains vertical and horizontal clearances within the navigation channel.
- **California State Lands Commission (CSLC):** A California Public Resources Code Division 6 Permit may be required.
- **Sonoma-Marin Area Rail Transit (SMART):** A railroad agreement may be required for at-grade or grade separated crossings
- **California Public Utilities Commission (CPUC):** The CPUC review and agreement may be required for at-grade or grade separated crossings along essential utilities including water, railroad, rail transit, and passenger transportation companies.



## SENSITIVE HABITATS

The San Pablo Baylands represent some of the Bay Area's best large-scale tidal marshland habitat, supporting a variety of uniquely adapted and/or rare plants and animals. For three decades, San Pablo's Bayland restoration has been a major focus of San Francisco Bay estuary restoration.

The mudflats and open shallows of the North Baylands support a wide diversity of resident and migrating bird species. These birds follow the rhythms of the tides and seasons, using it as a place to rest during migrations and feeding on the mudflats at low tide. The shallow waters of the baylands are also crucial nurseries for fish species such as steelhead, trout, and salmon.

The marshes of the North Baylands are especially important for some sensitive bird and mammal species. The endangered salt marsh harvest mouse (*Reithrontomys raviventris*) relies on pickleweed in marsh plain, but also requires access to higher ground during high tides and flooding events.

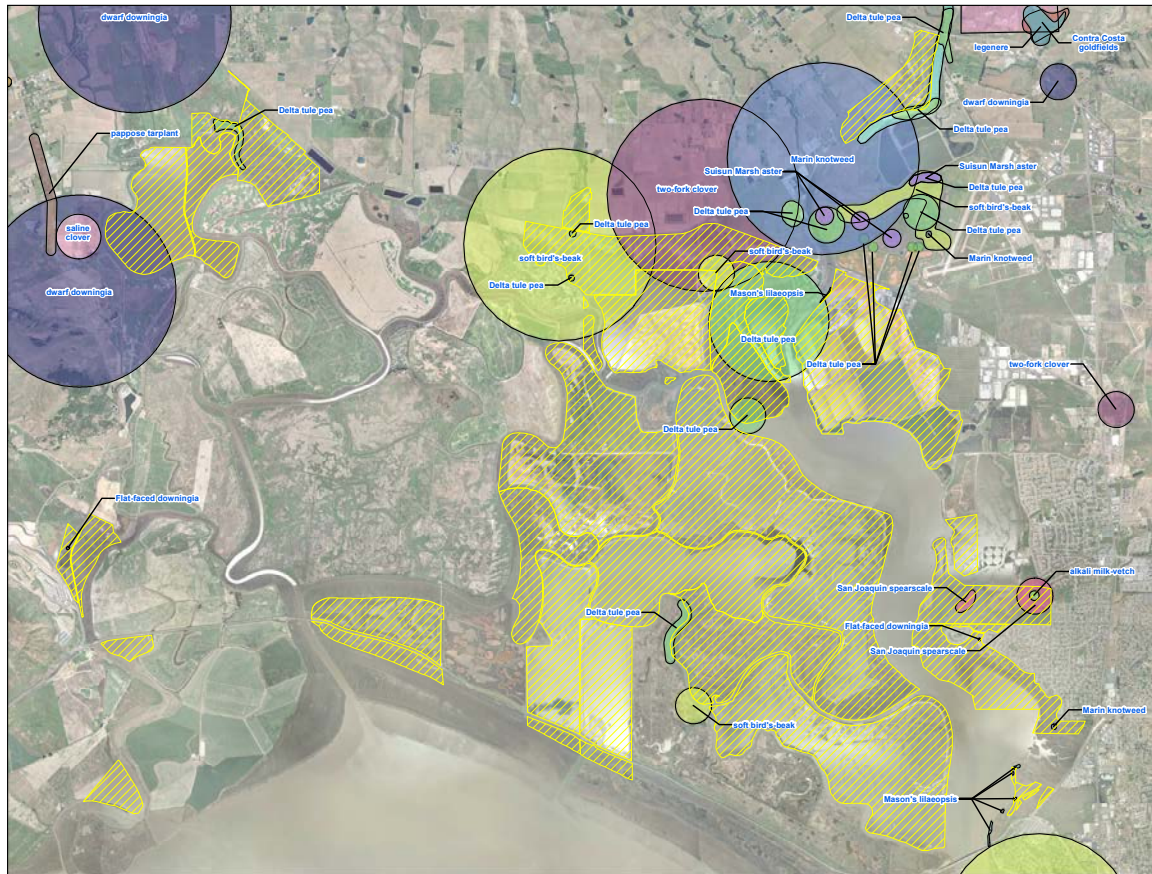
This means that ideal habitat for these animals consists not only of healthy growths of pickleweed, but also access to topographic highs on the fringes and "islands" within the marsh itself. Similarly, the near threatened California black rail (a state fully protected species) requires full vegetative cover for nesting, but connectivity of the marsh plain to the surrounding uplands, dominated by upland and coyote brush, is crucial for this species to thrive. The San Pablo Baylands is home to roughly half the North American population of this species.

The endangered Ridgeway's rail (*Rallus longirostris obsoletus*) must be able to access the mudflats and marsh plain to forage, and makes its nest in the stands of cordgrass that grow in between.

Many State of California fully protected species (e.g. salt marsh harvest mouse, California black rail, California Ridgeway's rail) also need upland connectivity to survive, which will be challenging in the face of SLR. With climate change and SLR, a major challenge is how to address a need for space for marsh to migrate. **In addition, the challenge also facing resource agency managers is where and how to provide public access in proximity to sensitive habitats.**

Federal and state resource agency landowners within the San Pablo Baylands have adopted management policies that prioritize habitat restoration within their lands, while recognizing the importance of appropriate and compatible public access.

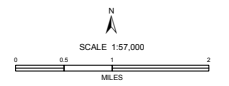
Under the McAteer-Petris Act, BCDC must assure that every project provides maximum feasible public access. In addition, both the Sonoma and Napa County General Plans identify priority goals to protect extensive open space landscapes where recreation, protection of natural, cultural, and archaeological resources, agricultural production, and private property are mutually supportive and complementary. It is safe to say that public access in the San Pablo Baylands are desired by Federal, State and County resource agencies, but there are



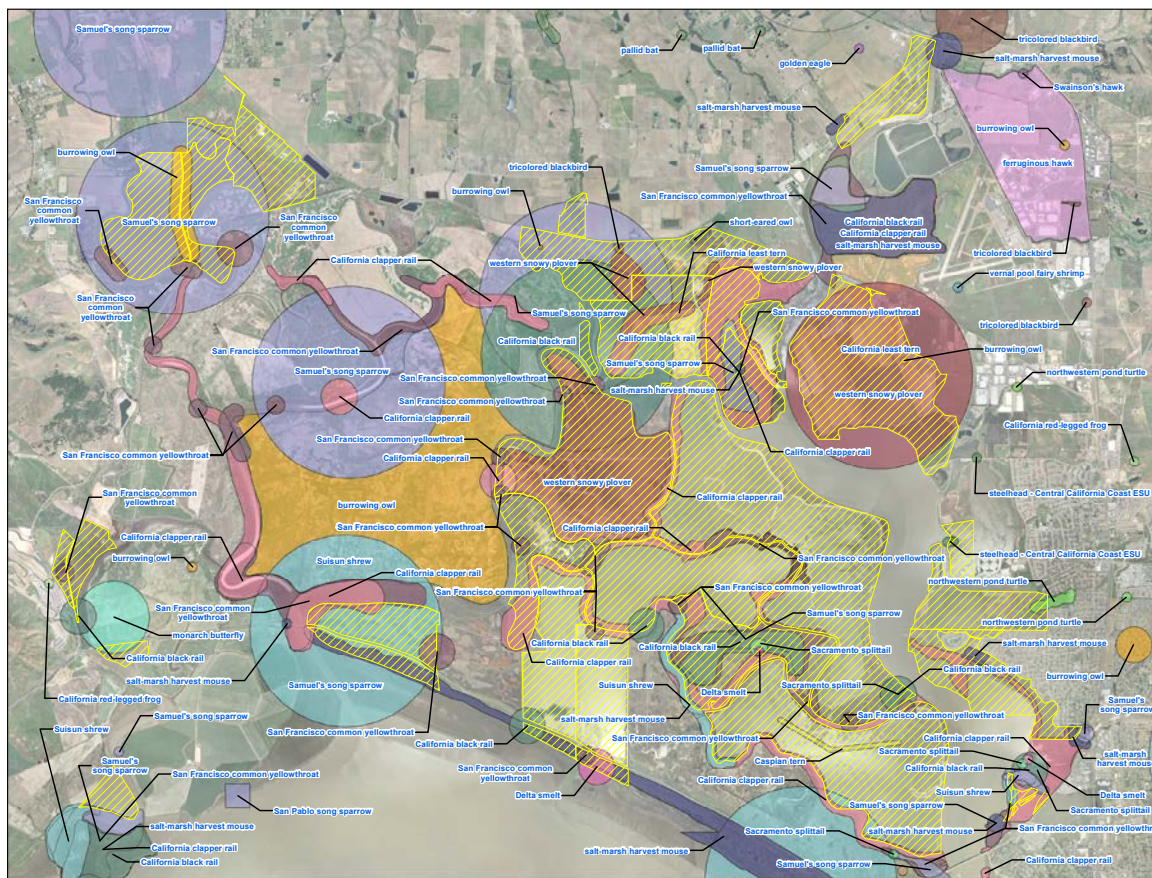
**Napa Sonoma Marshes Wildlife Area Land Management Plan**  
**FIGURE 11**

**Special-Status Occurrences: Plant Species**

NSMWA Management Unit boundary  
 Base Imagery: Airphoto USA, 1 April 2007, 0.3-meter cell size



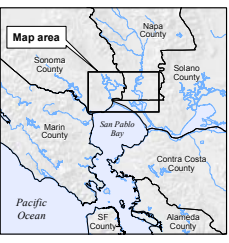
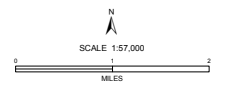
URS  
 SEPTEMBER 2011



**Napa Sonoma Marshes Wildlife Area Land Management Plan**  
**FIGURE 12**

**Special-Status Occurrences: Wildlife, Fisheries, and Invertebrate Species**

NSMWA Management Unit boundary  
 Base Imagery: Airphoto USA, 1 April 2007, 0.3-meter cell size



URS  
 SEPTEMBER 2011

In addition to the enhancement of wildlife corridors that connect the marsh plain to the uplands, establishment of topographic highs within the marsh are also essential for ecosystem function. Often, small animals are not able to travel across large swaths of land when the tide is rising and need islands within the marsh to retreat to. These can take the form of mounds, large woody debris, or live vegetation.

## A Slice of The Baylands



### SUBTIDAL

Many organisms inhabit the muddy bottoms and shallow waters of the San Pablo Bay. The community is made up of phytoplankton, zooplankton, crabs, shrimp, fish, mammals and a huge variety of bird species. Bottom-dwelling organisms are fed upon by larger species such as leopard sharks, starry flounders and bar rays.

MEAN LOW WATER

### MUDFLAT

Tidal flats are exposed twice daily when the tides recede. When the tide comes in, it brings with it phytoplankton and algae that support a community of benthic invertebrates such as clams, worms, and snails. Equipped with specialized beaks and long legs, shorebirds probe the mud for food at ebb tide. The mudflats of the baylands provide feeding habitat for wintering shorebirds of the Pacific Flyway.

MEAN TIDE LEVEL

### LOW MARSH

Pacific cordgrass is the dominant vegetation in the saline environment of the low marsh zones that border the tidal marsh plains. These stands of cordgrass provide cover and nesting sites for birds like the endangered Ridgway's rail. A non-native species from the Atlantic coast, Smooth cordgrass, is rapidly spreading throughout the baylands. Smooth cordgrass is able to grow at lower elevations and colonize mudflats, thus displacing shorebirds who depend on mudflats to feed.

Other marshes around San Francisco Bay are bounded by development and these connected habitats and high-tide refugia are not as available. There is huge opportunity to further improve these ecological corridors in the North Baylands by allowing for marsh migration and enhancement of topographic highs. Nearby, China Camp State Park offers a wonderful precedent for transitions from the marsh plain to the upland habitats.

While the focus of large ecosystem restoration projects tends to focus on the endangered species, they are not the only beneficiaries of these efforts. When protections are implemented to improve habitat for species that we are legally required to protect, subsequent habitat improvements benefit many other members of the ecological community as well as the communities of people who visit these landscapes.



### MARSH PLAIN

The tidal marsh plain is dominated by pickleweed, a perennial succulent that gives this part of the landscape its reddish hue. The endangered salt marsh harvest mouse and endemic San Pablo Bay song sparrow feed on pickleweed and other marsh plants. The baylands also support roughly half of the global population of the California black rail. In the higher portions of the tidal marsh plain, plants like saltgrass and the soft bird's beak, which is on the brink of extinction,

MEAN HIGHER HIGH WATER

### TRANSITION

The transition habitats are an essential part of a healthy, tidal marsh ecosystem. Above the limit of tidal flooding, this higher ground supports taller, denser plants and provides cover and high-tide refugia for marsh species. Marsh/upland transitional zones are also important because sea level may rise too quickly for the lower marshes to keep pace. Without large expanses of gently sloping transitional terrain for marshes to migrate into, the baylands may become submerged.

LIMIT OF TIDAL INFLUENCE

### UPLAND

Occupying the alluvial fans and hillslopes that surround the baylands, upland habitats support a wide array of plant and animal species. Coyote brush dominates the lower margins, providing cover for birds and small mammals and a crucial nectar source for insects in the winter months. Wildflowers dot the landscape in spring and larger mammals like coyotes and mountain lions roam the hillslopes.

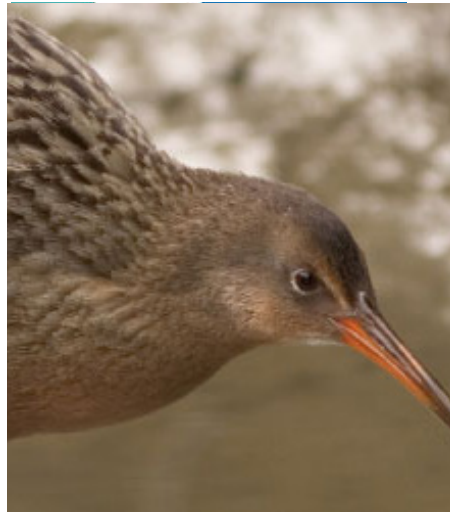
MEAN HIGH WATER

Artwork by Emily Underwood



**California Black Rail**

Source: <https://baynature.org/article/elusive-black-rail-may-adapt-better-than-you-d-think/>



**Ridgeway Rail**

Source: [https://www.fws.gov/Sacramento/es\\_kids/CA-Clapper-Rail/](https://www.fws.gov/Sacramento/es_kids/CA-Clapper-Rail/)



**Salt Marsh Harvest Mouse**

Source: [https://www.fws.gov/refuge/San\\_Pablo\\_Bay/Harvest\\_Mouse\\_Profile.html](https://www.fws.gov/refuge/San_Pablo_Bay/Harvest_Mouse_Profile.html)

numerous questions about what the relationship, location, distance, configuration and density should be. Additional challenges include significant concern with limited staff and maintenance resources for existing facilities and the threat of sea-level rise and climate change.

## BCDC

BCDC's Bay Plan recognizes that public access needs to be designed to respect the natural environments through which it passes. The Plan identifies specific environmental protection policies and Bay Trail design guidelines, including discouraging new stream, creek and slough crossings, and bridging them when no acceptable alternative exists. It anticipates situations where the alignment of the Bay Trail may more appropriately be located away from the shoreline in order to protect particularly sensitive habitats. In those instances, it encourages spur trails to provide access from the main trail to points of natural, historic and cultural interest along the waterfront. It supports land managers prohibiting domestic pets if they determine that their presence would conflict with habitat values. It also emphasizes the importance of being sensitive to the natural environment when maintaining and managing trails once built.

In 2001, BCDC published **Public Access and Wildlife Compatibility**. The study recognized that public access could have adverse effects on wildlife.

The type and severity of impacts on wildlife would depend on the type of human activity, and the predictability, frequency, magnitude, timing, season, and location of the activity. Impacts would also depend on the particular species, group size, age, sex, and resident or migratory nature. In addition, the study recommended that significant adverse effects should be considered within a regional context.

Appropriate site specific strategies would consider a variety of factors such as type of habitat, species present, adjacent land uses, types and frequency of users, planned future use of an area, management objectives, public input, and available funding.

Potential adverse effects from public access could be addressed through use of siting, design and management strategies that avoid or minimize adverse effects. Strategies might include use restrictions, buffers, periodic closures, or the prohibition of public access in specific areas. When public access must be set back from a shoreline or natural feature to avoid or minimize human disturbance of wildlife, it stated that formalized spur trails would reduce the risk of people creating their own informal pathways, increasing habitat fragmentation and predator access routes.

The report encouraged Federal, state, regional, and local jurisdictions, special districts, and BCDC to cooperate to identify and provide appropriately sited, designed and managed public access. It also



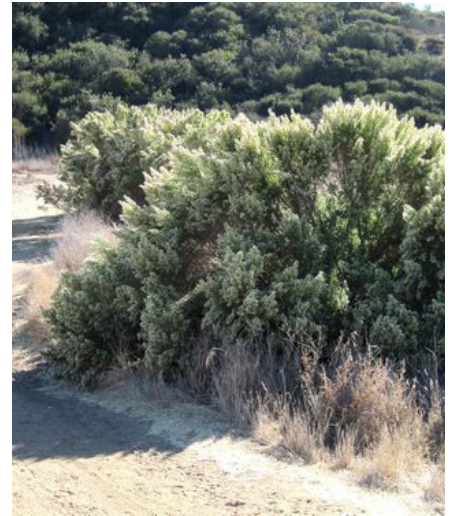
**Cordgrass**

Source: <http://nathistoc.bio.uci.edu/plants/Poaceae/Spartina%20foliosa/Spartina%20foliosa.htm>



**Pickleweed**

Source: <http://www.solpugid.com/cabiotal/pickleweed.htm>



**Coyote Bush**

Source: [https://calcscape.org/Baccharis-pilularis-\(Coyote-Bush\)](https://calcscape.org/Baccharis-pilularis-(Coyote-Bush))

recommended that when State, regional, and local agencies approve restoration projects, they should assure that provisions for public access are included as conditions of approval.

In 2005, BCDC produced - **‘Shoreline Spaces’**, an advisory design guide for developing attractive, useable public access areas in balance with the needs of wildlife. Suggested approaches include designing physical features to buffer wildlife from human use, elevating places to provide improved visual access from a distance, locating parking, staging areas, and lighting away from sensitive habitat areas, and, incorporating educational and interpretive elements that explain conservation strategies.

## **USFWS**

The U.S. Wildlife Refuge System is different from other multiple use federally owned lands because its lands are closed to all public uses unless deemed compatible and formally allowed. The Improvement Act requires a formal process for determining compatibility of wildlife-dependent recreational use or any other public use of a refuge before it is allowed. In 2011, USFWS adopted the San Pablo Bay Wildlife Refuge Comprehensive Conservation Management Plan (CCP), in compliance with the law.

While grounded in the unifying mission of the

Refuge System, the plan sets forth a vision specific for this Refuge. It acknowledges that the Estuary is of hemispheric importance to shorebirds, commits the Refuge to working with partners to protect, enhance, and restore tidal and upland environments of San Pablo Bay, and to rely on using natural processes whenever possible combined with an adaptive management framework to respond to changing conditions.

The identified strategies include identifying **priority conservation areas**, and providing greater habitat protection for them, especially during key periods. Key areas for protection include existing high tide roost environments, pickleweed-dominated salt marsh habitat of Ridgway’s rail and the salt marsh harvest mouse along San Pablo Bay, and a broad tidal marsh plain on both sides of Sonoma Creek.

Importantly, the Vision also defines the Refuge’s commitment to recreational access.

***The Refuge will be an open space resource where wildlife and people connect— where people belong with nature and are immersed in it. The Refuge will be inclusive of all age groups, backgrounds, and skill levels by providing a variety of opportunities, including fishing, hunting, trails, interpretive signs and guided tours, and off-refuge environmental education to facilitate that connection.***



**Steelhead**

Source: [https://www.biologicaldiversity.org/species/fish/southern\\_California\\_steelhead\\_trout/index.html](https://www.biologicaldiversity.org/species/fish/southern_California_steelhead_trout/index.html)



**Coho Salmon**

Source: <https://www.wildlife.ca.gov/Conservation/Fishes/Coho-Salmon>



**Eelgrass**

Source: <https://www.wildlifetrusts.org/wildlife-explorer/marine/seaweeds-and-seagrass/common-eelgrass>

The CCP includes eight goals and corresponding objectives. Goal 7 establishes the public access purpose in the Refuge:

***Provide visitors and the local community with compatible wildlife-oriented outdoor recreation opportunities to enjoy, understand, and appreciate the resources of the Refuge.***

Goal 7 Objectives anticipate development of a number of more detailed plans, including a Visitor Services plan outlining how the Refuge should expand compatible public use opportunities.

Suggested elements include interpretive panels, informational signage and kiosks, photography points, hunting, fishing, and self-guided trails for hiking, bicycling, and boating. It calls for the Refuge to also coordinate trail planning with regional plans such as the San Francisco Bay Trail and Bay Water Trail, and to assess what route would be compatible with long-term restoration goals.

The plan supports additional public access, including a fishing pier and boardwalks and boat launch at Cullinan Ranch, a non-motorized boat ramp in the Sears Point Baylands, a trail leading into the

Figueras Unit, and bike access at Sonoma Baylands, Sears Point, Cullinan, Skaggs Island, Tolay Creek, and Lower Tubbs Island units to provide SF Bay Trail linkage. It also highlights the premium viewing opportunities at Lower Tubbs Island.

The CCP does not allow pets in the Refuge, camping, or fishing from land.

## **CDFW**

For the past thirty years, CDFW has focused its efforts in the San Pablo Baylands on acquisition and restoration efforts for a variety of habitats supporting a diversity of fish and wildlife. In 2011, the ***Napa-Sonoma Marshes Wildlife Area (NSMWA) Land Management Plan (LMP)*** was approved. It presents a practical, science-based, ecosystem approach to conservation management. It also incorporates the commitment of CDFW to coordinate and cooperate with NSMWA neighbors, other local stakeholders, and other conservation entities to minimize competition and conflicts among users and facilitate compatibility between public uses.

## SUMMARY OF SENSITIVE HABITATS

- The recognized challenge facing resource agency managers and the public is where and how to provide compatible and appropriate access in proximity to sensitive habitats.
- Special-status species include the Ridgeway Rail, California Black Rail, western snowy plover, Samuels song sparrow, San Francisco common yellowthroat, burrowing owl, and salt marsh harvest mouse.
- Within bay waters, delta smelt and steelhead have been identified for protection.
- Plant species of the Napa Sonoma Marshes Wildlife Area Management Plan include soft birds beak, two fork clover, Marin knotweed, dwarf dowingla, delta tule pea, and several other plants having tightly limited territory.
- Within the Refuge, some areas have been identified as having especially important habitat values. The mature tidal marshes of Coon Island have been relatively undisturbed for the past 50 years. Today, delta tule pea, Ca. black rail, Ridgeway Rail Salt Marsh Harvest Mouse, Samuel's song sparrow, and San Francisco common yellowthroat have all been sighted there. Other species include Ca. black rail, Ridgeway Rail Salt Marsh Harvest Mouse at Green island unit, BMK Unit V, Lower Tubbs island and south of SR37.
- Existing planned amenities face significant challenge of limited resources for maintenance.
- The USFWS and CDFW have expressed concern regarding O&M tied to funding and staff. It is currently difficult to properly maintain existing access facilities - trash, debris and illegal dumping remains a significant problem. Future public access trail and amenities are that more of an additional concern if O&M is expected on their managed lands.

The principal natural resource management consideration for the NSMWA is to restore and enhance a mosaic of habitats, including tidal salt and brackish water marshes, managed ponds, seasonal wetlands, and adjacent uplands. Special attention is mentioned for habitat for Ca. black rail, Ridgeway Rail, Salt Marsh Harvest Mouse, Coon Island, tidal marsh along the entire San Pablo Bay shoreline, particularly near the mouths of sloughs and major streams, and riparian habitat along Sonoma Creek in the Schellville area.

The primary purpose of NSMWA is for wildlife habitat and conservation. Wildlife dependent public access is a secondary use. The LMP serves as a guide for appropriate public uses of the property. CDFW's stated purpose in managing this Wildlife Areas is:

***... to protect and enhance habitat for wildlife species, and to provide the public with compatible, wildlife-related recreational uses.***

One stated LMP goal is increasing opportunities for low impact, wildlife-oriented uses that are compatible with wildlife and habitat goals.

## ENVIRONMENTAL

- Baylands Ecosystem Habitat Goals (1999)
- Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (2013)
- Adapting to Sea Level Rise Along the Northbay Shoreline (2013)
- The Baylands and Climate Change (2015)
- Novato Creek Baylands Vision (2015)
- USFWS Climate Adaptation Plan (2016)
- Comprehensive Conservation and Management Plan (2016)
- Bel Marin Keys Wetland Restoration Project- Preliminary Design Report (Ongoing)
- San Pablo Baylands: Ensuring a Resilient Shoreline (2017)
- Deer Island Basin Wetlands Restoration Project (Ongoing)
- California State Wildlife Action Plan (2015)
- NSMWA Land Management Plan (2011)

## TRANSPORTATION

- American Canyon Bicycle Plan (2012)
- American Canyon Pedestrian Plan (2017)
- Bay Area Water Trail Design Guidelines (2019)
- Bay Trail Design Guidelines (2016)
- Bay Trail Gap Analysis Study (2005)
- Bay Trail Plan (1989)
- San Francisco Bay Area Water Trail Plan (2011)
- Marin County Unincorporated Area Bike/Ped Plan (2018)
- Napa Countywide Bicycle Plan (2019)
- Napa Pedestrian Plan (2016)
- Novato Bicycle/Pedestrian Master Plan (2015)
- Petaluma River Turning Basin Report Dec (2015)
- Solano Bike Plan (2011)
- Solano Countywide Pedestrian Transportation Plan (2012)
- Solano Trails Plan (2002)
- Sonoma County Bicycle and Pedestrian Plan (2010)
- Sonoma County Bicycle and Pedestrian Plan (2014)
- Sonoma County Regional Parks-- Bay Trail Sears Point Connector Feasibility Study (2017)
- STA Bay Vine Trail - Draft Feasibility and Preliminary Engineering Study (2014)

## GENERAL

- American Canyon General Plan Parks & Recreation Element (1994)
- City of Sonoma 2020 Circulation and Transit Element (2008)
- Napa County Parks Master Plan (2012)
- Napa General Plan- Open Space Element (2008)
- Novato General Plan Update (1998)
- Sonoma County Integrated Park Plan (2015)
- The Napa Countywide Transportation Plan – Vision 2040 (2015)
- Vallejo General Plan (2017)

## ON-GOING

- Caltrans- SR 37 State Highway Case Study (2013)
- Caltrans State Route 37 Transportation Concept Report (2015)
- MTC- SR 37 Transportation and Sea Level Rise Corridor Plan (2018)
- Caltrans Project Study Report- Project Development Support for SR37 (PSR-PDS) (2018)
- Caltrans- California State Rail Plan (2018)
- Caltrans- Dist. 4 Vulnerability Assessment Summary Report (2018)
- Sonoma-Marin Area Rail Transit District Passenger Rail Service Novato to Suisun City ( 2019)
- NVRTA Travel Behavior and Transit Feasibility Report (2019)

# STUDIES

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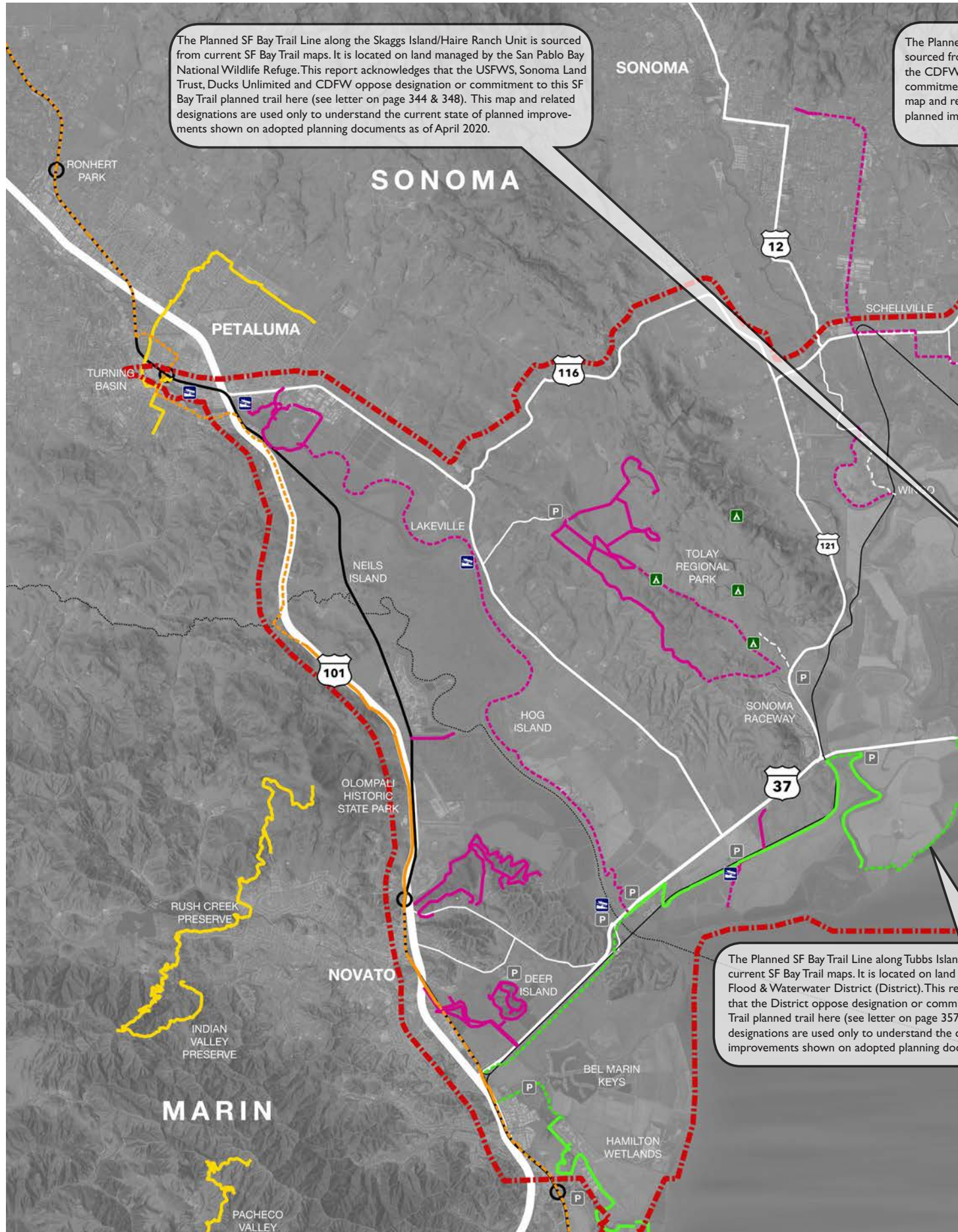
## PREVIOUS/ONGOING STUDIES

### *Summary*

Significant study of environmental restoration, active recreation, and transportation needs has occurred within and leading to the Baylands. In the Appendix (page 272) is a summary of relevant documents and maps existing public access conditions, land ownership, and sensitive habitats. It creates a foundation for development of public access goals and design standards within the Baylands. It also will guide active transportation and San Francisco Bay Trail integration with other mobility improvements along the SR-37 corridor. The relevant planning documents, policies, and guidelines for the Baylands provide a brief overview of the substantial work done to-date. For ease of navigation, the summaries are divided into four main categories:

- Environmental
- Transportation
- General
- On-going

# EXISTING STUDIES SHOWING ACCESS AND AMENITIES PLANNED OR SHOWN IN ADOPTED PLANNING DOCUMENTS



The Planned SF Bay Trail Line along the Skaggs Island/Haire Ranch Unit is sourced from current SF Bay Trail maps. It is located on land managed by the San Pablo Bay National Wildlife Refuge. This report acknowledges that the USFWS, Sonoma Land Trust, Ducks Unlimited and CDFW oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page 344 & 348). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

The Planned SF Bay Trail Line along Tubbs Island is sourced from current SF Bay Trail maps. It is located on land managed by the San Francisco Flood & Water District (District). This report acknowledges that the District opposes designation or commitment to this SF Bay Trail planned trail here (see letter on page 357). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

**GIS SOURCES**

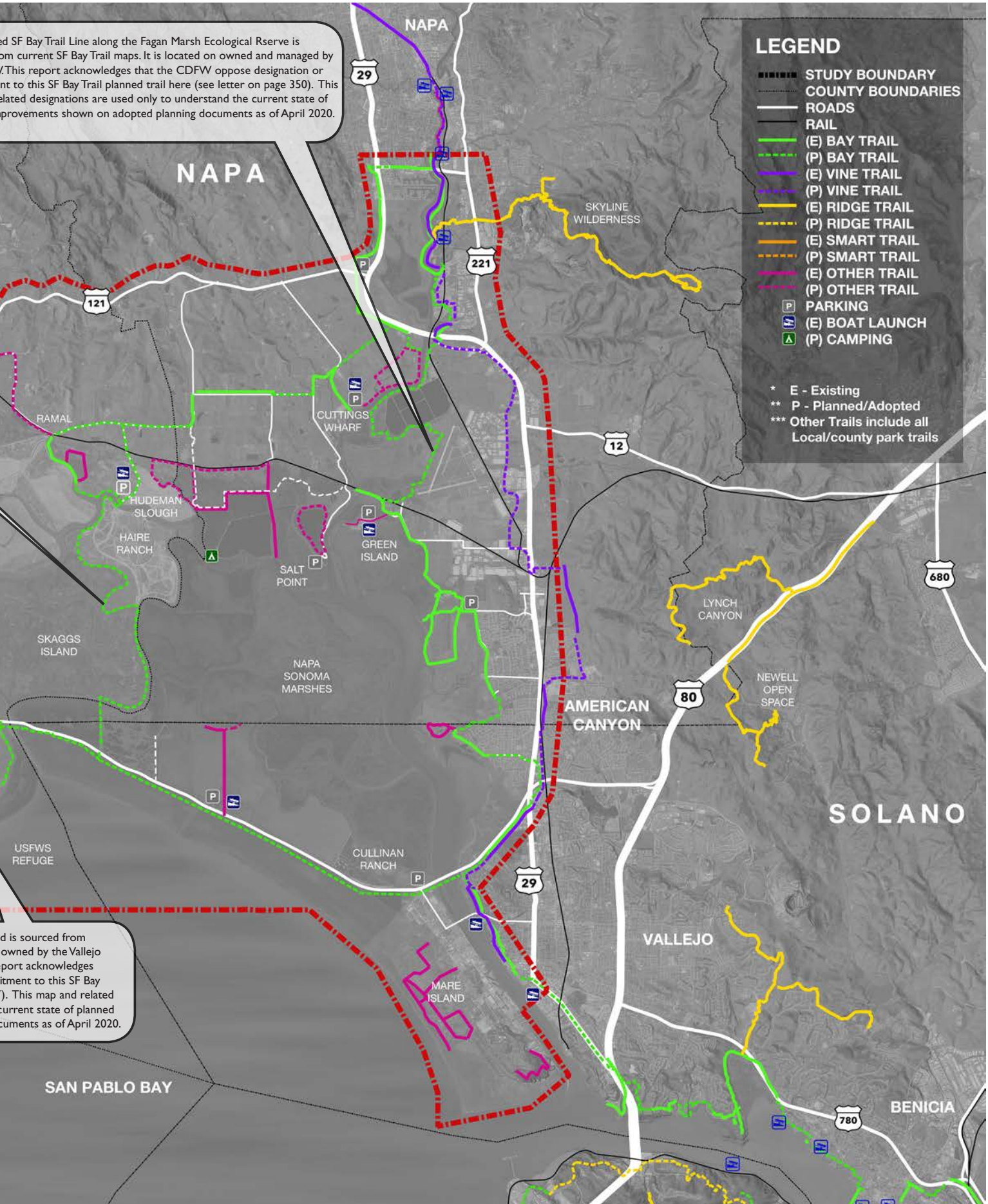
- Bay Trail
- Vine Trail
- Bay Area Ridge Trail
- SMART Pathway (Marin County Bicycle Coalition)

**OTHER SOURCES**

- Tolay Lake Regional Park Master Plan
- Rush Creek OSP
- Deer Island OSP + Adjacent Trails around Duck-bill and Heron's Beak Pond

- SPBNWR
- San Pablo Bay Trail
- Hudeman Slough Map
- SFBJV Map

ed SF Bay Trail Line along the Fagan Marsh Ecological Rserve is from current SF Bay Trail maps. It is located on owned and managed by . This report acknowledges that the CDFW oppose designation or ment to this SF Bay Trail planned trail here (see letter on page 350). This related designations are used only to understand the current state of improvements shown on adopted planning documents as of April 2020.



**LEGEND**

- STUDY BOUNDARY
- COUNTY BOUNDARIES
- ROADS
- RAIL
- (E) BAY TRAIL
- - - (P) BAY TRAIL
- (E) VINE TRAIL
- - - (P) VINE TRAIL
- (E) RIDGE TRAIL
- - - (P) RIDGE TRAIL
- (E) SMART TRAIL
- - - (P) SMART TRAIL
- (E) OTHER TRAIL
- - - (P) OTHER TRAIL
- P PARKING
- ⚓ (E) BOAT LAUNCH
- ⛺ (P) CAMPING

\* E - Existing  
 \*\* P - Planned/Adopted  
 \*\*\* Other Trails include all Local/county park trails

is sourced from owned by the Vallejo port acknowledges commitment to this SF Bay Trail ( ). This map and related current state of planned documents as of April 2020.



# TRAIL GAPS

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## BAY TRAIL GAPS

The San Francisco Bay Trail Plan was originally published in 1989. In 2005, A Gap Analysis Study was completed. It identified remaining gaps in the 500 mile trail system and estimated the cost to complete the system. As part of this report, the remaining Bay Trail gaps have been identified within the study area:

- Vallejo-American Canyon
- East side of Napa River
- Green Island Rd. to Soscol Ferry Road
- Soscol Ferry Road to Kennedy Park
- Bel Marin Keys Unit V Restoration
- SMART Rail Trail
- Eliot Trailhead to Tolay Unit Parking Lot in NSM-WA
- Tubbs Island Vallejo Sanitation District
- Skaggs Island
- Ramal Road
- SR37 Marin County

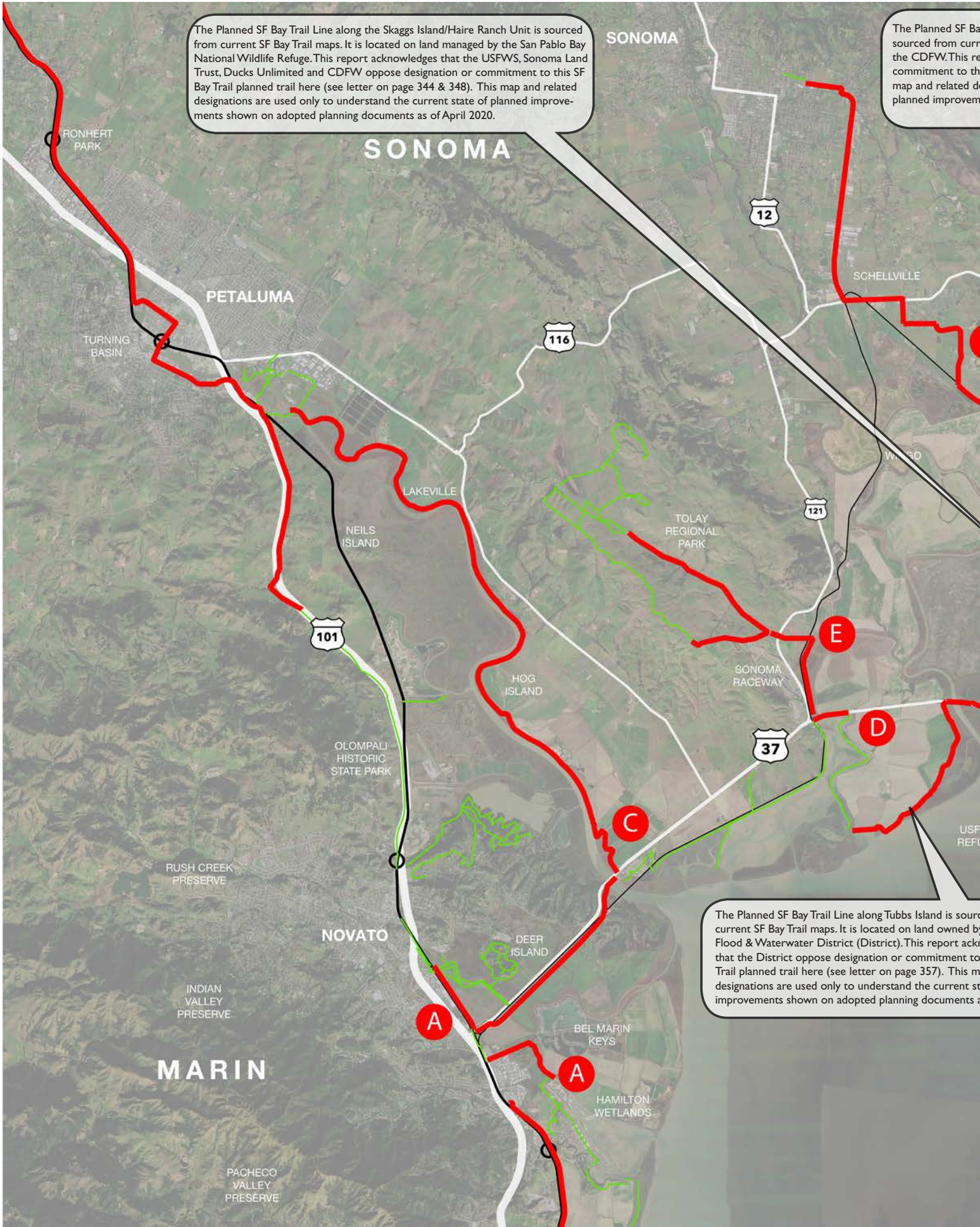
## OTHER TRAIL GAPS

In addition to the San Francisco Bay Trail gaps, other gaps in the trail network surrounding the Baylands have been identified that would support and contribute to a cohesive network in the region. These are identified as:

- Ultimate SR-37 Corridor
- Petaluma to Bay Trail
- Tolay Lake Regional Park to the Bay Trail
- City of Sonoma to the Bay Trail
- Mare Island

The gaps are described in detail in the Appendix on page 276.

# TRAIL GAPS



The Planned SF Bay Trail Line along the Skaggs Island/Haire Ranch Unit is sourced from current SF Bay Trail maps. It is located on land managed by the San Pablo Bay National Wildlife Refuge. This report acknowledges that the USFWS, Sonoma Land Trust, Ducks Unlimited and CDFW oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page 344 & 348). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

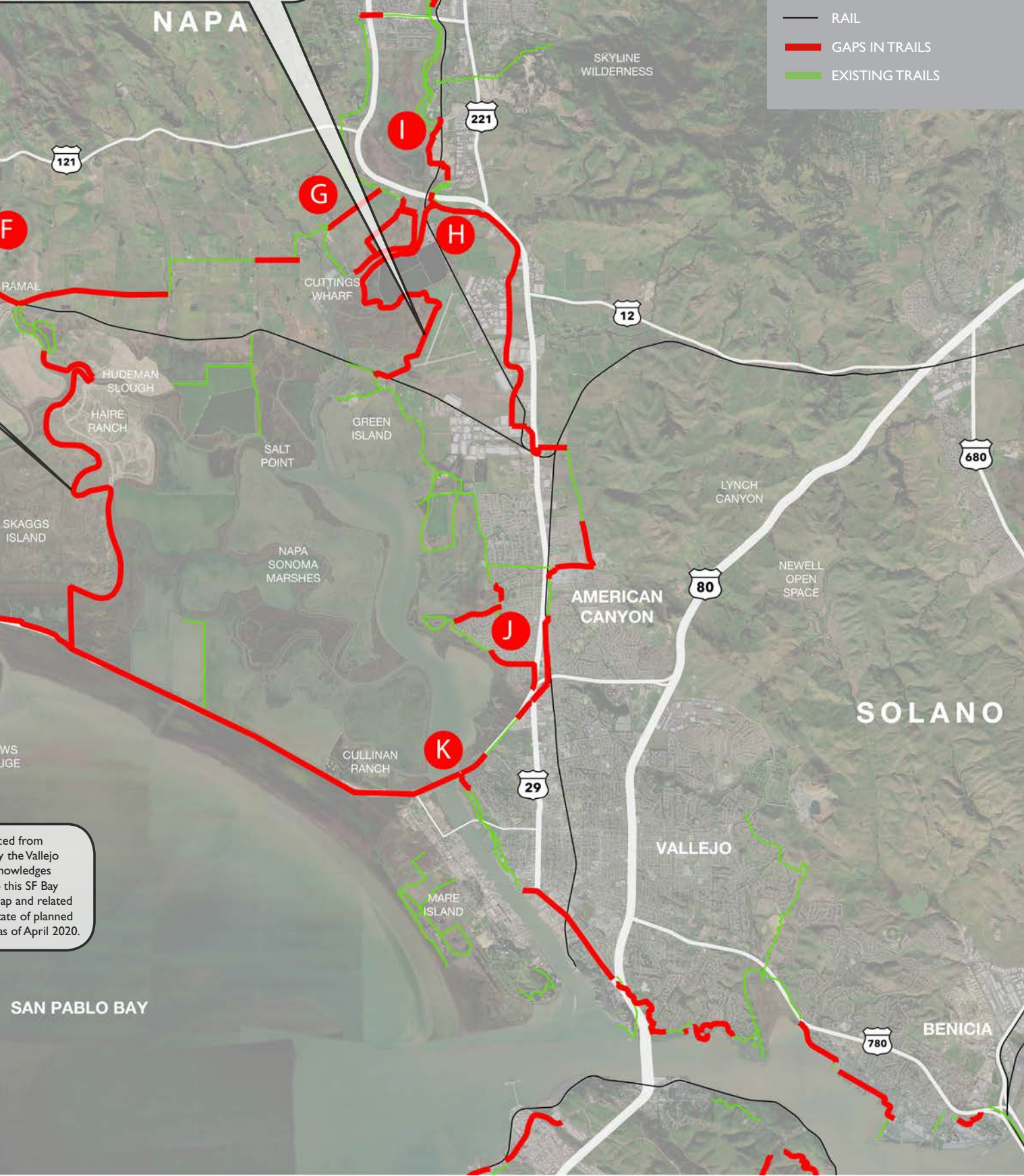
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Trail Line along the Fagan Marsh Ecological Reserve is present SF Bay Trail maps. It is located on owned and managed by report acknowledges that the CDFW oppose designation or is SF Bay Trail planned trail here (see letter on page350). This designations are used only to understand the current state of events shown on adopted planning documents as of April 2020.

**LEGEND**

- A TRAIL GAP KEY
- ROADS
- RAIL
- █ GAPS IN TRAILS
- █ EXISTING TRAILS



# NAPA

# SOLANO

# VALLEJO

# BENICIA

# SAN PABLO BAY

...ced from  
...y the Vallejo  
...nowledges  
...this SF Bay  
...ap and related  
...ate of planned  
...as of April 2020.



Have you known the  
lands in  
the area?

GRAND BAYWAY  
SP37 Public Access

Where else would you like to go in the Baylands?

Where have you been?

- A) METAVARS - 2000
- B) GREAT TECHNOLOGY
- C) CLIMATE CHANGE/ADAPTATION
- D) WATER RESOURCES - 2000
- E) OTHER - 2000

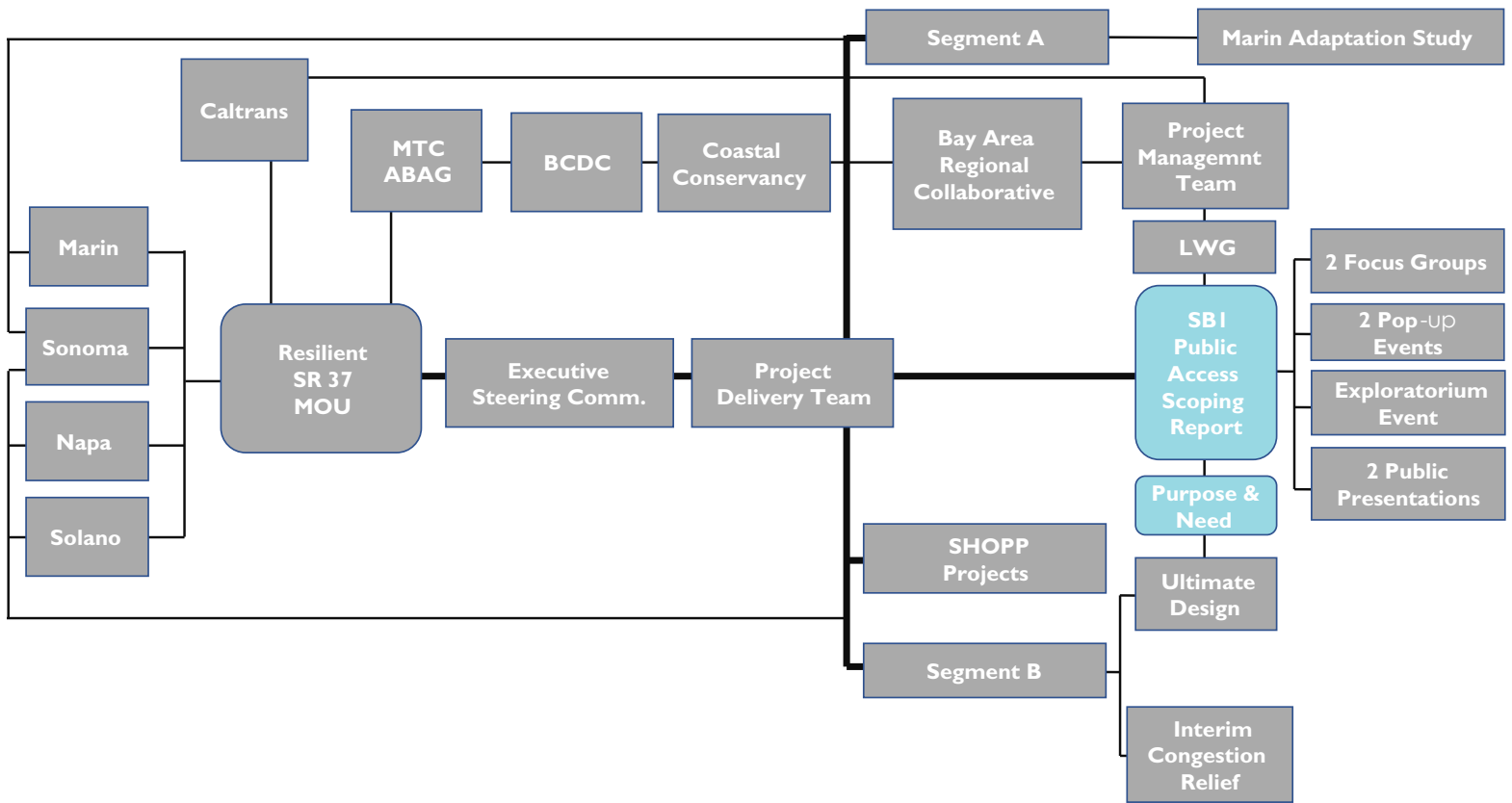
NAPM

REVIEW



# **PUBLIC ACCESS GOALS**

# SR37 PUBLIC ACCESS SCOPING REPORT MANAGEMENT PROCESS



# PROJECT ENGAGEMENT

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The development of the San Pablo Baylands Public Access Scoping Report has been compiled in close coordination with the SR37 planning efforts - both near-term and long-term improvement considerations. Updates used in this report are shared with the 4-County Policy Committee and MTC. Various public events and focused discussions with key stakeholders have occurred throughout development of the San Pablo Baylands Public Access Scoping Report utilizing a Local Working Group (LWG) selected by the SBI Adaptation Planning grant Project Management Team (SBIPMT) to provide technical knowledge and policy advice.

The SBIPMT has overseen this work and is made up of the following entities:

- Bay Area Regional Collaborative (BARC)
- Metropolitan Transportation Commission (MTC)
- Bay Conservation and Development Commission (BCDC)
- California State Coastal Conservancy (SCC)
- California State Transportation Agency District 4 (Caltrans District 4)

BARC's Executive Director will provide administration and management of the consultant team contract.

A LWG was appointed by the SR37 PDT team

in conjunction with SBIPMT to provide advice and review during development of the SR37 Public Access Scoping Report. The LWG includes representation from the following organizations:

- SF Bay Trail
- Napa Vine Trail
- SF Bay Area Water Trail
- Marin County Bicycle Coalition
- Napa County Bicycle Coalition
- Sonoma County Bicycle Coalition
- Sonoma County Regional Parks
- Greater Vallejo Recreation District
- California Department of Fish and Wildlife
- U.S. Fish and Wildlife Service
- Marin Audubon
- Ducks Unlimited
- Sonoma Land Trust
- Vallejo Community Representative (2)

## LOCAL WORKING GROUP #1



The first local working group was held on April 24th 2019 at the Baylands Center off of SR37 at Sears Point Road. The agenda for the meeting included an introduction to the project, goals, and schedule – and gave the local groups an opportunity to voice interests and concerns relating to the public access study.. Detailed meeting minutes are included in the Appendix. A summary of the feedback includes:

- **Sea Level Rise (SLR) is a major concern for access** planning in this region with most areas projected to be affected by SLR.
- Access from the edges of marsh and the upland edge have some beneficial logic but present some challenges for marsh retreat with SLR. Ecotone levees are important for this.
- A single public access solution should not be implemented in this region and site specific design needs to be explored based on ‘spectrum of accessibility’.
- CDFW major land owner - **is interested in getting people out to the Baylands but important to do it so that marshes can migrate with SLR.**
- **O&M considerations should be built into the planning process** – maintenance proves to be a very difficult challenge in this vast region.
- There are many recent examples of access that deals with SLR when done in association with restoration.
- **People need to see restoration efforts to continue to vote to support restoration efforts.**
- Not interested in Yolo Causeway project - include places where elevated trail can “touch down” for more direct exploration.
- **Water Access is the best way to see the Baylands.**
- Water trail facilities also used by Hunters.
- **Water trail guides are “knowledgeable educators.”**
- Seamless and low stress trail environments critical.
- **Make known what is already there in places like Vallejo** - untapped resources ready to take-off with better connections.
- **Access builds public support.**
- **Best way to protect the Baylands is through education.**

# SKAGGS ISLAND BIKE TOUR

On Saturday, June 15th the public was provided a rare opportunity to tour Skaggs Island, a 3,300-acre, former top secret naval communications site. Normally closed to the public, Skaggs Island is now a part of the San Pablo Bay National Wildlife Refuge.. There is an important planned Bay Trail route on Skaggs, so our team set up a 'pop-up' outreach tent at the entrance to the site to provide information for a self-guided ride through the refuge area. The route includes a 7-mile loop with a few optional spur trails of 0.3 and 0.5 miles. The event was open to bike or walk and featured many interested members of the public - including many families and children curious to explore this unknown part of the Bay Area. Many were familiar and appreciated the sensitive context and need for habitat protection including bird watchers. Most expressed interest in more areas to park and access this region.

**Q. While exploring the Baylands, would you like opportunities to learn more about**  
(or if you are an educator, do you teach about) :

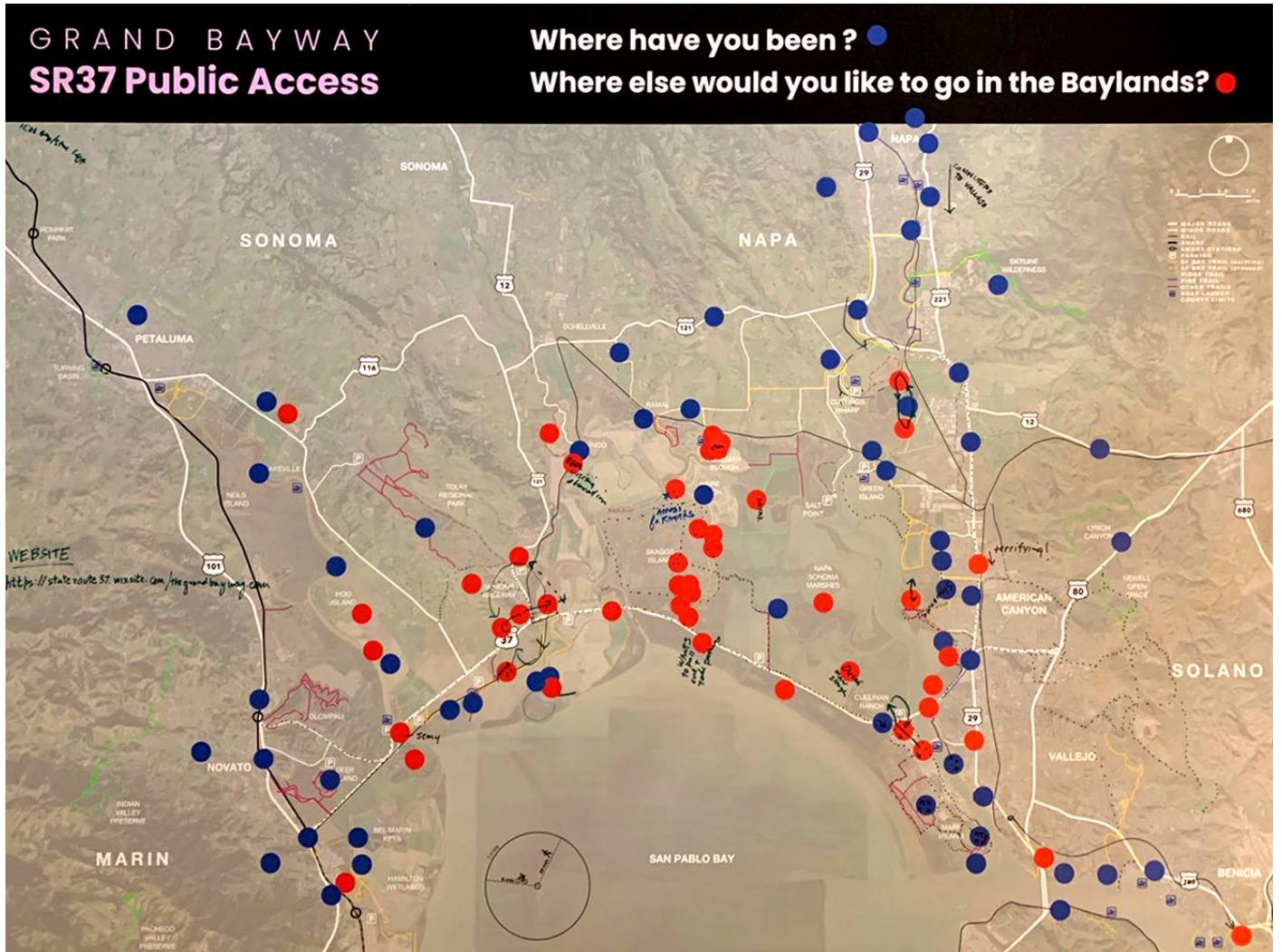
A.) **WETLANDS** ×××××××  
 B.) **SF BAY ECOLOGY** ×××  
 C.) **CLIMATE CHANGE/SEA LEVEL RISE** ×××  
 D.) **WILDLIFE/BIRDS** ×××××××××××××××  
 E.) **LOCAL HISTORY** ××××××  
 F.) **OTHER:** CA FIRES, *Urban, Salinity, like exploring joint urban*

**Q. What do you think are the most difficult concepts to understand ?**  
(or if you are an educator, to convey)

*WATER, WAD, Tidal Influence (change volume)*

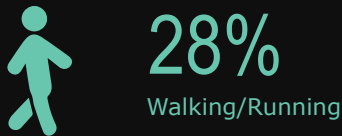
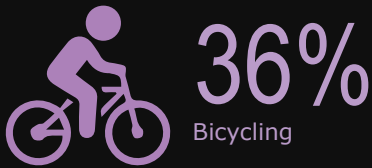
**Q. What would be useful to understand these concepts?**  
(or teach about)

A.) **NEW MAPS THAT SPECIFICALLY SHOW:** TIME BASED TRAILS, RIDING (SLOTTED)  
 B.) **SIGNAGE THAT SHOWS:** RESTROOMS, WATER, DISTANCE, TRAILS + WILDLIFE EXPOSED TO CO2  
 C.) **OTHER PUBLISHED MATERIALS:**  
 D.) **HANDS-ON EXHIBITS I CAN PLAY WITH THAT SHOW/DO:** SEA LEVEL RISE  
 E.) **OTHER:** RENTAL BIKES, THROUGH TRAILS, CALL USE VIRTUAL MAPS (ONE GREAT MAP) *ORIENTATION*

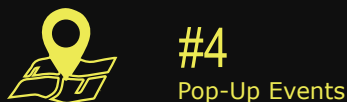


## Survey Results

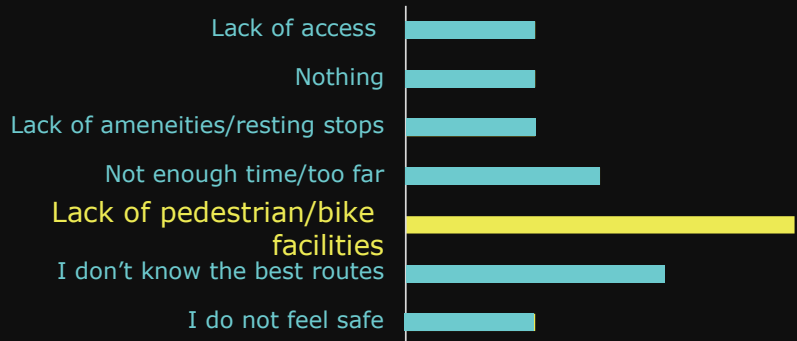
1.) Would you like to visit the Baylands for:



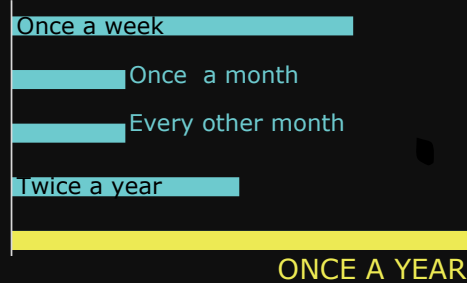
2.) What amenities would you like to see?



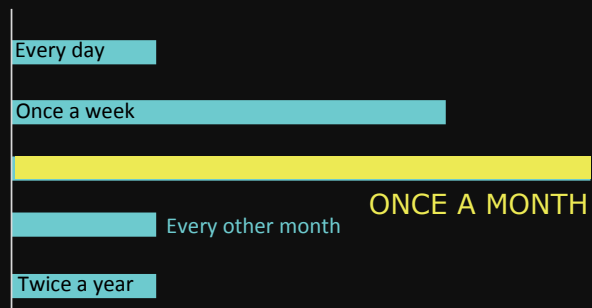
3.) What limits how often you visit the Baylands?



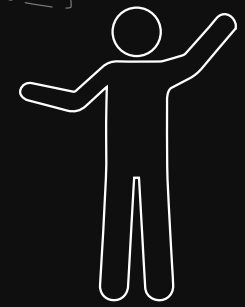
4.) How often do you currently visit the Baylands?



5) If Access was created for key destinations, how often would you visit these facilities ?



What is the ideal relationship between the people, the landscape, and wildlife?



## FOCUS GROUP #1

On July 17th, 2019 our team hosted a meeting at the Sonoma Raceway to gain focused feedback from agencies and people involved in the restoration and management of Baylands Habitat in the study area.

The objective of the meeting was to:

- gain the best understanding of the latest and greatest thinking within the Baylands science and regulatory environment;
- help evaluate areas in the study area or existing conditions that should be considered “no-go” zones for access;
- outline any conflicting policies that should be addressed including broader policy or regulatory issues such as long-term governance and management, and public access in sensitive habitat areas.

Detailed minutes of this meeting are included in the appendix. A summary of the meeting includes the following feedback:

- SF Bay Joint Venture’s role as a 27-member committee acting as primary convener of voluntary wetland habitat restoring organizations.
- **SF Bay Joint Venture’s San Pablo Bay Access map from 2010 is outdated** and includes many planned access routes that many in the group consider invalid.
- The CDFW do allow a lot of regulated public access for purpose of bird watching, hunting and other wildlife dependent activities. **Article 14 prohibits camping, biking so they will never agree to put a paved trail in their land or allow using any of the levees for pedestrian/biking purpose.**
- **Biggest challenge is maintenance.** No manpower or resources to keep track of the amenities and activities.
- As soon as **USFWS buys property, they restrict access.** They are only able to regulate based on wildlife habitat considerations.
- USFWS suggested that the preferred location for trails would be along SR 37 and the SMART rail line- other participants concurred

- Sonoma Creek Study – Public access is a part of their study, but they do not know what element, scope of public access would be included yet.
- SLT describes the tension with BCDC policies. **The perception is that the BCDC forces the land owners to maintain public access and all trails in place for eternity** if they allow a trail to be built through their land. With some certainty of SLR, they are hesitant to promise maintenance and access as they **wish freedom in adapting the trails in future.**
- SLT recommends finding funding for maintenance.
- Marin Audubon supports viewing from road along Atherton Ave in Novato.
- **As a group, they initially felt it was premature to fund this Scoping Report.**
- View habitat restoration is an adaptive process that requires time before considering where public access would be acceptable.
- It was recommended that no routes be shown on a map, because even if it has qualifying note, many will consider it to be a commitment to a location.

## REGULATORY AGENCY DISCUSSION

Based on feedback from Focus Group #1 meeting, our team met with Regulatory Agencies - BCDC, State Coastal Conservancy and MTC on September 4th. The purpose of the meeting was to discuss Public Access opportunities and their associated regulatory implication in the San Pablo Baylands Restoration planning areas.

Detailed minutes of this meeting are included in the appendix. A summary of the meeting includes the following feedback:

- Bay Plan Public Access Policies - **BCDC does not require landowners to maintain public access in place for eternity or 2100 with SLR impacts**
- Projects need to be “resilient” to mid century and adaptable for 2100 SLR - should have maximum



public access consistent with the specific project. Projects or trails can flood and still be resilient.

- **Plenty of leeway to permit and maintain trails without a requirement to maintain them in place for eternity.**
- Understand the feedback from CDFW as real constraints that make public access in certain regions difficult but not impossible.
- Bond measures that fund these projects can only fund capital improvements and not funding for annual maintenance.
- BCDC strongly recommended incorporating maintenance into the budget/trail planning for any projects. **Suisun Marsh restoration with CDFW is a recent example of a permit that required funding for operations and maintenance.**
- **Important to define the level and type of trails/public access for these different conditions** so it's not all lumped together. If it's all lumped together and undefined it creates confusion and unnecessary conflicts.
- Discussed pro and cons of public access planning lines clearly designated on a map - there is rationale for both showing clearly the lines/alignment (i.e. Bay Trail Maps) versus a objection from the environmental/restoration groups to show lines on a map. **BCDC agrees and states there is flexibility in adapting trail alignments in future (if there is a need) after monitoring restoration.**
- Agreed to show proposed trail alignments in restoration regions as more ambiguous connecting "corridors".
- All the alignments shown on SF Bay Trail Map (existing and planned) have been adopted and approved through multiple documents. They should be shown on existing access map.

## LOCAL WORKING GROUP #2

The second local working group was held at the Baylands Center off of SR37 at Sears Point Road on September 23rd 2019. The goal for the meeting was to review a draft of the overall vision plan and introduce trail alternatives for a series of Focus Areas. Detailed meeting minutes are included in the Appendix. A summary of the feedback includes:

- Reviewed Caltrans SHOPP projects at SR37 & 121 - include intersection between SR37-121 AND the 2 lane EB merger at east of the same intersection. **Neither of these projects currently include public access.**
- Governor Newsom has signed legislation requiring Caltrans to consider climate change adaptation in all SHOPP projects.
- Several speakers pointed out that flexibility in adapting public access once permitted has not been as straightforward as mentioned earlier by BCDC.
- Bay Trail staff have worked with BCDC to mitigate the loss of Tubbs Island loop trail to a levee breach by designating a small trail section adjacent to it.
- Suggestion to have **different permits/expectation for maintenance of public access trail systems based on usage, location and habitat sensitivity.** Most Bay Trail sections in these Baylands are not expected to be paved.
- LWG member from Vallejo suggested including **Mare Island as one of the focus areas.**
- Trails and amenities (local + regional) to be focused in the least impactful zones to preserve habitat and restoration efforts. **Precedent examples would be beneficial to see how the designation of various management zones are used in other refuge and habitat restoration projects.**

- **Skaggs Island Connector is identified as a critical connection in the region.** The existing USFWS Comprehensive Conservation Management Plan (CCMP) authorizes a Bay Trail alignment through Skaggs Island. Just north of the Refuge, Sonoma County has identified Hudeman Slough as a preferred location for expanded public access, including a boat launch and camping facilities. USFWS mentioned that its plan is from 2011 and anticipates revisions in the coming years with a goal of wildlife preservation. Our team **recommended using this study to inform public access opportunities through Skaggs Island, in either a revised CCMP or in a Visitor Management Plan as called for in the current CCMP.**
- SF Bay Water Trail expressed interest in adding more launch sites such as **improved access into Sonoma Creek.** Staff also stated that it is recognized that SLR will eventually eliminate some existing facilities.

## FOCUS GROUP #2

On November 4th, 2019 our team hosted a meeting to gain focused feedback from public access advocacy groups where we reviewed draft focus area maps and Trail Design Guidelines. A summary of the feedback is as follows:

- The SR37 Interim congestion relief project on segment B proposes includes an option for a Bike Shuttle to accommodate active transportation on S37 (current access is allowed on the shoulder).
- **Group does not support bike shuttle option on SR37** - shuttles are often canceled or funding is removed after a few months.
- **Closing the short gap of 4300' at Tolay Creek is a major opportunity** to respond to the mitigation for access in the interim S37 project. **Closing this gap would connect approximately 9 miles of Bay Trail.**
- Discussed importance of Skaggs Island connector to the access community. **An alternative route along 121 was explored earlier and determined that it was too dangerous** and not preferred.
- Suggest adaptation of permitting process with BCDC concerning access within a specific timeframe. Restoration/Baylands Group should have discussions with Bay Trail and BCDC as they plan their restoration efforts.
- **Major need for Class I or IV on Lakeville Highway.** Currently very dangerous and unused by even daring cyclists.
- There are **frequently large bike rides on Berndale/Ramal road** - a good corridor for improved facilities.
- Potential Hotel/Water launch site on Vallejo Waterfront.
- Important connections planned for the Bay Trail to the Ridge Trail along Eucalyptus drive in American Canyon. Double Class I on SR29.

- Major need for shade/water in open areas for users.
- **Most users will drive to the destination points**, others leaving from Petaluma will travel west rather than east towards the Baylands.
- **Trend is moving toward gravel bikers**
  - Hamilton Wetlands are an example where cyclists explore on these type of bikes.
- Expand considerations for the long-term SR37 solution - i.e. **cantilever and lowered section of a separated Bay Trail off of SR37**

## PEOPLE + BAYLANDS EVENT

### People and the Baylands: Public Learning and Equitable Access During Climate Adaptation, November 13, 2019, 7-9 pm Bay Observatory, Exploratorium

The Common Ground Team organized a series of public events to better understand how potential visitors think about the Baylands; What kinds of information do they want? Where would they like to visit? What interests them about the Baylands and what would they like to do there? How do recreation, wildlife viewing and education factor in?

This public event at the Exploratorium brought together scientists, environmentalists, policy makers, educators, and community leaders with a general audience to open a dialogue about equitable access in sensitive wildlife zones. The speakers included Mark Stacey from UC Berkeley, Brad McCrea from BCDC, Jessica Davenport from the State Coastal Conservancy, Jackie Finn of Bayview Hunters Point and the India Basin Project, David Halsing from the South Bay Restoration Project, Kay Flavell of New Pacific Studio, Vallejo, as well as Tom Leader and Erik Prince from Team Common Ground

Presenters gave brief descriptions of their approach to public access and the importance of different constituents and stakeholders working together. Leader and Prince gave an overview of the Grand Bayway project vision and the work to date with the Highway 37 working group to suggest potential trail links and guiding principles for future trail development and design. Stacey presented an overview of the science of sea level rise and the need for Bay Area governments to work together on adaptation plans. McCrea described the history of BCDC's approach to public access and their changing policies around bay fill and adaptation planning. Davenport introduced the Coastal Conservancies role in funding and guiding public access efforts and also introduced the Highway 37 working group. Flavell and Finn spoke from community organizing perspectives about the importance of public engagement for understanding both the ecology and history of people and wildlife in these locations. Halsing described the process in the South Bay for balancing restoration efforts with education and public access.

The event brought together many key individuals and groups in this space, some of whom are spearheading public access initiatives including the Bay and water trails, bicycle access, Cal Trans, Mare Island development project, the Friends of San Pablo Bay Wildlife refuge among others. The program had over 100 attending. The discussion was lively and positive but also opened up sensitive issues regarding access to wildlife, managed retreat, environmental justice and equity as well as meaningful approaches to public education and what stories should be told. From these events we learned how dialogue with people of differing expertise and knowledge is critically important for building resiliency in the Bay Area and how connections to stories of place can help to foster stewardship. We also learned that public access means different things to specific constituents and there is a need for continued dialogue and collaborative learning across disciplines and points of view.

## LOCAL WORKING GROUP #3

The third local working group was held at the Baylands Center off of SR37 at Sears Point Road on September 23rd 2019. The agenda for the meeting was to:

- Review and feedback on the Bicycle and Pedestrian Purpose and Need Statement.
- Consideration and feedback for developing a regional Zone Management Plan in a future planning effort - to aid in future decision making that balances public access and the protection of sensitive habitats.
- Review and feedback on Guiding Principles, including associated metrics and relative weights.
- Confirmation of two priority near-term projects and general scope of their opportunities.

Detailed meeting minutes are included in the Appendix. A summary of the feedback includes:

- Discussed email request from Anne Morkill from the USFWS regarding opposition to showing any access routes through the Skaggs Island Unit of the San Pablo Bay National Wildlife Refuge.
- **Disagreement remains regarding the removal of reference to public access at Skaggs Island.** The current Comprehensive Management Plan for this area specifically references both the SF Bay Trail and the Bay Area Water Trail. While there may be a desire to modify the plan, that process has not occurred, must involve all relevant stakeholders when it does, and until such time, the existing plan is the relevant guidance document.
- Request that the consultant team **revise the Framework Map to not show the route through Skaggs Island as a**

**“Mid-Term Regional Connector” line** at the request of USFWS, Sonoma Land Trust and Marin Audubon.

- Graphic for the Framework map and Focus Area map will be revised to address the request by taking the Skaggs Island connector line out of recommendations in this report as a near or midterm access opportunity.
- Noted that **“compatible and appropriate” public access on Skaggs Island will require additional planning in coordination with restoration efforts.**
- **General support of Zone Management Concept** and how it could help guide decisions in the future. Most discussion centered around “Core Wildlife Area” concept and how this could aid restoration effort. Concerns were also expressed from Bay Trail/ Water Trail that **this should not be used to holistically exclude all access but help guide the appropriate kinds of access in various areas.**
- Zone Management Concept, map or process has yet to be determined - ‘potential restoration area’ or per ‘private vs. public land’
- Adding improve signage and awareness to existing access facilities could provide very valuable and needed.
- Include language such as ‘adaptable and appropriate’ related to access in wildlife and sensitive habitat
- Suggestion to screen projects on the criteria matrix that might not meet a prioritization threshold, so that a hierarchy of projects can be evaluated together.
- **Overall in support of two priority project to carry forward as near-term projects - Mare Island and Sears Point/121.**



# GUIDING PRINCIPLES

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## **SCOPING REPORT PROJECT OBJECTIVES:**

- Develop a set of bike/e-bike, pedestrian and water recreation options that **BALANCE PUBLIC ACCESS & PROTECTION OF SENSITIVE HABITATS;**
- Confirm trail design principles, guidelines, and routing alternatives to **COMPLETE A CONTINUOUS SAN FRANCISCO BAY TRAIL ALIGNMENT** between Novato and Vallejo;
- Identify opportunities to incorporate **ACCESS TO THE BAY VIA THE SAN FRANCISCO BAY AREA WATER TRAIL;**
- Consider opportunities to **INCREASE AWARENESS AND ENVIRONMENTAL EDUCATION IN THE BAYLANDS;**
- **DELIVER STRATEGIC NEAR-TERM TRAIL AND ACCESS OPTIONS,** in coordination with the longer and near-term goals of the region.

This report is driven by the project objectives, directed by members of the SBI PMT. These objectives were then shaped by the project stakeholders and the community through the project engagement process noted in the previous chapter.

At the outset of the project, engagement activities were focused on familiarizing the team and stakeholders with the status of existing facilities, current planning efforts and defining a criteria for public access. Several consistent feedback themes emerged during this process:

- Strong desire to include public access in the planning of the 4-county sub-region.
- Not all forms of public access are understood as equal.
- There remains disagreement amongst stakeholders about what access is “compatible and appropriate”.
- Advancing PUBLIC ACCESS brought to light larger regional policy discussions.
- Legitimate limitations (maintenance, SLR) for PUBLIC ACCESS in sensitive habitat areas.

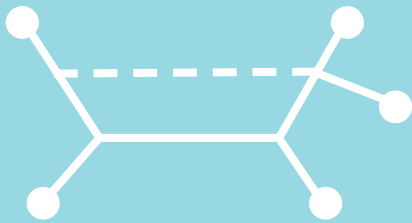
This report gathered all the feedback to help develop a mission statement and set of guiding principles that are used to evaluate a range of access opportunities for future next steps.

# GRAND BAYWAY PUBLIC ACCESS MISSION STATEMENT:

*Work to connect a safe and world-class active transportation corridor along SR37 with a network of recreational opportunities (land and water based) along the San Pablo Baylands for people of all ages and abilities that enhances awareness of the Baylands, the protection of future and current sensitive wildlife area, enhanced regional connectivity and provides:*

- Resilient connections coordinated across jurisdictional boundaries
- A wide-range of equitable access opportunities
- Opportunities for access in the near-term (5-20 years)
- Increased awareness and environmental education

## GUIDING PRINCIPLES:



### 1. RESILIENT CONNECTIVITY

- Resilient access that provides reliable connectivity yet offer flexibility for Baylands habitat to adapt with SLR.
- Provide for one connecting corridor to be resilient to SLR.
- Develop spokes or spines of access that can adapt and retreat with SLR and be able to maintain connectivity from communities to the water.
- Create cohesion and identity throughout the region through sustainable, comfortable and active transportation networks.



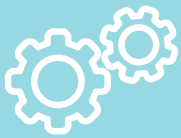
### 2. EQUITABLE ACCESS

- Opportunities shall promote equal access and enhanced awareness for all user groups.
- Provide equitable access between the Bay Trail to diverse communities surrounding San Pablo Bay such as marginalized communities in Vallejo and Novato.



### 3. PROTECTION & ADAPTABILITY

- Public access shall exemplify a responsible approach to the protection of sensitive habitat.
- \*Options for public access should be considered during every restoration phase.
- \*Consider building trails in the near-mid term from materials that may deteriorate or adapt with sea-level rise, flooding, and inundation without harm to surrounding habitat.
- \*All access should be adaptable to ensure on-going facility safety and maintenance. Facility safety and maintenance needs may change with anticipated changing landscape conditions.



## 4. PROJECT SYNERGY

- Proposed opportunities shall incorporate planned improvements such as highway improvement projects, restoration efforts and other local efforts for more holistic, multi-beneficial partnerships.
- Prioritize opportunities that are catalytic in nature that will build a constituency in the near term while strategically coordinating with the long term efforts for the SR37 improvements.



## 5. IDENTITY

- Strengthen the identity of the San Pablo Bay Region to encourage a better understanding of the Baylands as a major educational resource for the interpretation of its changing habitats, ecology, local culture and history.
- \*Improve signage at existing access facilities to increase awareness of existing public access opportunities.



## 6. DESIGN EXCELLENCE

- In recognition of the Bayland's exceptional environmental setting, national value, and regional commitment, the highest standards shall be applied when designing trail facilities, associated public amenities, signage, lighting, and habitat restoration.
- \*Before access is included in site design, ensure that resources, including funding and the entity responsible for the design, construction, maintenance, law enforcement and ownership of the access facility have been identified.

# GUIDING PRINCIPLES:

## I. RESILIENT CONNECTIVITY

The framework for access in the Grand Bayway proposal for the Resilient By Design Competition was a figural loop that skirted the edge of the bay along S37 and wrapped the baylands to the north along the SMART owned rail line, the approximate limit of areas effected SLR. The access loop was considered beneficial and resilient by the project team in the face of SLR. If one portion of loop became unpassable because of flooding, there would still be a way to circulate across the corridor. It afforded multiple access routes less susceptible to disruption, creating a more resilient network.

Feedback from various restoration scientists and land managers was that a loop is the least desired form of access. The rationale is that a loop around lands that need to freely adapt and retreat with SLR puts the future habitat connectivity and adaptation at risk.

It was clear the project team needed a different approach to meet the goals of the restoration scientists and wildlife refuge managers, while finding a way to

provide a continuous, resilient Bay Trail and strategic access points to a region that will need to adapt to SLR

The project team used the network types featured below to re-think the overall framework of connectivity. The “Beckman Topology” is useful in laying out spokes or spines of access that can retreat with SLR and be able to maintain connectivity.

“Least Cost to Builder” minimizes the length of connections with spokes of access. In principle access should be developed that requires one connecting corridor to be resilient to SLR with the spokes adaptable and able to retreat with SLR. Even though the one resilient corridor might still be vulnerable, this option might offer restoration land managers the greatest flexibility for Baylands habitat to adapt with SLR. **This network configuration provides for access that moves more perpendicular to the shore, with spokes or spines of access that can adapt and retreat with SLR and still be able to maintain connectivity to the water.**

## TRAIL NETWORK POSSIBLE TYPES

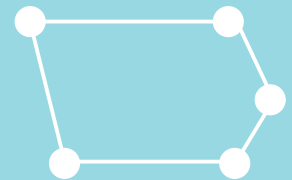
### A) Paul Revere

- traditional connecting two or more points.



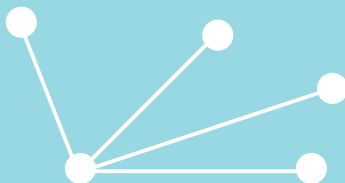
### D) Traveling Salesman

- Single loop route gets you back where you started - an advantage of not having to turn around.



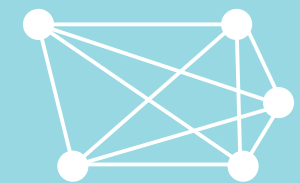
### B) Hierarchical

- one or a few nodes important enough that other nodes connect to them.



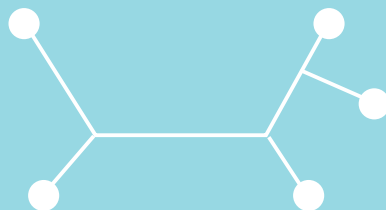
### E) Least Cost to User

- Connects every node to every other node.



### C) Least Cost to Builder

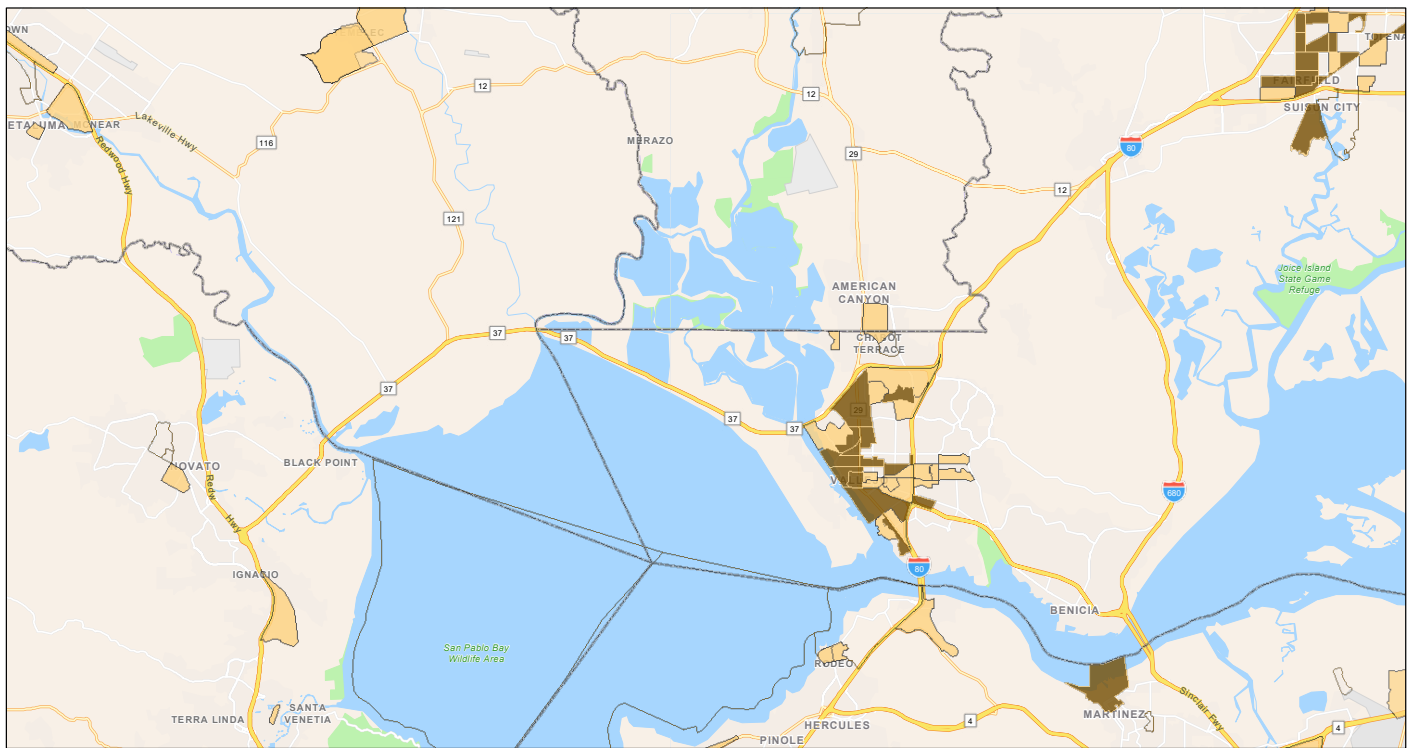
- Minimizes the length of all the connections but may be vulnerable to disruption.
- Resilient Connectivity option.



### F) Beckman Topology

- Can move between any two nodes without passing through any others.
- Resilient Connectivity option.





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California Counties

Proposition 1 Funding Areas

Disadvantaged Communities - Places 2016

Data Not Available

Severely Disadvantaged Communities (MHI < \$38,270)

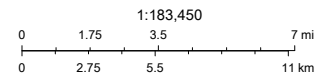
Disadvantaged Communities (\$38,270 >MHI< \$51,026)

Disadvantaged Communities - Block Group 2016

Data Not Available

Severely Disadvantaged Communities (MHI < \$38,270)

Disadvantaged Communities (\$38,270 >MHI< \$51,026)



U.S. Census Bureau. Contact: [gis@water.ca.gov](mailto:gis@water.ca.gov). U.S. Bureau of Reclamation, California Department of Conservation, California Department of Fish and Game, California Department of Forestry and Fire Protection, National Oceanic and Atmospheric

Web AppBuilder for ArcGIS

U.S. Census Bureau. Contact: [gis@water.ca.gov](mailto:gis@water.ca.gov) | Department of Water Resources, Division of Integrated Regional Water Management (IRWM), Financial Assistance Branch, Integrated Regional Water Management Grant Program. Contact: [gis@water.ca.gov](mailto:gis@water.ca.gov) | Department of Water Resources | California

## 2. EQUITABLE ACCESS

The project team’s goal is to find ways to expand the constituency around a place that is not familiar to many, yet integral to nearby disadvantaged communities. A marsh is a mysterious place – it’s not like a forest, meadow, desert, mountain range, or seascape – the things we often think of as beautiful places to preserve. But baylands are essential ecosystems and can provide numerous benefits to not only the Bay Area but directly to adjacent communities. The project team wants to bring new more equitable access to the baylands. Through our project engagement we learned that people see this landscape and are intrigued and would like to visit and explore but are not quite sure what they would do or where they would go. But we also learned and observed that people do come here over generations within the marsh and on the margins to visit for a range of recreation, hunting and fishing.

It is with this context that we include a helpful summary from a December 16, 2019 The State Coastal Conservancy draft guidelines for Justice, Equity, Diversity and Inclusion (JEDI). These guidelines provide a critical policy framework especially for this study area:

*All Californians have the right to access the coast and should live in a healthy environment. However, the management of natural resources, including the California coast, has been fraught with exclusion, displacement, injustice, and extractive practices. The environmental burdens of development and industry are often borne by under-resourced communities, while environmental preservation and restoration primarily benefit the affluent.*

*The Coastal Conservancy is a state agency that funds planning and construction of projects that protect and restore natural resources, and increase public access to, California’s coast, ocean, and coastal-watersheds. The Coastal Conservancy’s vision is of a beautiful, restored, and accessible coast for current and future generations of Californians.*

*The Coastal Conservancy recognizes its role in a history of inequity along the California Coast and commits to addressing injustices and moving forward in an equitable, inclusive manner. The Coastal Conservancy will:*

- *Improve its policies, programs, and practices to advance equitable access to the environmental, social, and economic benefits of California’s coast and coastal watersheds.*
- *Regularly evaluate and modify program priorities, grant funding, contracting, hiring practices, communications, and community engagement practices, to address existing inequities.*
- *Increase the involvement and role of marginalized and indigenous communities in decision making by the Conservancy.*

### 3. PROTECTION & ADAPTABILITY

The San Pablo Baylands in the study area represents one of the largest patch of non-fragmented landscape in the entire Bay Area - it is an exceptional opportunity for the protection and future adaptability of sensitive baylands habitat. Therefore public access here shall exemplify a responsible approach to the protection of sensitive habitat. Access planning should incorporate the most comprehensive set of principles and guidelines for biological conditions in the study area that are found in the **Baylands Ecosystem Habitat Goals (1999), The Baylands and Climate Change (2015)**, These documents provide recommendations for improving the ecological health of the area, including the kinds, amounts and distribution of wetlands and related habitats that are needed to sustain diverse and healthy communities of fish and wildlife resources.

The Baylands report contains specific recommendations for the San Pablo region, identifying this segment as an opportunity area to restore marsh/upland transitions, expand and reintroduce populations of rare plant and animal species. It specifically calls out the opportunity for tidal marsh restoration projects to enhance flood protection by expanding tidal prism.

The report also advocates a nonregulatory, voluntary effort to point the Bay Area toward a more resilient future, with strategies that were developed over several years by several hundred experts and practitioners in the region. The following five highlights are the most critical overarching ideas from the recommendations.

- Restore estuary–watershed connections that nourish the baylands with sediment and freshwater.
- Design complexity and connectivity into the baylands landscape at various spatial scales.
- Increase coordination among baylands stakeholder organizations to promote the successful implementation of the recommendations in this report.
- Create plans that factor in ecological outcomes after extreme events and other disasters.
- Engage the citizenry in the baylands.

The Baylands report of 1999 and 2015 are instrumental in guiding the restoration efforts in the study area, yet they don't specifically guide areas where access should

be avoided or included. Key to the project objective is to develop a set of access options that balance public access & protection of sensitive habitats including the goals outlined in these reports.

At the outset of project engagement for this report, many stakeholders thought that any access planning should be done only after restoration planning and modeling has been done for the region. The underlying understanding being that access planning should occur only after a more concrete understanding of where various habitat zones might be in the context of SLR and future restoration plans. Knowing this issue created a conflict with the project team's objectives, the project team has aimed to develop principle approaches to better help guide next steps in the context of ongoing restoration efforts.

**The project team feels strongly that in principle, public access planning shall be considered in conjunction with restoration planning to best meet the Baylands Habitat goals along with the goals and objectives laid out in this report.** This also conforms with a guiding principle from the Sonoma Creek Baylands Strategy report that options for public access should be considered during every restoration project phase.

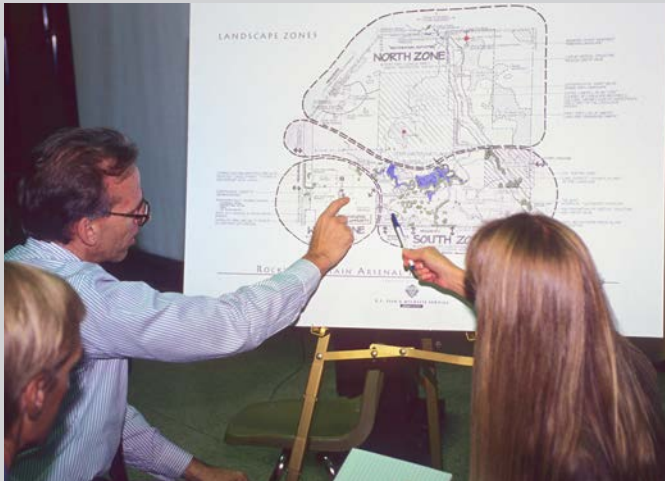
The following principles from the Sonoma Creek Baylands Strategy report link the dynamic nature of Baylands ecosystems to the need for public access adaptability:

- Consider building trails in the near-mid term from materials that may deteriorate or adapt with sea-level rise, flooding, and inundation without harm to surrounding habitat (more information on this can be found in the Trail Design Guidelines section).
- All access should be adaptable to ensure on-going facility safety and maintenance. Facility safety and maintenance needs may change with anticipated changing landscape conditions.

As it pertains to the protection of habitat, the project team does have a better idea of the various potential "no-go zones" for access given sensitive habitat, along with other areas important to the transition and adaptability of baylands habitat in the area. This understanding show on the Area Maps (pg 138 & 140) are used to guide various access opportunities considered in the phasing of project and to guide a set of next steps. **However, it is recognized that another planning process should be explored as a 'next step' to create a regional, comprehensive and coordinated process to map the future baylands habitat in conjunction with compatible and appropriate access alignments and designs.**

## ZONE MANAGEMENT CONCEPT

A planning process that can serve as a good precedent for guiding access with the protection and adaptability of baylands habitat is for the USFWS Rocky Mountain Arsenal, and their use of a Zone Management concept.

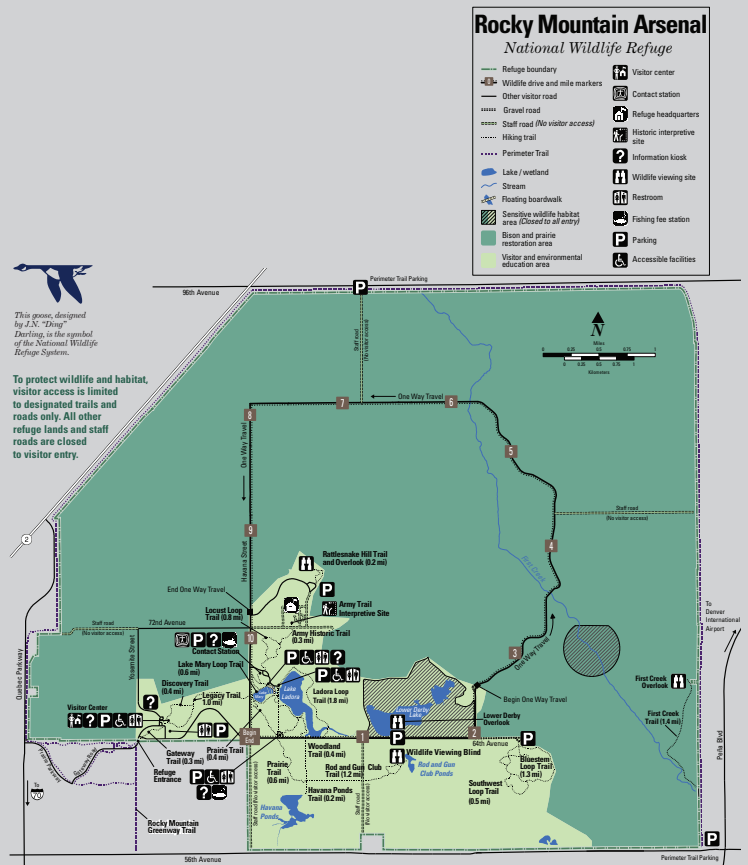


The Rocky Mountain Arsenal National Wildlife Refuge Comprehensive Management Plan served a visionary purpose in the conversion of a 17,000-acre Superfund site into one of our nation's largest urban wildlife refuges. Addressing pressing land use issues of the early 21st century – conservation, habitat protection and management, public use, recreation and environmental education – the CMP conceptualized a pioneering approach to dynamic, novel ecosystems where restoration would harbor living ecologies while simultaneously providing recreational opportunities. Located ten miles northeast of downtown Denver, the refuge is a storied landscape of cultural and ecological significance. For thousands of years, the refuge consisted of a shortgrass prairie, home to many communities of endemic plants and animals. Vast herds of American bison roamed freely, while prehistoric people followed the availability of foods. The project is relevant in that it shows a successful planning process and implementation of a large scale wildlife-focused restoration in an urban context - achieving a balanced approach to community access, education and habitat conservation.



This goose, designed by J.N. "Ding" Darling, is the symbol of the National Wildlife Refuge System.

To protect wildlife and habitat, visitor access is limited to designated trails and roads only. All other refuge lands and staff roads are closed to visitor entry.



## ZONE MANAGEMENT

Distinct patterns – some natural, some constructed – revealed past uses, suggested ecological functions and represented placement within regional ecologies. To preserve these relationships, a Zone Management Concept focused upon the principles of Partnership, Education, and Restoration.

**Partnership:** The Western Zone, located adjacent to metropolitan development, provided a logical community-oriented gateway. This zone included all major facilities – a visitor learning center, a campus of education, lab and research facilities, and other commercial and nonprofit businesses. The CMP outlined a cooperative “green industry” zone where partnerships formed with the USFWS would compound future funding.

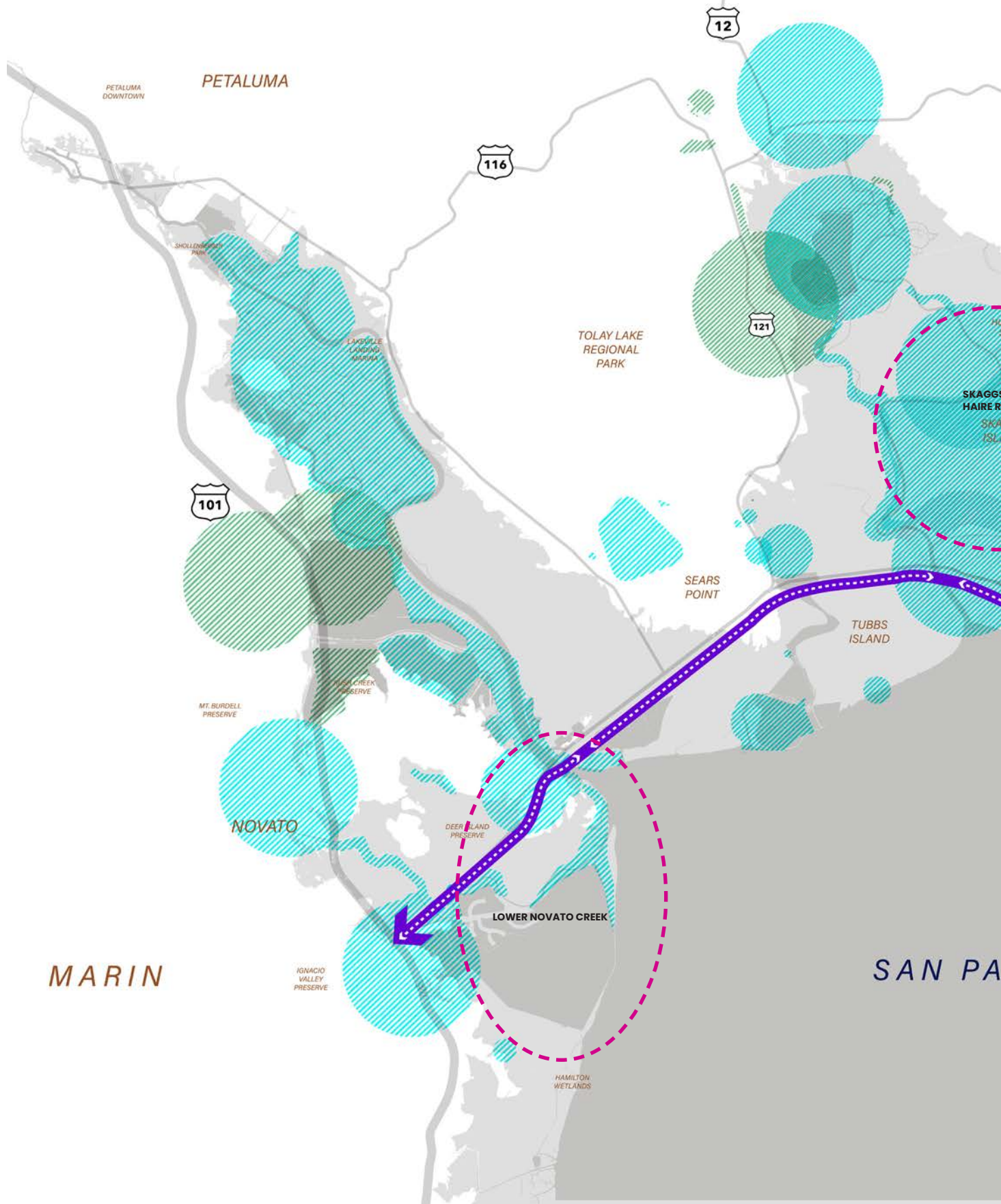
**Education:** The Southern Zone, with its many lakes, ditches and related vegetation along existing roads, required little cleanup. Adjacent to established neighborhoods, this zone included educational venues along public use trails organized around existing Jeffersonian grid-based roads. The Plan outlined habitat for the existing wildlife and anticipated wildlife reintroductions, and integrated various forms of recreation.

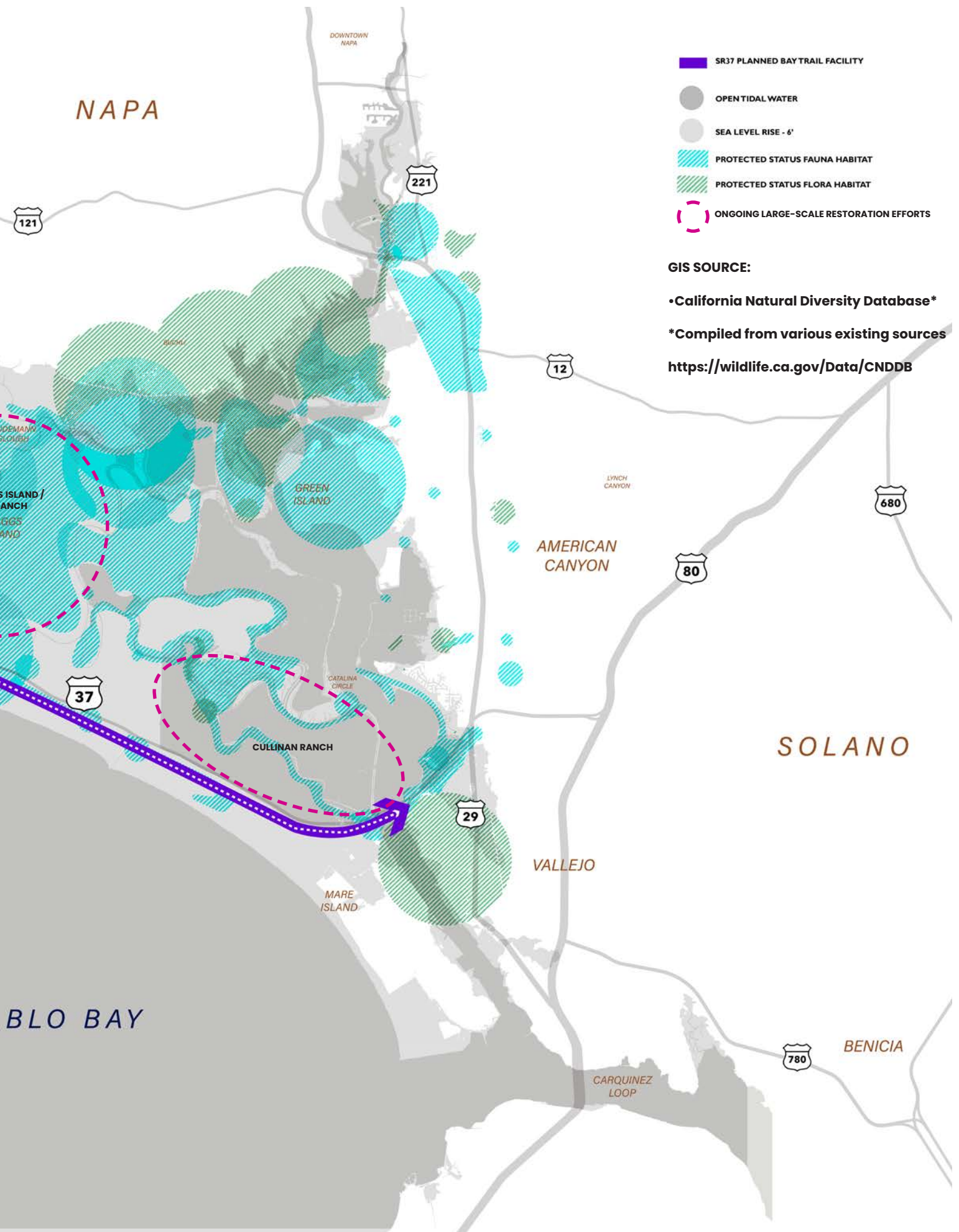
**Restoration:** The Northern Zone required the highest levels of cleanup effort. Here, the plan intentionally called for a quieter, less frequented place, designed in a more organic manner. Limited access is provided on the zone's eastern edge to accommodate the Bald Eagle Watch.

The Public Use Plan targeted various potential user groups. Recreational and educational activities include wildlife watching, hiking, jogging, cycling, non-consumptive hunting, angling, photography and picnicking while volunteer opportunities include monitoring, seed collecting, planting and trash collecting.

# PROTECTED STATUS SPECIES HABITAT MAP

## SONOMA





- SR37 PLANNED BAY TRAIL FACILITY
- OPEN TIDAL WATER
- SEA LEVEL RISE - 6'
- PROTECTED STATUS FAUNA HABITAT
- PROTECTED STATUS FLORA HABITAT
- ONGOING LARGE-SCALE RESTORATION EFFORTS

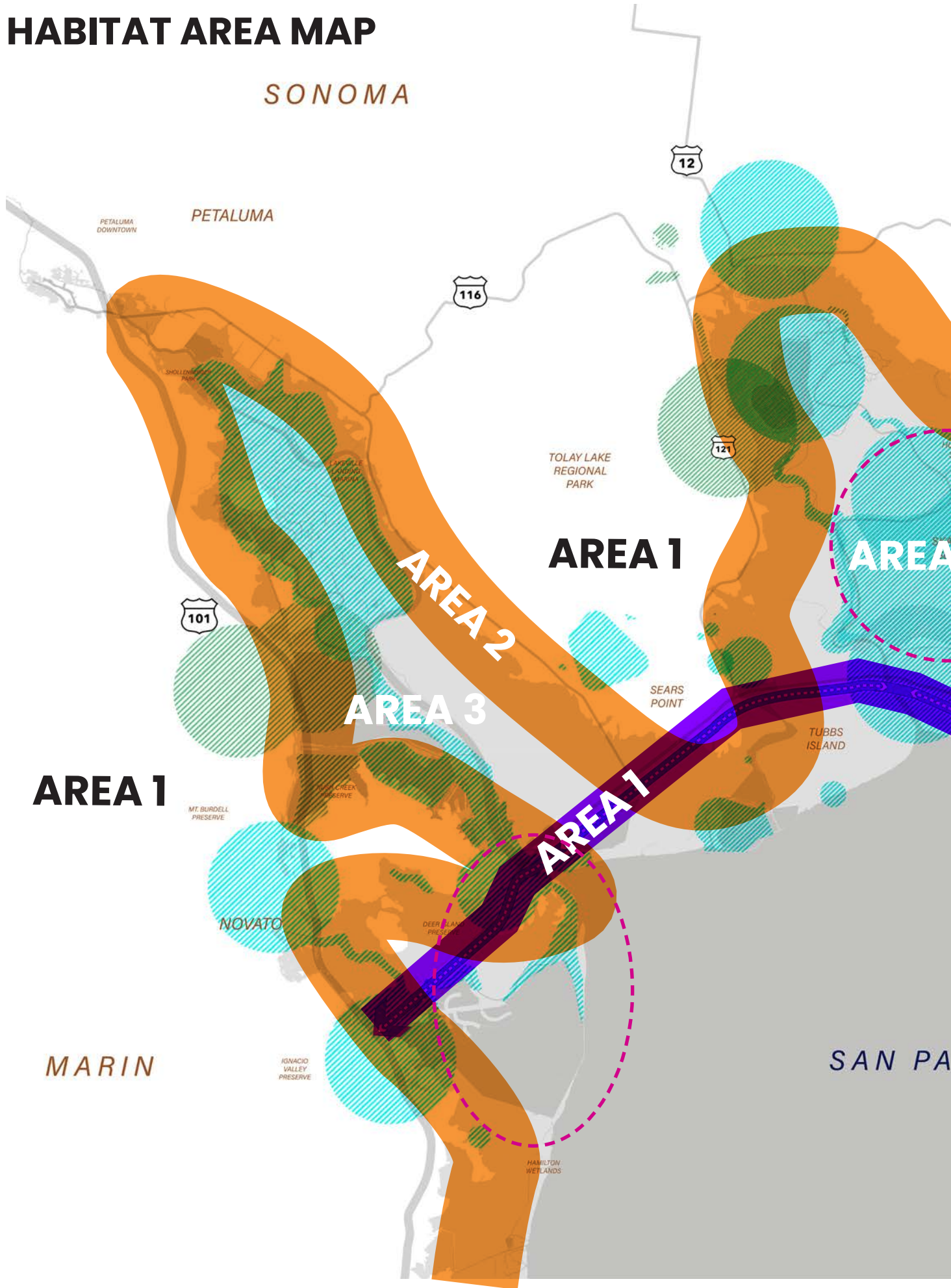
**GIS SOURCE:**

- California Natural Diversity Database\*
- \*Compiled from various existing sources

<https://wildlife.ca.gov/Data/CNDDDB>

# HABITAT AREA MAP

SONOMA



**AREA 1**

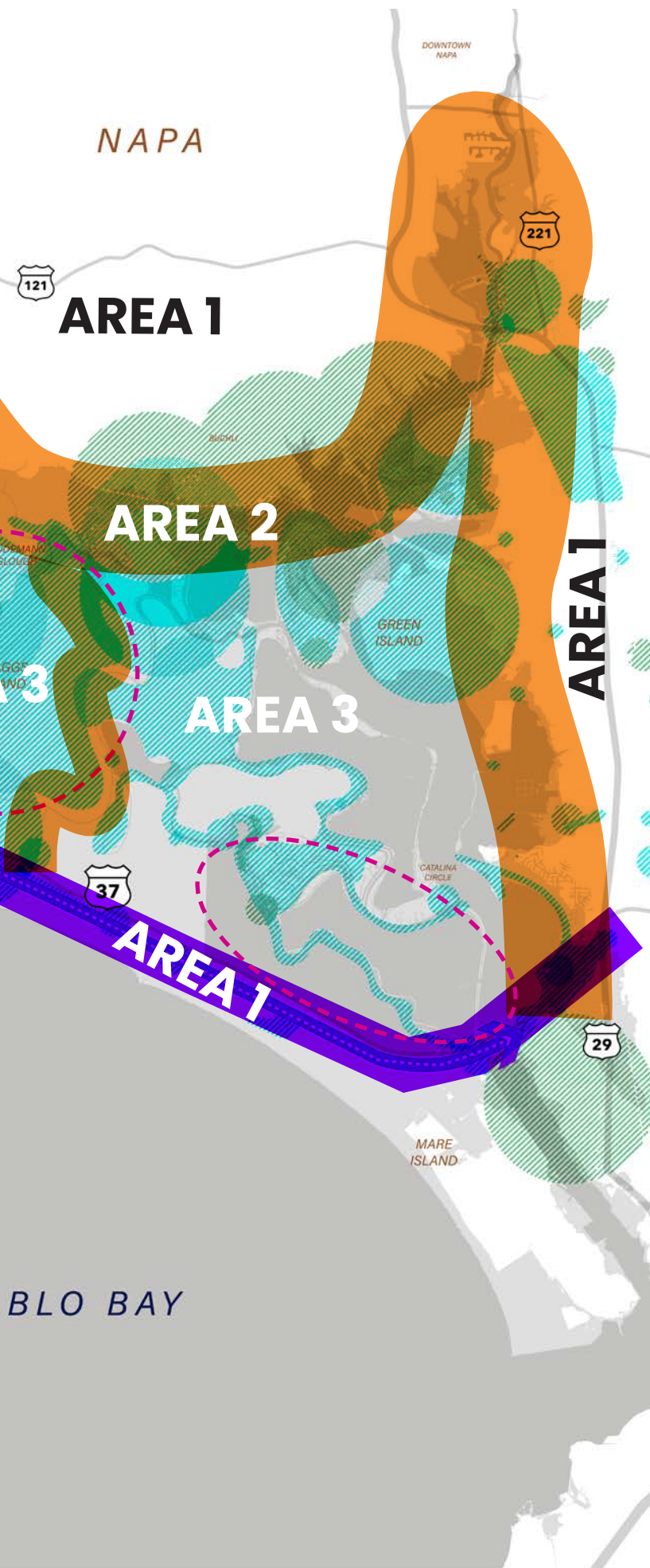
**AREA 3**

**AREA 2**

**AREA 1**

**AREA**

**AREA 1**



- SR37 PLANNED BAY TRAIL FACILITY
- OPEN TIDAL WATER
- SEA LEVEL RISE - 6'
- PROTECTED STATUS FAUNA HABITAT
- PROTECTED STATUS FLORA HABITAT
- ONGOING LARGE-SCALE RESTORATION EFFORTS

This map is based on known areas of protected status habitat, open water, projected sea level rise and areas of complex management concerns. The project team used this data along with a general understanding of typical landscape conditions (gained throughout project engagement and discussions with land managers) to determine a breakdown of three areas. These areas designate a varying degree of potential impact that access might have on the protection and adaptability of baylands habitat, including helping guide the intensity and design of access facilities. **This map is only to be used to guide the phasing of access opportunities and to guide the timing of decisions on priority and near-term opportunities.**

### AREA 1

This Area, along the current ROW of SR 37, is identified as the preferred transportation corridor for the SR 37 Corridor Sea Level Rise Adaptation Project (Ultimate). Based on design alternatives explored, this area was determined to have the least impact to various environmental conditions. Additional areas in Area 1 include upland areas outside of the Baylands.

### AREA 2

This Area generally follows the limit of projected SLR and is along the upland transition zone. This area is an important area for bayland land managers because it provides the large expanses of gently sloping transitional terrain for marshes to migrate into - as the baylands below may become submerged with SLR. This is also a key area for nearby communities to gain access to the baylands and the shoreline via existing facilities and the potential to increase resilient forms of access. Habitat in this zone could be moderately sensitive to public access. Potential public access can mitigate impact to habitat.

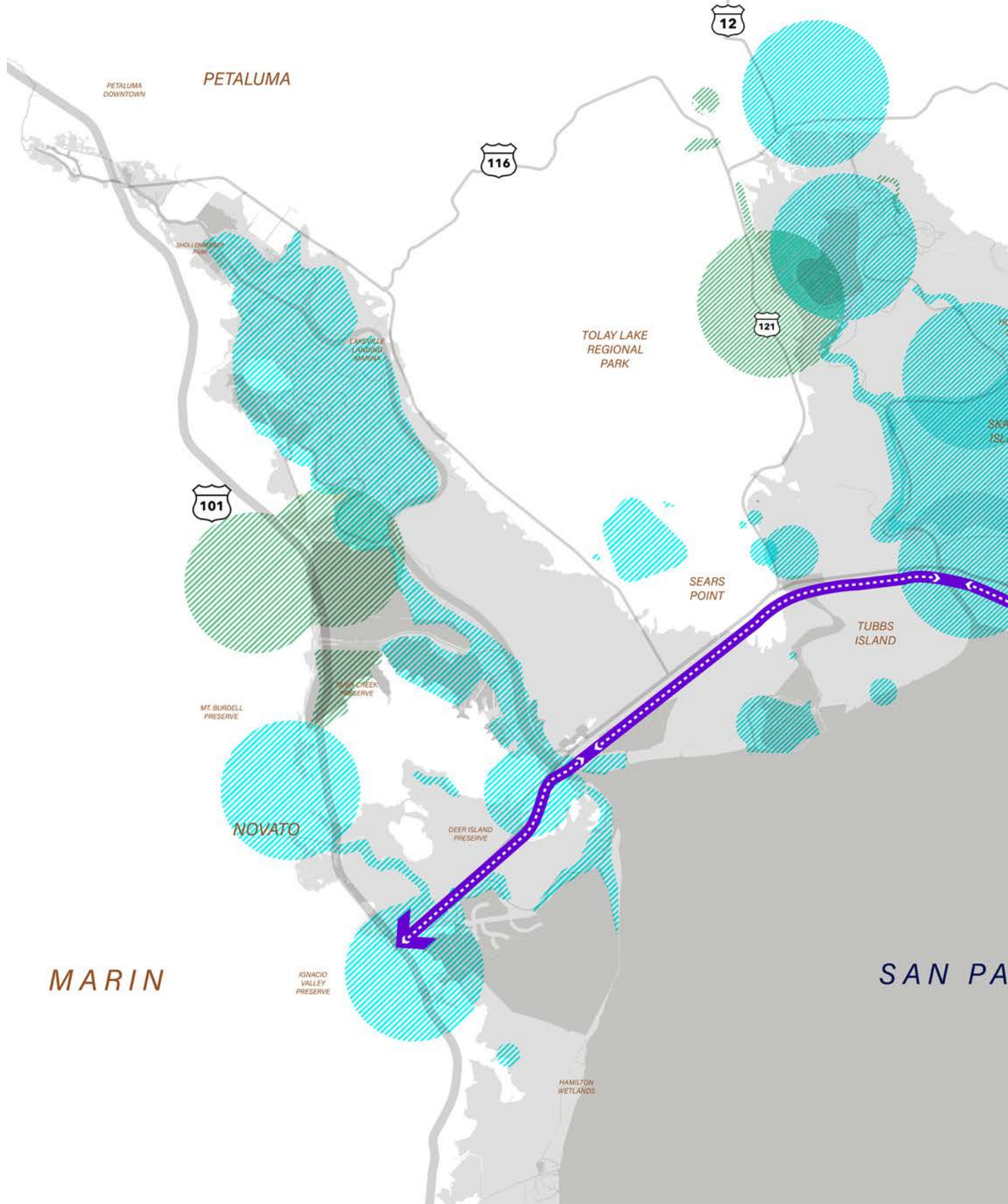
### AREA 3

This Area includes many areas of protected habitat, open water and tidal marsh habitat with some key large-scale restoration efforts. Habitat in this zone could be particularly sensitive to public access. Potential public access can mitigate impact to habitat with close coordination with restoration science.



# ZONE MANAGEMENT CONCEPT NEXT STEP

## SONOMA

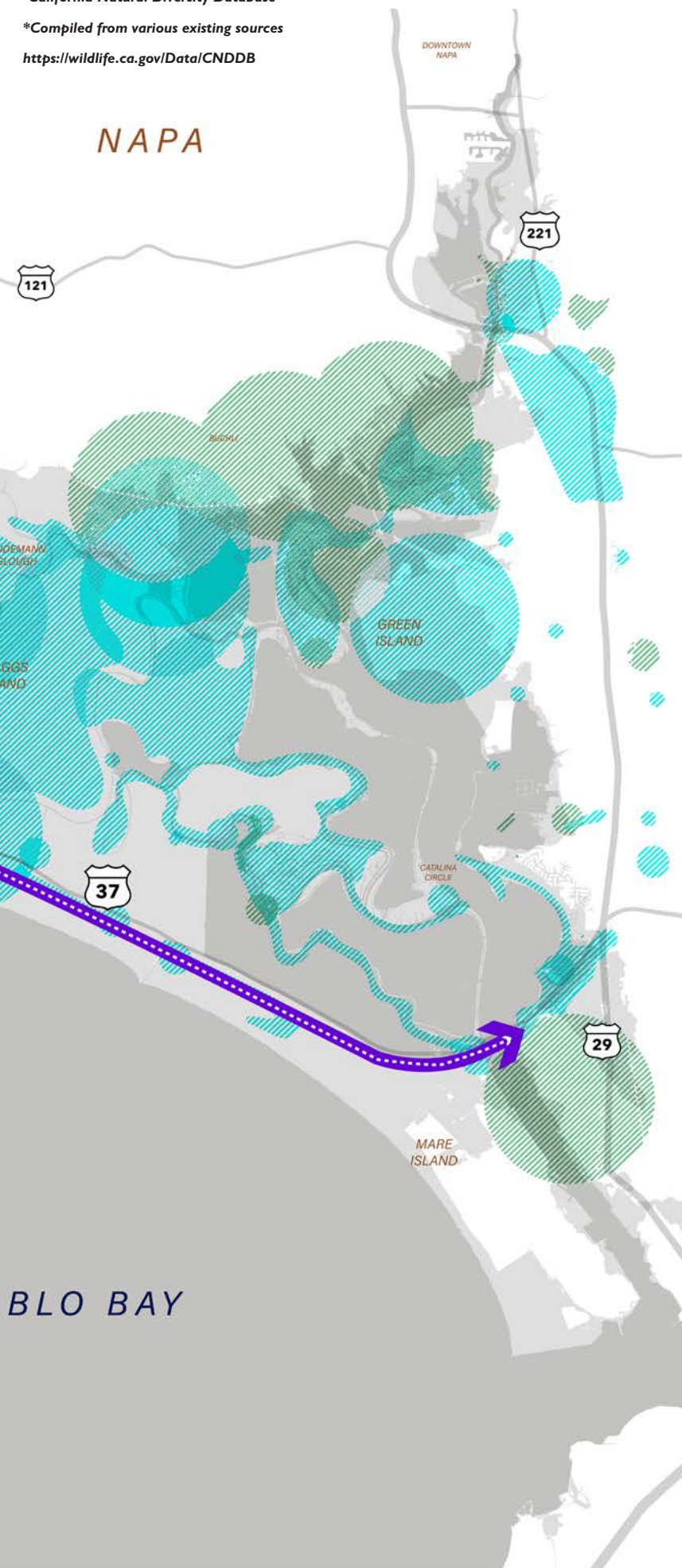


GIS SOURCES

•California Natural Diversity Database\*

\*Compiled from various existing sources

<https://wildlife.ca.gov/Data/CNDDDB>



-  SR37 PLANNED BAY TRAIL FACILITY
-  OPEN TIDAL WATER
-  SEA LEVEL RISE - 6'
-  PROTECTED STATUS FAUNA HABITAT
-  PROTECTED STATUS FLORA HABITAT
-  ONGOING LARGE-SCALE RESTORATION EFFORTS

## ZONE MANAGEMENT CONCEPT

The Habitat Area Map shown on page 140 is a first steps to articulate typical areas of protected status habitat, open water, projected sea level rise and complex management areas, summarized to guide the timing of decisions on priority access opportunities in this sensitive study area.

Even though this report doesn't include a Zone Management Map or process (given timing and scope limitations), the project team recognizes that another approach similar to the Rocky Mountain Arsenal National Wildlife Refuge Comprehensive Management Plan should be taken as a next step to benefit future collaboration and a set of coordinated decisions based on detailed science and extensive stakeholder engagement.

## 4. PROJECT SYNERGY

Proposed projects shall incorporate planned or adopted improvements such as highway projects, restoration efforts and other local infrastructural and cultural efforts for more holistic, multi-beneficial partnerships. Prioritize opportunities that are catalytic in nature that will build a constituency in the near term while strategically coordinating with the long term efforts for SR37 improvements.

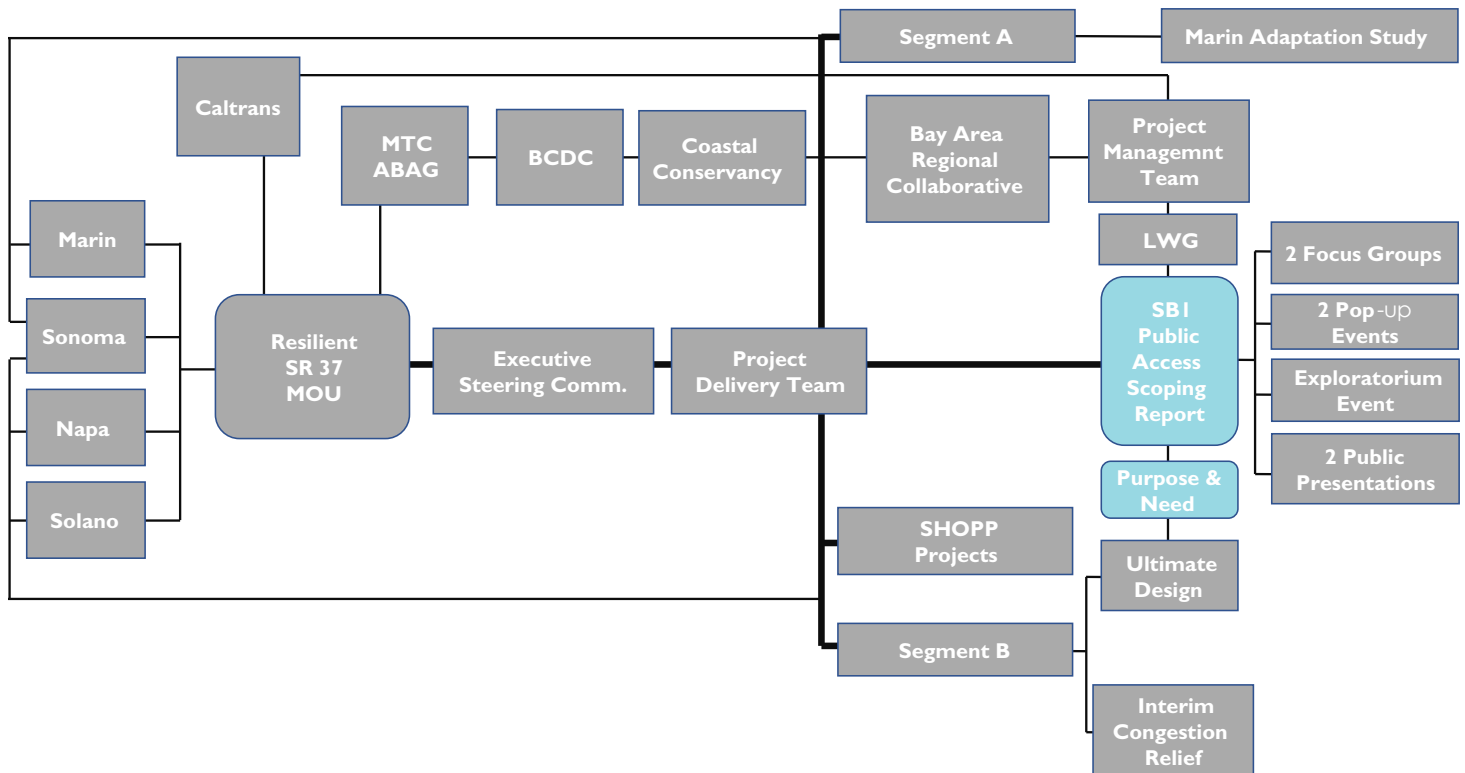
Through the project's PMT and engagement with the SR 37 Policy Committee, the project team has learned about many planned projects that have overlapping goals and the potential to help fund future access opportunities. Key near term project such as the Caltrans SHOPP projects at SR37 & I21 and the SR37 Interim Project are good examples of project synergy. These projects neither of currently include any public access. Governor Newsom has signed legislation requiring Caltrans to consider climate change adaptation in all SHOPP projects. The SHOPP and

SR37 Interim project has the opportunity to help close the short gap of 4300' at Toley Creek, connecting approximately 9 miles of Bay Trail in the area (reference the Sonoma County Regional Parks-- Bay Trail Sears Point Connector Feasibility Study, 2017)

Another such example is at Mare Island where the project team attended a meeting/site walk with the Nimitz Group and resident's of Vallejo to learn about initial ideas and opportunities for enhanced public access on the Island. The Nimitz Group has acquired around 500 acres on Mare Island, where it hopes to create a plan for further redevelopment of the onetime shipyard area after taking over from developer Lennar. The LWG has shown overall support for synergistic opportunities at Mare Island and Sears Point/I21.

There are numerous other synergistic project opportunities along Segment A of SR 37 that come out of the Marin Adaptation Study and along the SMART rail line that could connect the project study area with a rail corridor serving much of Marin and Sonoma County (reference Sonoma-Marín Area Rail Transit District Passenger Rail Service Novato to Suisun City, 2019).

## SR37 PUBLIC ACCESS SCOPING REPORT MANAGEMENT PROCESS





*“Bike-friendly  
since 1902”*

Louis Semino, the bridge tender in the 1920's. He operated two bridges over two different sloughs – this one a rolling drawbridge over Sonoma Creek

## 5. IDENTITY

Strengthen the identity of the San Pablo Bay Region to encourage a better understanding of the Baylands as a major educational resource for the interpretation of its changing habitats, ecology, local culture and history.

San Francisco Bay is typically subdivided into areas with distinct identities – South Bay, Central Bay, the Delta / Suisun Bay, and San Pablo Bay. Although the cultural identity of San Pablo Bay is the least clear, its distinguishing ecological and geomorphological features make it a compelling subregion of diverse landscape conditions. Large areas to the north retain much of their rural character. Sloughs and tidal marshes await restoration through the breaching of levees. To the south, a dense working-class industrial corridor stretches from Richmond to Vallejo. These places are not often thought of as related to each other, yet they all share San Pablo Bay as their common front door.

Because San Pablo Bay is less defined, it presents an opportunity for a new ecological-based identity. How do we bring disparate places, sensitive habitat and communities into relation with each other

and their common bay? By enhancing access and understanding of shared stories and local conditions, the project team believes it is possible to reorient communities here to turn to “face” the bay.

The story of these Baylands is one of continual change and transformation – both on the daily level and through the course of human habitation. Because of its constant transformation its story has been hard to tell and seemingly lost. While the economic centers of gravity remain in San Francisco and Silicon Valley, San Pablo has its own rich history as an ecological “working bay” to draw from. These waterfronts are primed for restoration. San Pablo Bay could serve as a test case for increasing civic agency and stewardship in the Bay Area by connecting communities through improved recreation and access for learning about the places we inhabit and the critical wildlife habitat found there.

Lastly a principle is to improve signage at existing access facilities to increase awareness of existing public access opportunities.

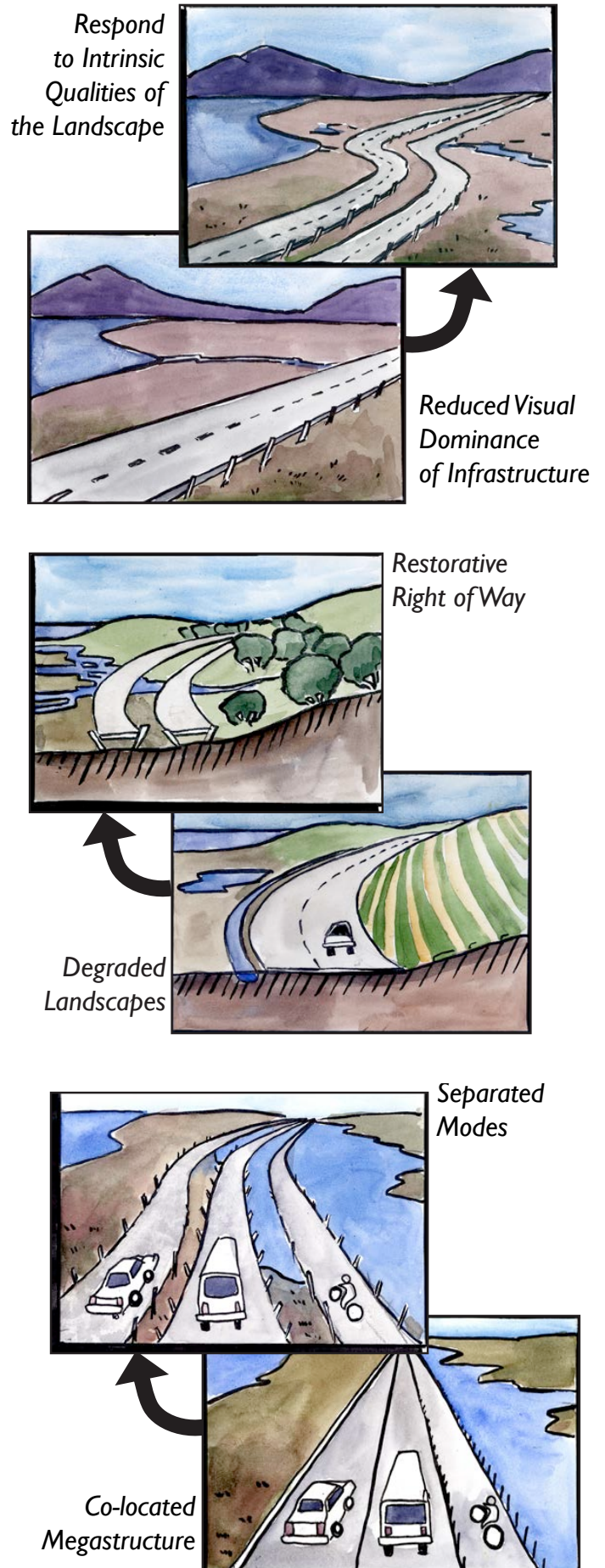
## 6. DESIGN EXCELLENCE

It is critical for excellent public access options to ensure that resources, including funding and the entity responsible for the design, construction, maintenance, law enforcement and ownership of the access facility have been identified early in the planning process. At the same time it is important to plan for design excellence in recognition of the Baylands' exceptional environmental setting, national value, and regional commitment. The highest standards shall be applied when designing and planning for the maintenance of trail facilities, associated public amenities, signage, and habitat restoration.

The San Pablo Baylands are truly a unique regional and national treasure - it offers not only exceptional Bay Area habitat but tremendous scenic qualities. SR 37 on Segment A, B, and parts of C (west of SR29 only) are eligible for a scenic highway designation, based on Caltrans Transportation Concept Report from 2015. The highway should be designated as a scenic highway especially as future restoration efforts only enhance the quality of open space along long stretches of protected or refuge land.

The USFWS offers guidelines for roadway design, many of which are not only applicable for SR37 but also for the design of recreation and trail facilities. One such principle is to "respond to intrinsic qualities of regional landscape" (LE-4, ref.) provides meaningful application to achieving design excellence:

- Consider Context Sensitive Solutions (CSS) for general design guidelines and engage a landscape architect
- Develop benchmarking tools for ecological performance
- Consider what local land use traditions are consistent with FWS goals and management activities
- Respond to visual appearance of regional landforms, vegetation, and other natural features
- Review historic land use patterns and cultural practices
- Consider visitor experience and potential educational and interpretive benefits of road and visitor facility designs.



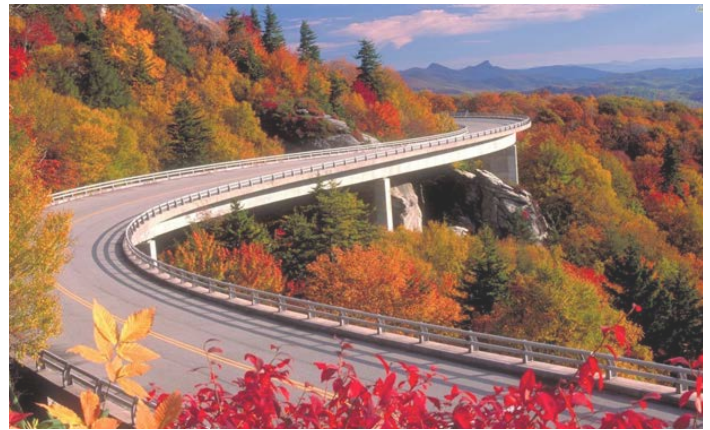
**The SR 37 Corridor Sea Level Rise Adaptation Project (ultimate)** will include a fully separated CLASS I Bay Trail path that will likely be elevated on a causeway. A future causeway will establish a scenic visual corridor between significant landmarks in San Pablo Bay and should create an immersive experience of the existing terrain and new architectural structures. Designs should give travelers opportunities to connect to and interact with the unique terrain in a more direct and intimate way. Design form should communicate and be shaped by the ecologically sensitive areas of the site in order to have minimum impact on the site, with the maximum effect for the visitor.

Referencing the routes of the National Parks that celebrate nature through scenic routes, access should seek to establish a similar iconicity for the San Pablo Bay through the way that the causeway and bike path play off one another. As such, the visitor can be given the opportunity to experience the landscape differently depending on their method of transportation. In a way, this incentivizes the visitor to return to the site to travel through it in different ways, affording a multiplicity of experiences rather than a singular one.

The elevational changes of the multi-use path are also critical to establishing the different vantage points from which the visitor perceives and engages with the landscape. The multi-use path will be elevated affording an entirely different reading of the landscape than currently experienced. This juxtaposition between being directly immersed in the landscape, and viewing it from above, is essential in curating a more holistic and complete story of the natural forces which are at play in this vibrant and dynamic ecosystem.



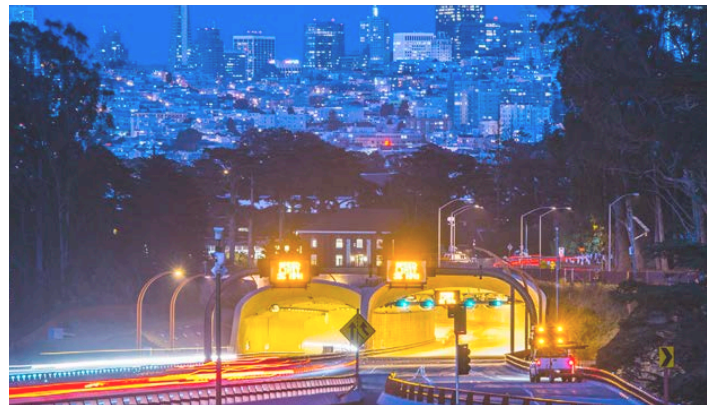
Conceptual rendering from RBD Grand Bayway proposal.



BLUE RIDGE PARKWAY

- Generating \$1.5 billion in total business sales, sustaining approximately 9,300 jobs, and creating an increase of \$251.7 million in labor earnings

- Structures are simple in character and encourage harmony with natural environment - a unified kinetic experience. Provide travelers waysides, overlooks, picnic areas and lodging



DOYLE DRIVE, PRESIDIO PARKWAY

- Fundamental problem for initial offerings were variations on the straight-forward freeway - absent of "design"

- Cut-and-cover tunnel with a landscaped top so that people could once again walk to the historic Battery Bluff. Initially dismissed as infeasible.



I-70, GLENWOOD CANYON, COLORADO

- A 12.5-mile grade separated bike path along network of viaducts, bridges, and tunnels constructed through an extraordinarily narrow, environmentally sensitive gorge.

- The corridor houses four full-service rest areas, a bicycle/ped path along entire length, and special facilities for launching rafts, boats, and kayaks.



# PURPOSE AND NEED

## **SR 37 SEGMENT B ULTIMATE PROJECT BICYCLE AND PEDESTRIAN PURPOSE & NEED**

A Purpose and Need statement describes the underlying causes and the proposed action intended to address a problem. The need for a project drives its purpose; this is how the phrase “need and purpose” came into usage. It conveys how practitioners should approach a topic: define the need(s) for a project first, and the project purpose will flow from that.

- Need – States the transportation deficiency.
- Purpose – States the objectives that will be met to address the transportation deficiency.

The goal in drafting the purpose statement is to define as sharply as possible the fundamental reasons why the project is being proposed. The purpose statement should not be a laundry list of all potential benefits of a project, nor should it list every possible purpose that could conceivably apply to the project. It explains to the public, stakeholders, and decision makers that the expenditure of funds is necessary and worthwhile, and that the project's priority relative to other transportation projects is warranted.

A quality Purpose and Need statement meets federal and state environmental regulations. It is used to limit the range of alternatives requiring detailed study during the PA/ED phase. A well-defined, succinct purpose and need is a fundamental building block of any EIS/EIR. It should be agreed upon by a full range of stakeholders in the earliest phase of the project and amended as warranted as the project develops. It is helpful to begin identifying, during the development of the purpose and need, the criteria that will be used when evaluating the ability of alternatives to meet the purpose and need.

## **SR 37 SEGMENT B ULTIMATE PROJECT BICYCLE AND PEDESTRIAN FACILITIES NEED**

Bicycle and pedestrian use of SR 37, an integral segment of California's Interregional Road System, and the state routes connecting to it are unsafe, stressful, and vulnerable to existing and predicted increases in flooding and storm events, limiting healthy, non-motorized transportation, Bay Trail gap closures, access to scenic, aesthetic, historic, and natural resource values of the area along the SR 37 corridor, and fulfillment of local, regional, and state Climate Change, Complete Street, and Bicycle and Pedestrian goals .

## **SR 37 SEGMENT B ULTIMATE PROJECT BICYCLE AND PEDESTRIAN FACILITIES PURPOSE**

Design and construction of bicycle and pedestrian facilities in the SR 37 Segment B Ultimate Project design will increase non-motorized user safety, enjoyment, and volume, while protecting these activities from predicted sea level rise, contributing to state and regional efforts to reduce GHG emissions, improving compatible public access to national and state wildlife areas, and adding lasting community value within a reasonable timeline.

# **NAVIGATION BAR**

- A. STUDY CONTEXT**
- B. SAN PABLO BAYLANDS IDENTITY**
- C. EXISTING PUBLIC ACCESS**
- D. PUBLIC ACCESS GOALS**
- E. TRAIL DESIGN GUIDELINES**
- F. PUBLIC ACCESS ALTERNATIVES**
- G. NEXT STEPS**
- H. APPENDIX**



# TRAIL DESIGN GUIDELINES

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# **TRAIL DESIGN BEST PRACTICE**

## Guidance Basis

The sections that follow serve as an inventory of shared use path and trail design treatments and provide guidelines for their development. These treatments and design guidelines are important because they are the tools for creating a safe and accessible community as well as support wild life compatibility. The guidelines are not, however, a substitute for a more thorough evaluation by a landscape architect or engineer, upon implementation of facility improvements.

### National Guidance

The following standards and guidelines are referred to in this guide:

The Federal Highway Administration's (FHWA) **Manual on Uniform Traffic Control Devices (MUTCD)** defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic.

American Association of State Highway and transportation Officials (AASHTO) **Guide for the Development of Bicycle Facilities** (2012) provides guidance on dimensions, use, and layout of specific bicycle facilities.

The National Association of City Transportation Officials' (NACTO) **Urban Bikeway Design Guide** (2012) is the newest publication of nationally recognized bikeway design standards, and offers guidance on the current state of the practice designs.

The **AASHTO A Policy on Geometric Design of Highways and Streets** (2011) commonly referred to as the "Green Book," contains the current design research and practices for highway and street geometric design.

**Trails for the 21st Century** (1993) guides communities on how to convert unused railway and canal corridors into trails for

pedestrians, cyclists, horseback riders, and others.

### State Guidance

The Caltrans Highway Design Manual (HDM) **Chapter 1000** provides guidance for nonmotorized transportation. Design guidance for Class I bikeways (bike paths), Class III bikeways (bike routes) and Trails are provided in this chapter.

### Local Guidance

**The San Francisco Bay Trail Guidelines and Toolkit (2015)**. This document offers direction and defines goals to facilitate the design and development of a San Francisco Bay Trail system that is safe, connected and continuous; provides a positive user experience that encourages people to use the trail; and maximizes access to and use by the broadest spectrum of people possible.

**Enhanced San Francisco Bay Area Water Trail Plan** (2011) is a guide to trail implementation for the agencies and organizations that will develop and manage water trail access points and programs, as well as trail proponents and other stakeholders also involved in implementation

**BCDC Wildlife and Public Access Study** provides the background information and research results, on which the revisions to the San Francisco Bay Plan public access findings and polices are based.

# Design Needs of Trail Users

Understanding the unique characteristics and needs of all path users is critical when designing quality facilities that minimize user risk.

## Pedestrian Characteristics by Age

The table below summarizes characteristics that describe pedestrian user group types to consider when designing facilities through an ecologically sensitive area such as the Baylands.

Age	Characteristics
0-4	Learning to walk Requires constant adult supervision Developing peripheral vision and depth perception
5-8	Increasing independence, but still requires supervision Poor depth perception
9-13	Susceptible to “darting out” in roadways Insufficient judgment Sense of invulnerability
14-18	Improved awareness of traffic environment Insufficient judgment
19-40	Active, aware of traffic environment
41-65	Slowing of reflexes
65+	Difficulty crossing street Vision loss Difficulty hearing vehicles approaching from behind

## Disabled Pedestrian Design Considerations

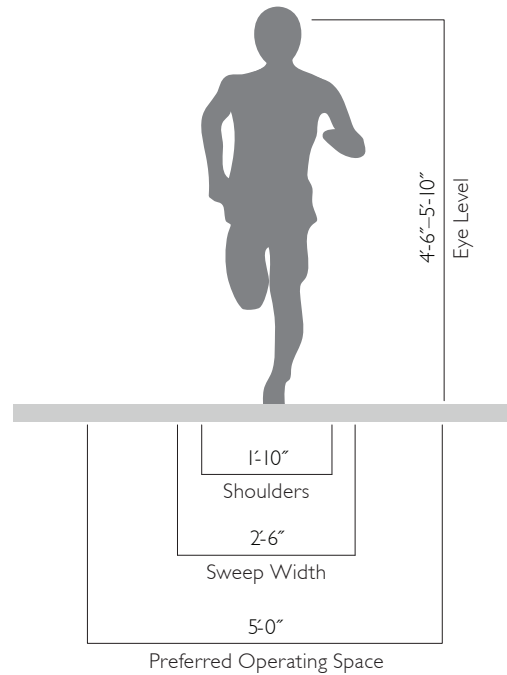
The table below summarizes common physical and cognitive impairments, how they affect personal mobility, and recommendations for improved pedestrian-friendly design.

### Disabled Pedestrian Design Considerations (AASHTO Pedestrian Guide 2004)

Impairment	Effect on Mobility	Design Solution
Physical Impairment Necessitating Wheelchair and Scooter Use	<p>Difficulty propelling over uneven or soft surfaces.</p> <p>Cross-slopes cause wheelchairs to veer downhill or tip sideways.</p> <p>Require wider path of travel.</p>	<p>Firm, stable surfaces and structures, including ramps or beveled edges.</p> <p>Cross-slopes of less than two percent.</p> <p>Sufficient width and maneuvering space.</p>
Physical Impairment Necessitating Walking Aid Use	<p>Difficulty negotiating steep grades and cross slopes; decreased stability and tripping hazard.</p> <p>Slower walking speed and reduced endurance; reduced ability to react.</p>	<p>Cross-slopes of less than two percent.</p> <p>Smooth, non-slippery travel surface.</p> <p>At trail crossings, longer pedestrian signal cycles, shorter crossing distances, median refuges, and street furniture.</p>
Hearing Impairment	<p>Less able to detect oncoming hazards at locations with limited sight lines.</p>	<p>At trail crossings, longer pedestrian signal cycles, clear sight distances, highly visible pedestrian signals and markings.</p>
Vision Impairment	<p>Limited perception of path ahead and obstacles; reliance on memory; reliance on non-visual indicators (e.g. sound and texture).</p>	<p>Accessible text (larger print and raised text), accessible pedestrian signals (APS), guide strips and detectable warning surfaces, safety barriers, and lighting.</p>
Cognitive Impairment	<p>Varies greatly. Can affect ability to perceive, recognize, understand, interpret, and respond to information.</p>	<p>Signs with pictures, universal symbols, and colors, rather than text.</p>

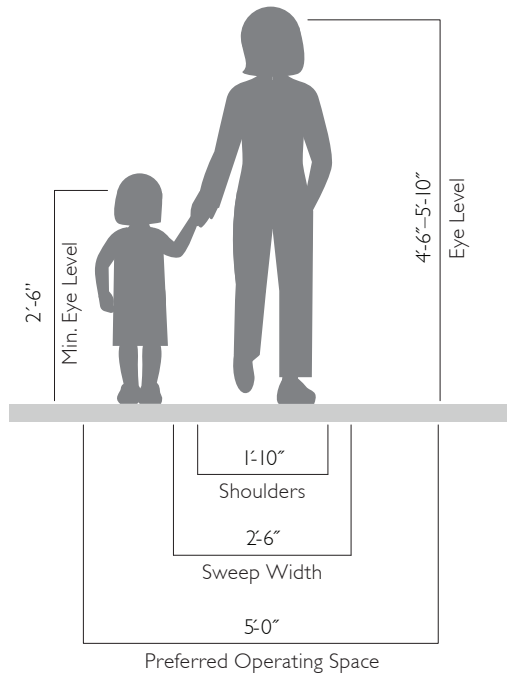
# PATH USER TYPES

Path designs should be based on the intended user types and anticipated volumes and speeds throughout the Baylands. Path users include people walking + running (including those using mobility devices or pushing strollers), people rolling (such as scooters and skateboards), people bicycling, and people using wheelchairs. Unique user groups visiting the Baylands also include bird watchers, hunters, and kayakers.



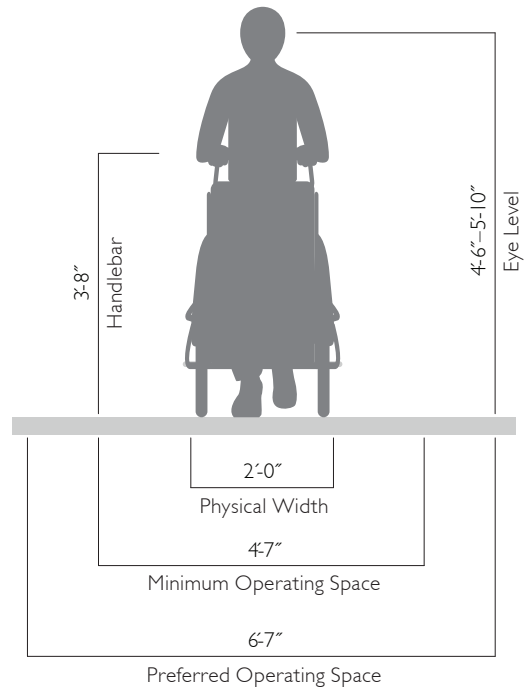
## Design Needs of Runners

Running is an important recreation and fitness activity commonly performed on shared use paths. Many runners prefer softer surfaces (such as rubber, bare earth or crushed rock) to reduce impact. Runners can change their speed and direction frequently. If high volumes are expected, controlled interaction or separation of different types of users should be considered.



### Design Needs of People walking

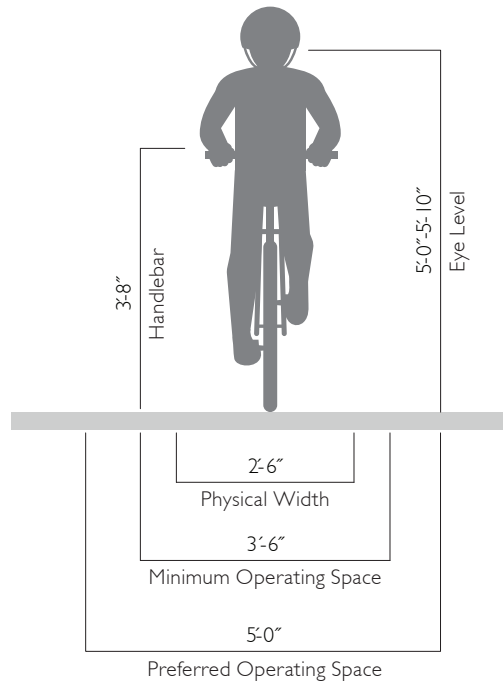
People walking have a variety of characteristics and the path network should accommodate a variety of needs and abilities.



### Design Needs of Strollers

Design needs of strollers depend on the wheel size, geometry and ability of the adult who is pushing the stroller.

Strollers commonly have small pivoting front wheels for easy maneuverability, but these wheels may limit their use on unpaved surfaces or rough pavement. Curb ramps are valuable to these users. Lateral overturning is one main safety concern for stroller users.



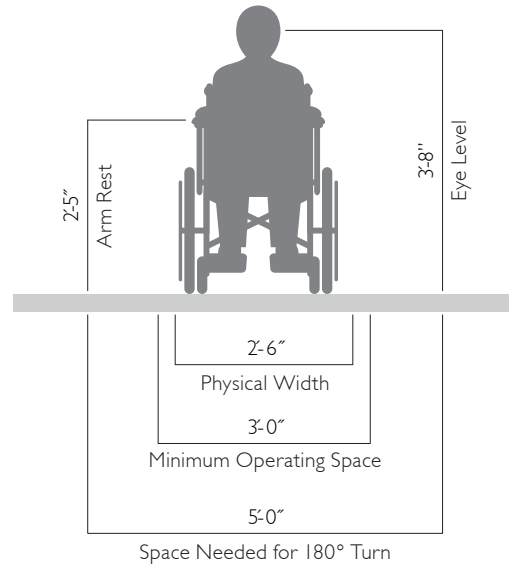
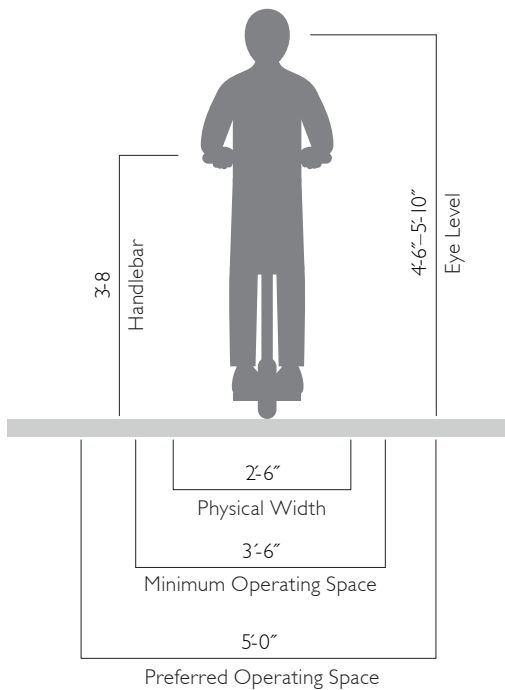
### **Design Needs of people bicycling**

The path design should consider reasonably expected user types and utilize the appropriate design dimensions and standards. People bicycling differ from people walking in several ways, such as moving at a faster pace and generally having a higher center of gravity.

Users on electric bicycles should also be considered, with increased speeds and further travel times.

Design of path curves is important for people bicycling, as are the design of ramps, grade changes, and path surface transitions.

In addition to the design dimensions of a typical bicycle, there are many other commonly used pedal-driven cycles and accessories to consider when planning and designing bicycle facilities. The most common types include tandem bicycles, recumbent bicycles, and trailer accessories.



### Design Needs of people rolling

Scoters, skateboards and other micro-mobility devices (MMD) are low-speed mobility devices operated on-street facilities. MMD can be entirely human-powered, powered by an electric motor, or a hybrid of the two, but typically have a speed of 20 mph or less. Because the speed of these devices is similar to bicycles, they are often operated in bicycle facilities (on-street and off-street).

In general, these devices have the same design and operating envelopes of bicycles (in some cases even narrower), and can be operated by a wide range of users, including those who may not be able to operate a traditional bicycle.

The cost of these devices continues to decrease, making them more accessible. Beyond personal ownership, MMD for public use continues to expand with scooter-share systems being implemented in many cities across the country.

### Design Needs of people using a Wheelchair

Manual wheelchairs are self-propelled devices that can also be controlled by a second individual using handles attached to the back of the chair.

Powered wheelchairs and other electric mobility devices have larger physical dimensions than manual wheelchairs, and use battery power to move the wheelchair. The size and weight of powered wheelchairs limit their ability to negotiate obstacles without a ramp. Various control units are available that enable users to control the wheelchair movement, based on their ability such as a joystick control or breath control.

Maneuvering around a turn requires additional space for wheelchair devices. Providing adequate space for 180 degree turns at appropriate locations is an important element of accessible design with minimum 3-foot clearance between obstacles<sup>1</sup>.



### **Design Needs of Bird Watchers**

Similar to pedestrian needs, Bird Watchers and other sight-seeing recreational activities need vertical clearances for to see longer distances. Also, these user types may move at a slower pace and should consider having viewing areas, separated from faster path types. Observation decks and viewing towers should be considered in desired areas. Appropriate distances and setbacks from sensitive habitat is important to consider.



### **Design Needs of Hunters**

Hunters may not need typical designated paths but amenities such as parking lots should be considered in potential hunting areas. Wayfinding and setbacks from vulnerable user groups should also be considered.



### **Design Needs of Kayakers**

Refer to Water Trail Guidelines for various watersports and water users. Kayakers are the most likely to utilize the Baylands and will need special considerations at major launch points, destination sites, paddle-in campgrounds, and potential paddleshare locations.



## Precedents

The following precedents highlight successful trail systems that have been implemented in a similar environment to the Baylands.

These precedents also demonstrate important lessons that can be applied to the Baylands. These include:

No one typology fits all contexts.

Trails should be built to be resilient to the anticipated water level in the year 2100.

A resilient concrete surface is long-lasting and can withstand large storm events that cause temporary flooding.

Boardwalks or soft-surface trails may be preferred through environmentally sensitive areas.

# LOCAL PRECEDENTS

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## **Alviso Salt Ponds Environmental Education Center**

This restoration area features uplands, marshes, salt ponds, and a freshwater tidal slough. The building, designed for education, contains two classrooms, an auditorium, and an enclosed observation tower. Trails and a new boardwalk through the seasonal wetland habitat make it easy to see and explore the natural wonders of the South Bay.



## **Mountain View/Sunnyvale Bay Trail**

This five mile stretch of Bay Trail was constructed in 2016. The trail sits atop a series of levees in salt ponds and wildlife refuge adjacent to Moffett Field. The permeable decomposed granite surface was a requirement of the resource agencies and allows the trail to blend into the surrounding environment.



## **Richmond Bay Trail**

This recently constructed segment of the Bay Trail in north Richmond includes an elevated structure resilient to projected sea level rise.



## Baylands Trail Network

The access in the Baylands should balance and connect trail networks including the Bay Trail, Water Trail while also enhancing and protecting existing and future habitat.

**TRAIL + BAY TRAIL**

**+**

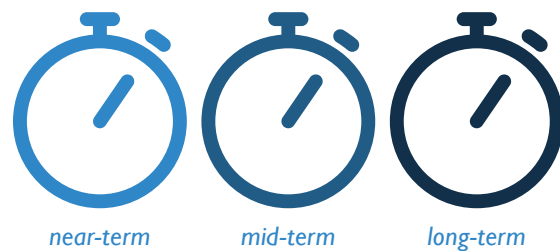
**WATER TRAIL**

**+**

**SENSITIVE HABITAT**

# FEASIBILITY + RESILIENCY

The trail typologies throughout the Baylands should examine the opportunities and constraints presented by their longevity and re-use of the structures, level of resiliency to sea level rise, and sensitivity to habitat.



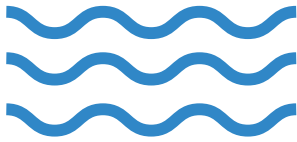
## PROJECT PHASING

The implementation of different trail facilities may have varying time scales in order for the Baylands to remain resilient to sea level rise.

Quick build, near-term priority typologies can close key gaps in the existing network. Near term trail typologies are intended to be implemented within the next five years. Considerations should be made to include materials that may deteriorate or adapt with sea-level rise, flooding and inundation without harm to surrounding habitat.

Mid-term typologies require additional study and funding allocation prior to implementation. Mid-term projects may or may not be resilient to sea level rise. Considerations should be made to include materials that may deteriorate or adapt with sea-level rise, flooding and inundation without harm to surrounding habitat.

The long-term typologies are intended to be resilient to sea level rise and incorporated into the ultimate SR 37 corridor improvements.



### **RESILIENCY TO SEA LEVEL RISE**

Long lasting trail design solutions should be made of durable materials and built to an elevation that withstands the anticipated water-level in the min-century.

These resilient, long-term solutions can be developed along with environmental restoration efforts.

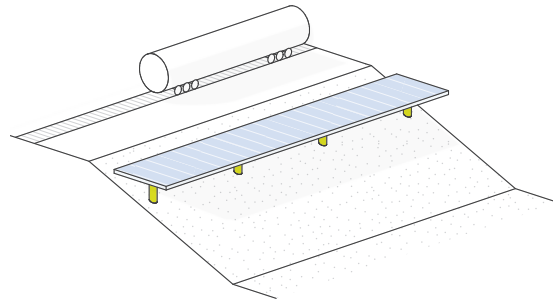
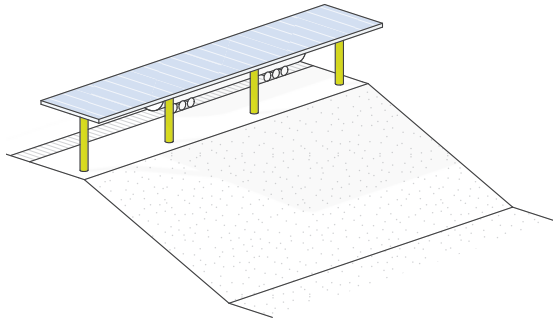


### **SENSITIVITY TO HABITAT**

The trails are intended to be developed in proximity to rivers, wetlands, and other natural areas. Special design consideration is needed to avoid negative impacts to these sensitive resources. The exact location of seasonal marshes, ponds, and riverine wetlands will need to be further delineated so that the trail can avoid impacting these resources or appropriate mitigation measures designed and permitted.

# FACILITY TYPOLOGIES

The trail typologies respond to the varying contexts throughout the Baylands and are rated by how they respond to their longevity and reuse of the structures, level of resiliency to sea level rise, and sensitivity to habitat.



## Path Types

### Elevated Top-of-bank

An elevated top-of-bank typology has a path supported by piers that anchor on the top-of-bank. This typology is valuable for ramping and crossing over roadways, rail, and other at-grade obstacles. This typology considers sea level rise, can be placed at top of existing levees, and should be considered for the ultimate Highway 37 design.

### Elevated adjacent to Levee

An elevated typology has a path supported by piers that anchor on a slope of levee or adjacent to levee. This typology is valuable for ramping and crossing over roadways, rail, and other at-grade obstacles, particularly in locations where an elevated top-of-bank typology is not feasible. The placement can be set back from areas that will be inundated from sea level rise. Elevated typologies can have a variety of surface types such as grated or wood boardwalks to minimize ecological impact for plant and animal species. Option for floating or elevated path types.

Phasing



Resiliency



Sensitivity



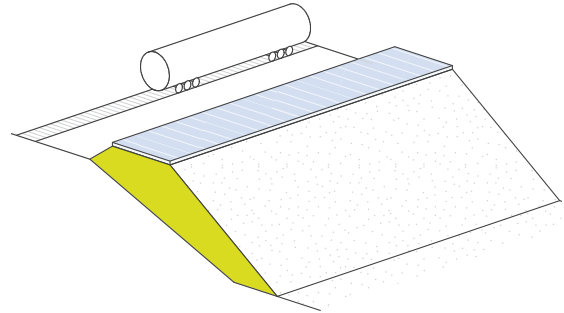
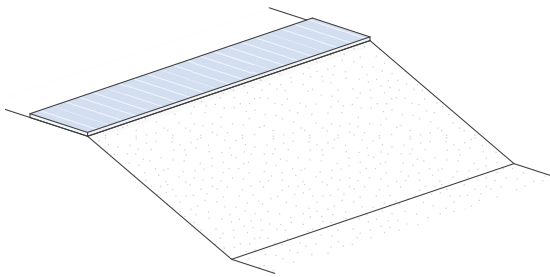
Phasing



Resiliency

Sensitivity





**Top-Of-Bank**

A top-of-bank typology uses available space at grade for the path. This typology is the simplest and most cost effective construction, but is only feasible in select locations where rail lines and utilities are set back from the channel at a sufficient distance and is elevated above projected sea level rise.

**Buttress Fill**

Using dredged material or excess sediment, Buttress Fill typology is adjacent and parallel existing levees. Typology should be used sparingly and strategically to avoid severing ecological and hydrological flows. Refer to the County of Sonoma the Sears Point Connector Trail Feasibility Study project for further details.

Phasing



Resiliency



Phasing

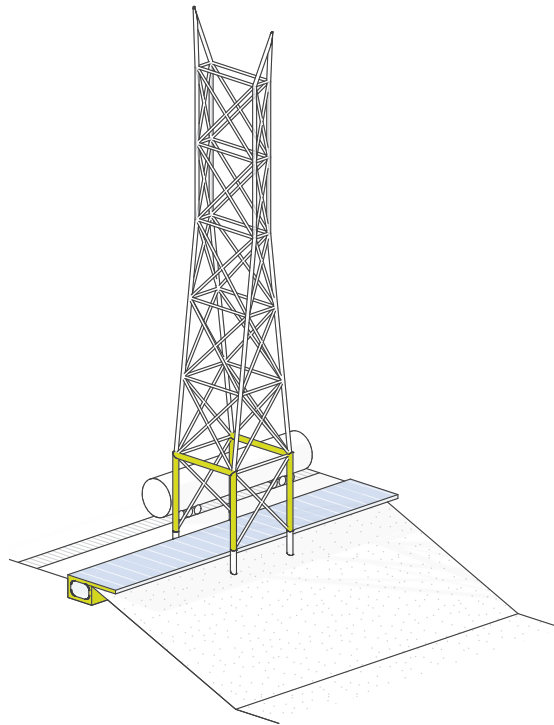


Resiliency



Sensitivity

# FACILITY TYPOLOGIES



## Utility Corridors Overview

Utility corridors often offer space for shared use path and trail development. These corridors offer excellent transportation and recreation opportunities for trail users of all ages and skills.

Some typical applications include along underground utilities such as water, sewer, natural gas, or buried electric or optic lines and along above-ground utility corridors such as telephone, cable, or overhead electric.

Utility companies benefit from this arrangement by having uninterrupted, easily accessible route to their utility service. Individual utility companies may have their own policies and guidelines about buffer requirements.

## Under

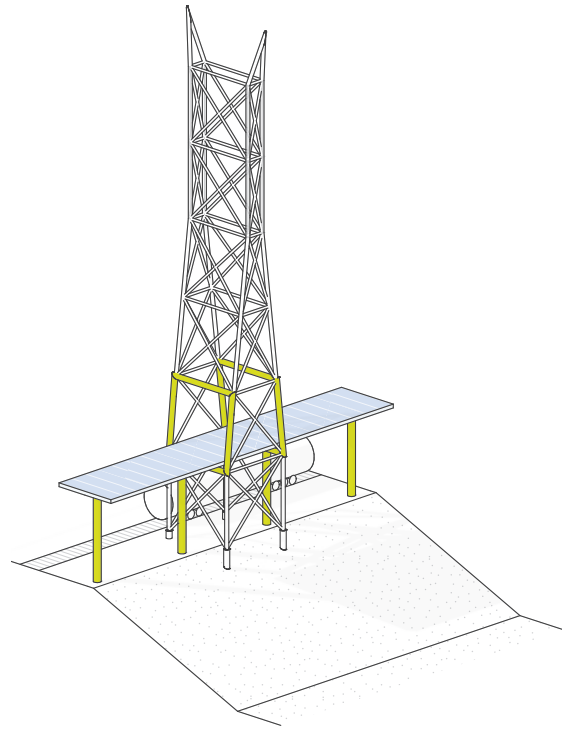
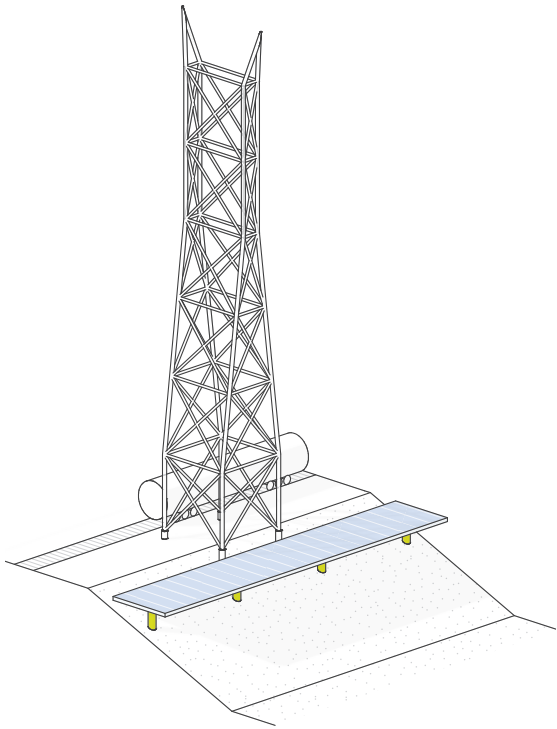
In an under utilities typology, an at-grade, cantilevered, or incised path passes underneath an existing utility tower. This typology may require partially rebuilding the lower portion of the tower. This typology could be used where utility towers are large (20 feet wide) and obstruct the route at the top-of-bank. This is an opportunity to use paths, and potentially existing paths, that can be used to recreation as well as maintenance for the utilities.

*Phasing*



*Resiliency*

*Sensitivity*



**Around**

Jogs a cantilevered, incised, or elevated path around an existing utility tower. This typology avoids impacting the existing tower but will impact the levee or baylands. It could be used where utility towers obstruct the route at the top-of-bank and are too small to pass through. This is an opportunity to use paths that can be used to recreation as well as maintenance for the utilities.

**Through**

Passes an elevated path through an existing utility tower. This typology may require partially rebuilding the middle and lower portion of the tower. It could be used where utility towers are large (20' wide), obstruct the top-of-bank route, or would otherwise be at risk for sea level rise.

*Phasing*



*Resiliency*



*Sensitivity*

*Phasing*



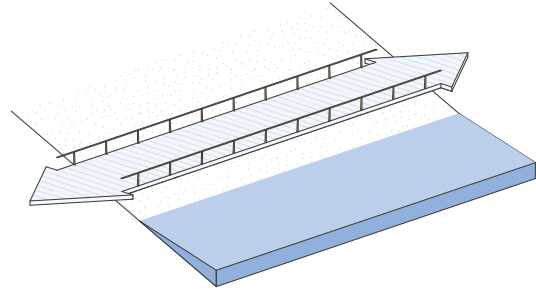
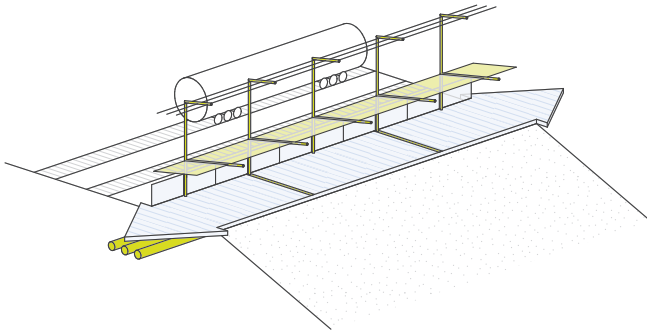
*Resiliency*



*Sensitivity*



# FACILITY TYPOLOGIES



## Rail Corridors

### Adjacent

Rails-with-Trails projects typically consist of paths adjacent to active railroads within railroad right-of-way. Consider consolidating corridor with above and below ground utilities. Rail, utilities, and trail are long term infrastructure improvements and will be set to an elevation above sea level rise.

The trail setback from the rail line greater than 20' will result in a more pleasant trail user experience and should be pursued where possible.

## Riparian Corridors

### Adjacent

Riparian and waterway corridors often offer excellent shared use path development and gap closure opportunities as well as transportation and recreation opportunities for trail users of all ages and skills.

Consider environmental impacts and set trail out of potential marsh migration. If trail is set parallel to waterway, crossing points that are perpendicular to waterway allow for marsh migration and inter-tidal zones.

Phasing



Resiliency



Sensitivity

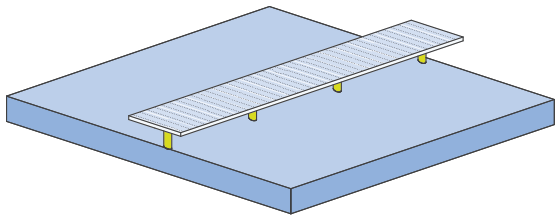
Phasing



Resiliency

Sensitivity





## Boardwalks in Wetlands

### Above

Boardwalks are typically required when crossing wetlands or other sensitive natural areas. A number of low-impact support systems are also available that reduce the disturbance within wetland areas to the greatest extent possible.

In general, building in wetlands is subject to regulations and mitigation and should be avoided. See Trail Surfaces for materials.

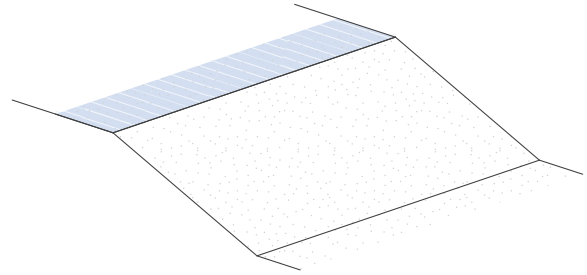
Phasing



Resiliency



Sensitivity



## Short Term Levees

### Top-Of-Bank

In areas where future habitat restoration is uncertain, existing non-paved levees are a great, existing opportunity to allow for access. Temporary shade and water stations would benefit cyclists and pedestrian groups. Coordination with land owners on maintenance and access is necessary. These levees provide an existing network that cyclists and pedestrians can access almost immediately at a low cost. As sea level rises, the paths can either be flooded or respond to the appropriate resilient method according to the desired restoration efforts.

Phasing



Resiliency

Sensitivity

# FACILITY TYPOLOGIES: SR-37 LONG TERM

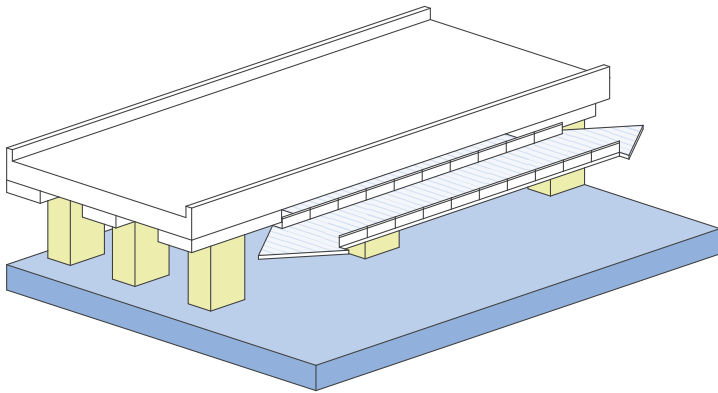
The ultimate alignment for SR-37 will include a long term, resilient, and sensitive to habitat solution. The facility typologies explored in this section focus on the experiential relationship between users on the future Bay Trail versus vehicular traffic on the causeway.

## Precedent Study:

I-70/Colorado River. The trail is set below the highway with a sound barrier that creates a comfortable trail for pedestrians and cyclists.

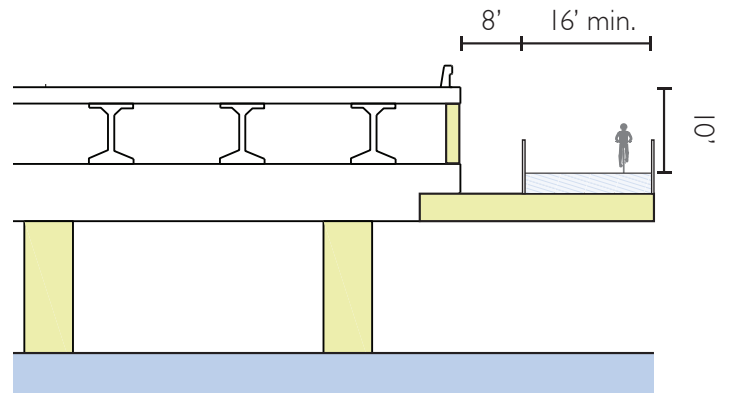


# FACILITY TYPOLOGIES: SR-37 LONG TERM PREFERRED



## Beside and Below

Cantilevering the trail from the elevated structure minimizes additional structures needed throughout the Baylands.



## Section.

Loud vehicular traffic noises and stress are minimized by setting the trail approx 10' below the causeway and extending approx. 8'.

Phasing



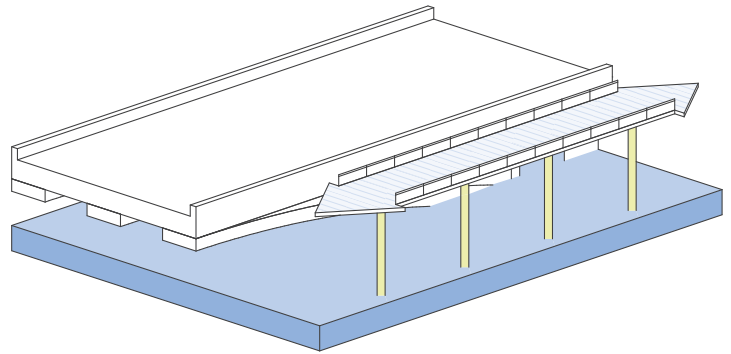
Resiliency



Sensitivity



# FACILITY TYPOLOGIES: SR-37 LONG TERM



## Adjacent Typologies

These typologies separate the trail from the future SR-37 elevated structure. These should be set back a minimum of 25', similar to rail corridors to manage the amount of noise heard from the highway and improve the overall experience and sight-lines. There also is the option to add these alignments on the North or South side of the alignment. The separation also allows the path to meander to different parts of the Baylands and are not tied down to the vehicular structure.

## Adjacent - Above

Allows bikers/pedestrians/etc to see over the highway. Cost and height would need to be studied.

Phasing

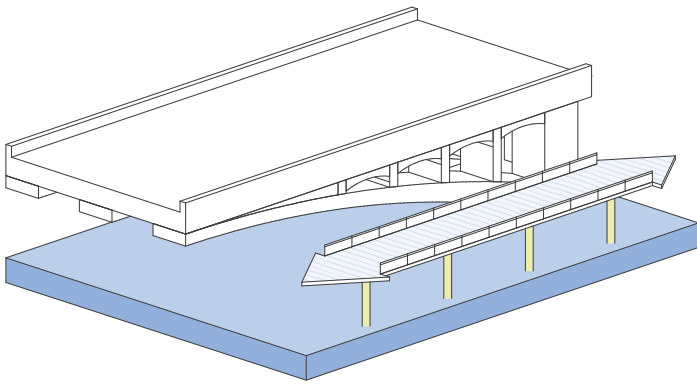


Resiliency



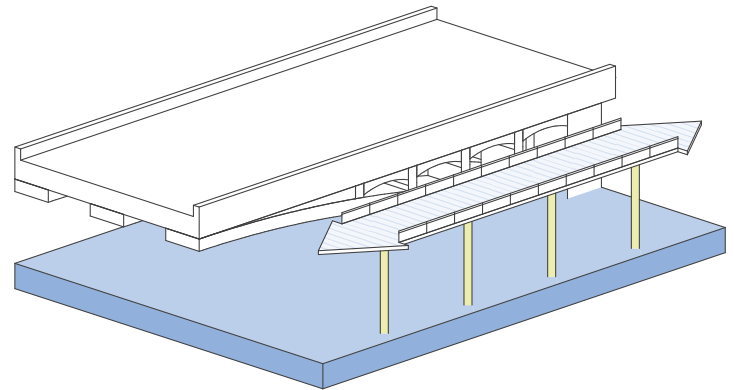
Sensitivity





### **Adjacent - Below**

Capitalized on the structure for shade, potential for visual interest if the vehicular structure becomes a place for birds and other species, and minimizes sound from vehicular traffic. Provides opportunities for water access.



### **Adjacent - Same Plane**

As the alignment of the future highway is studied, the height will most likely be related to projected sea level rise and the height of the trail should be at the same height of the highway.



**Beside and Below - Birds Eye View**



**Beside and Below - Eye Level View**



**Adjacent - Above - Birds Eye View**



**Adjacent - Above - Eye Level View**



**Adjacent - Same Plane - Birds Eye View**



**Adjacent - Same Plane - Eye Level View**

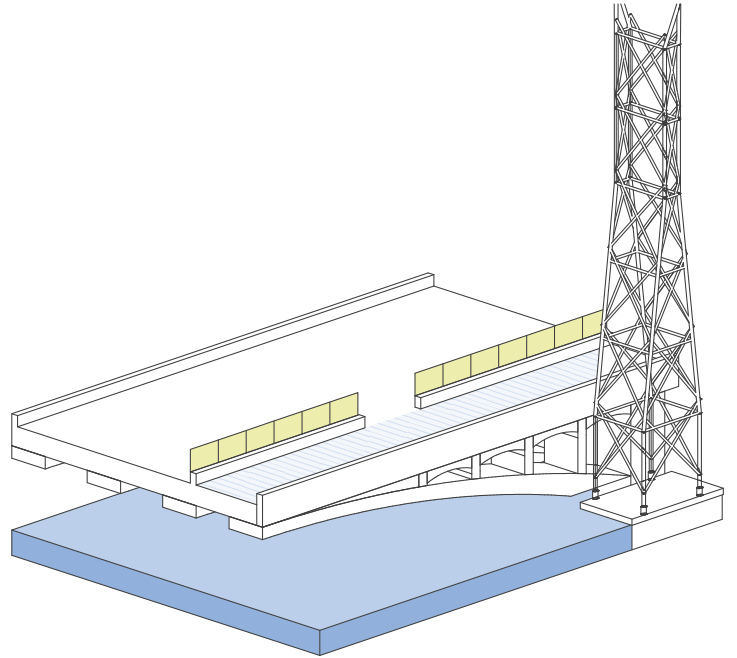


**Transitioning - Up/Down - Birds Eye View**



**Transitioning - Up/Down - Eye Level View**

# FACILITY TYPOLOGIES: SR-37 LONG TERM



## Cantilevered Typologies

These typologies attach the trail to the future SR-37 elevated structure. These typologies should have significant buffers and sound/lighting should be considered.

## Beside

Attaching the trail to the structure at moments is beneficial for emergency access and maintenance vehicles. The barriers between the highway and the trail should be visually interesting and vary between porous- to allow sightlines to other sides of the Baylands- and solid, to mitigate noise, allow for plantings, etc. This can also lessen the amount of visual noise throughout the area.

Phasing

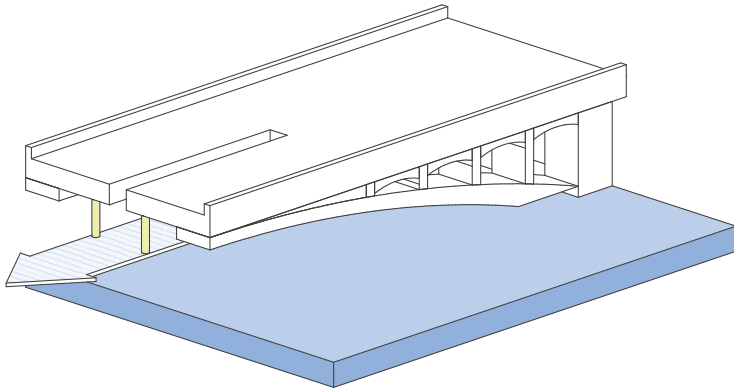


Resiliency



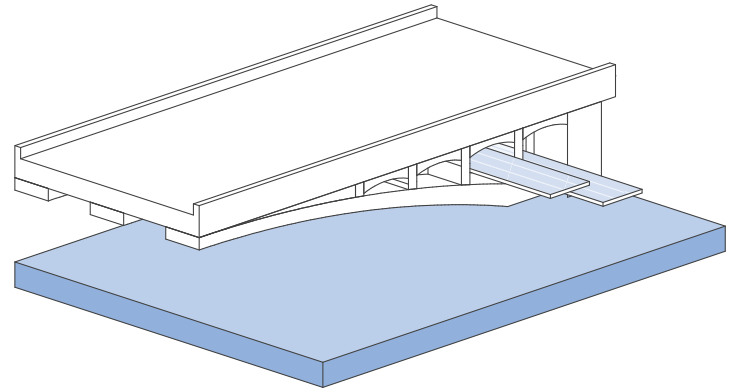
Sensitivity





### **Below**

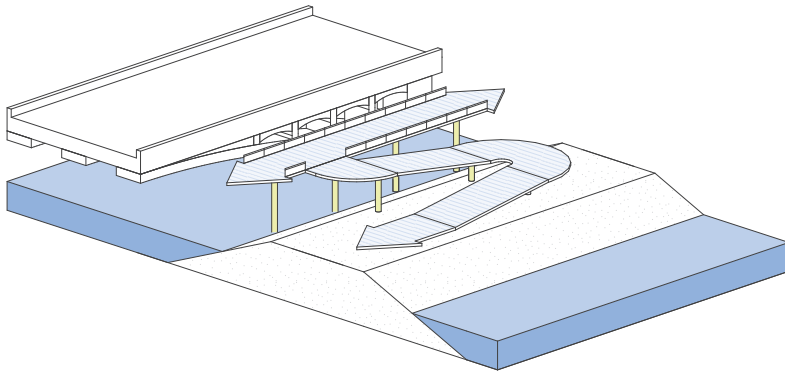
Where maintenance and inspections need to occur on the structure, the amount of pathways could be consolidated and a unique experience for the trail users. Sound buffers may be needed but could be an opportunity for art, lighting, and consolidated structures throughout the Baylands.



### **Through**

Similar to the Below strategy, the trail can split and move through the structure - in ways that serve both as maintenance and shade platforms but also allow the trail to follow a separate course.

# FACILITY TYPOLOGIES: LONG TERM



## **On Levee (old SR-37 Alignment)**

To supplement the cantilevered or adjacent typologies, this typology utilizes existing levees that support ecological goals for pedestrian, bike, and water trail access. This can be used on the existing SR-37 route, that is above sea level rise, and does not impact future wetland mitigation and migration. The width of the levee can be used for amenity zones, shade structures, or green infrastructure.

*Phasing*



*Resiliency*

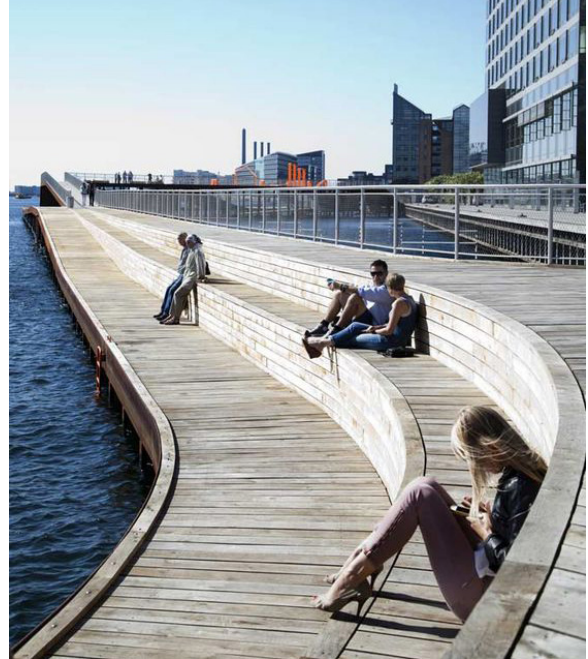


*Sensitivity*





Colorful materials and unique lighting create a fun, active atmosphere.



Breaking down the edge from structure to the waterfront is an important feature to consider. The structure should not just move through the Baylands, but drop down where feasible and appropriate.



Structures should relate to each other and feel comfortable for all users.



Overall experience and materials should relate to the context and overall help shape the identity for the Baylands.



## Trail Fundamentals

The trail network consists of the San Francisco Bay Trail (Bay Trail) as well as other connecting trails to the Baylands. The goal of the network is to bring people to the Baylands through continuous, low-stress, separated trails.

The trails may transition from a combined shared use path to separated zones for pedestrians and cyclists, depending on demand and location. The trail system may also have varying typologies such as using existing levees or following utility corridors. The trail network should be made of appropriate and resilient materials, have safe crossings, as well as an array of amenities depending on demand and context.

## Water Trail Fundamentals

The San Francisco Bay Area Water Trail (Water Trail) is a growing network of non-motorized small boat launching and landing sites. The Water Trail primarily uses and seeks enhancements to existing boat launch locations, but where suitable encourages new access designed to meet the conditions and capacity of the area. By creating a network of sites every 3-4 miles and overnight opportunities every 8 miles, this program will allow the public to explore and learn about the Baylands like never before.

# TRAIL DESIGN PRACTICES

## Overview

Trails and shared-use paths can provide desirable facilities, particularly for recreation, and users of all skill levels preferring separation from traffic. These typologies can be used for multiple recreation and transportation opportunities throughout the varying contexts surrounding the Baylands. The Bay Trail will provide a continuous shoreline experience while the additional trails will connect various urban centers, regional parks, and regional trails.

## Typical Application

In abandoned rail corridors.

In active rail corridors, trails can be built adjacent to active railroads (referred to as Rails-with-Trails) such as adjacent to the future SMART Rail line.

In utility corridors, such as powerline and sewer corridors.

In waterway corridors, such as setback from the Petaluma River, Napa River, and wetlands in the Baylands.

Within roadway right-of-way.



# WATER TRAIL DESIGN PRACTICES

## Overview

The Water Trail Facilities should throughout the Baylands should be designed based off of the context. By providing access to the Baylands major asset, the water, the users are encouraged to become stewards of this landscape by providing unique experience throughout the region. Access points should include and consider the needs of camping, hunting, fishing along with paddlers as well as include safety and stewardship information.

## Typical Application

In the San Pablo Bay.

In rivers adjacent to project area such as the Petaluma and Napa River.

Sloughs in the Baylands.



# TRAIL SURFACE TYPES

The majority of the trails is likely to be an asphalt surface with decomposed granite or base rock shoulders. However, environmental agencies may require a more permeable surface for constrained portions of the trail that are along the rivers or adjacent to wetlands. The following pages outline the pros and cons of the different materials.

## TRAIL SURFACE ALTERNATIVES

---



### CLASS II BASE ROCK - \$2.00-\$5.00/SF

#### Pros

- Drains better than natural dirt surface
- Cheaper than decomposed granite

#### Cons

- Angular aggregate, clay content, moisture and proper compaction are key
- 5 to 7 year life expectancy



### DECOMPOSED GRANITE \$9.00-\$12.00/SF

#### Pros

- Provides smooth surfaces for bicyclists
- Color blends well with surrounding landscape

#### Cons

- Doesn't stay compacted/smooth without a binder
- Relatively expensive
- 5 to 10 year life expectancy



### PERVIOUS CONCRETE \$15.00-\$18.00/SF

#### Pros

- 10 to 15 year life expectancy
- Provides smooth surface for bicyclists while being highly permeable

#### Cons

- Not as strong as conventional concrete

## BOARDWALK ALTERNATIVES

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### WOOD

#### Pros

- Natural and rustic
- Relatively inexpensive

#### Cons

- Moderate maintenance
- Short lived



### ALUMINUM / GRATED

#### Pros

- Permeable
- Environmentally sensitive since pattern creates dappled shade that allows animals and fish to pass beneath

#### Cons

- Artificial looking



### FIBERGLASS

#### Pros

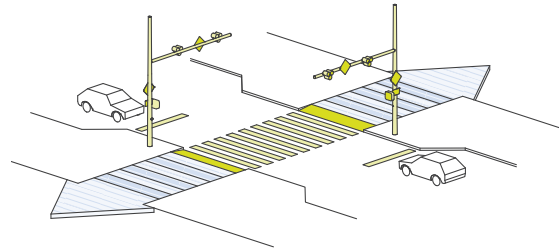
- Durable

#### Cons

- Expensive
- Artificial looking

# TRAIL CROSSINGS

The trail may connect and cross to existing street networks. Consistent markings and traffic calming elements are important elements to bring attention to both trail users and vehicles. Other vertically separated crossings, such as bridges, tunnels, and over-passes are opportunities to create an architectural identity of the trail network throughout the region.

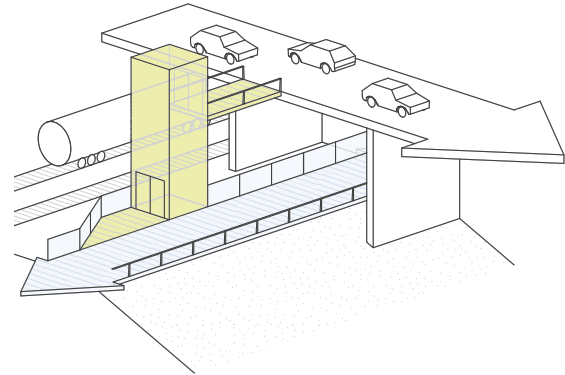
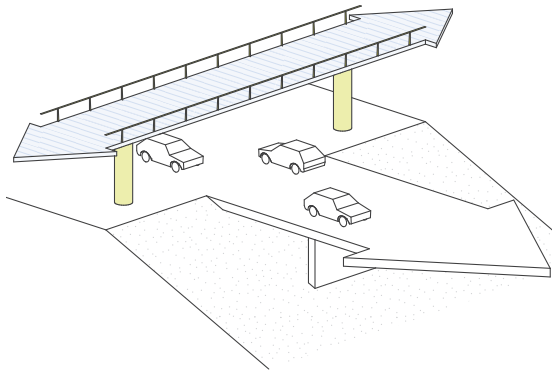


## On-Street Trail Crossings

Trail crossings are important for the safety of all users, including those on the adjacent streets. Bay Trail Guidelines lay out specific traffic calming elements and standards.

On street crossings are important at local street networks and connecting to existing trail types, such as seen.

Vertical and horizontal traffic calming elements as well as wayfinding are important as the trail changes context.



## Overpass

Grade-separated crossings provide critical non-motorized system links by joining areas separated by barriers such as railroads, waterways, and highway corridors. In most cases, these structures are built in response to user demand for safe crossings where they previously did not exist. There are no minimum roadway characteristics for considering grade separation.

Overpasses should be at least 8 feet wide with 14 feet preferred and additional width provided at scenic viewpoints. Railing height must be a minimum of 42 inches for overpasses. Centerline stripe is recommended for grade-separated facility.

## Underpass Beneath Structures

Bicycle/pedestrian underpasses provide critical non-motorized system links by joining areas separated by barriers such as railroads and highway corridors. In most cases, these structures are built in response to user demand for safe crossings where they previously did not exist.

Safety is a major concern with underpasses. Shared use path users may be temporarily out of sight from public view and may experience poor visibility themselves. To mitigate safety concerns, an underpass should be designed to be spacious, well-lit, equipped with emergency cell phones at each end and completely visible for its entire length from end to end. (AASHTO 2013)

Consider the potential flooding potential due to sea level rise.

# TRAIL DESIGN FEATURES (TRAILHEADS)

There are a number of design tools that can be used to improve the physical characteristics of the trail which in turn increase user safety and comfort while also improving connectivity and access. In particular these proposed design tools and path elements take into consideration ways in which the quality of the trail experience can be enhanced for both existing users while also being mindful of the way in which new users, might interface with the trail system.

These design features create a regional identity, educate users about the landscape, and enhance the overall experience . The variety of amenities and path elements should respond to appropriate timeframes for short term design solution and also consider cost-effective, long last solutions. Using adaptive materials are also critical.

Good access to a path system is a key element for its success. Trailheads serve the local and regional population arriving to the path system by car, transit, bicycle or other modes. Trailheads provide essential access to the shared use path system and include amenities like parking for vehicles and bicycles, restrooms (at major trailheads), and posted maps.



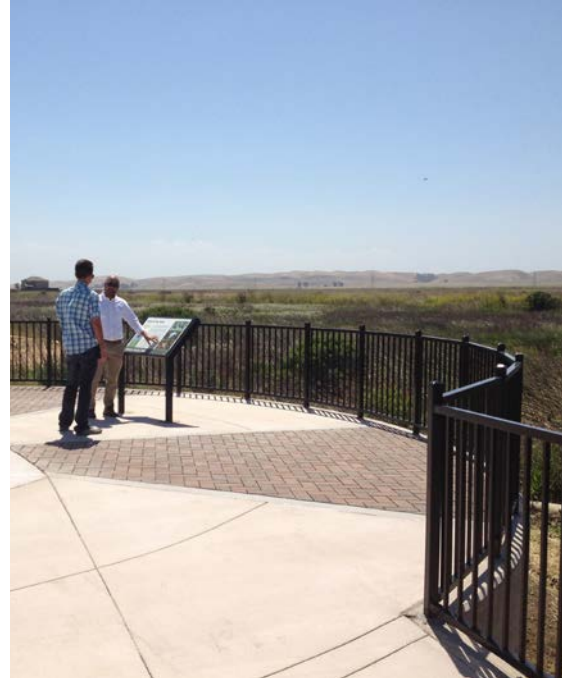
## Major Trailheads

Major trailheads should include automobile and bicycle parking, trail information (maps, user guidelines, wildlife information, etc.), garbage receptacles and restrooms.



### **Minor Trailheads**

Minor trailheads can provide a subset of these amenities.



### **Areas of Interest**

Areas of interest include vistas, overlooks and outdoor classrooms. Amenities for these areas can include seating and interpretive signage.

# WATER TRAIL DESIGN FEATURES

The majority of the Water Trail design features occur at the launching and landing sites. Typical design features for the Water Trail throughout the Baylands include:

Hierarchy of launching and landing sites

Wayfinding and trip planning is encouraged prior to accessing the Water Trail as well as information including length of trails and difficulty

Points of interest including scenic vistas, wetlands, cultural landmarks, and historic landmarks

Variety of amenities including parking, restrooms, drinking water, trash disposal, signage, camping areas, available cell phone signal, and other safety features

Typical day trips that are approximately 4 miles and should have resting areas placed accordingly

Overnight trips that are approximately 8 miles and should have overnight camping and other facilities placed accordingly

Opportunity for paddleshare or renting non-motorized watercraft to increase accessibility to a wider range of users

Provide general recommendations and security guidelines for accessing the water trail

Design facilities that can be used for fishing and hunting paddlers



## PRIMARY LAUNCH WATER TRAIL SITES

Primary Launch Facilities are adjacent to major hubs or dense populations. These areas may include a parking lot, restrooms, and concession stands. Boat storage, rental gear, and paddleshare facilities should also be considered. They may consist of boat ramps, docks, and or piers. They should also provide and comply with ADA where feasible. They should be placed appropriately in coordination with other hubs and incorporate other types of recreation including trail systems where possible.



Source: Botkins, Water Trail



## SECONDARY LAUNCH WATER TRAIL SITES

Secondary Launch Facilities are used by those that want to drive to the access point and use their own boats. These differ from the Primary Launch Sites as they offer less visitor capacity, fewer amenities, and are generally further from population centers. These sites are intended to be low maintenance areas. Natural materials are encouraged with matting for temporary stabilizing if needed.



## DESTINATION SITES

The Water Trail Plan defines these as: "A shoreline location where human-powered boats can land, but from which they cannot or should not be launched. A destination site needs to have, at a minimum, facilities for landing and then-relaunching a non-motorized small boat (e.g., a ramp, beach, etc.) . Most of these landing-only sites are not accessible by auto at all (e.g., Angel Island), or within a reasonable distance for boaters to transport their boats to the launch." Destination sites minimize the potential impact to sensitive habitats by providing designated areas for resting, bathrooms, or picnic areas for kayakers. Additionally, these may be resting areas for hunters or remote sites for fishing.



### **BOAT-IN CAMPSITES**

Overnight opportunities at boat-in campsites provides a unique experience in the Baylands. These campsites may be limited to a small number of sites and open during seasons that will have minimal environmental impact. Primitive campsites including temporary floating docks or boat-in beaches require users to pack out any trash or waste.



## PADDLESHARE OPPORTUNITY

A paddleshare system is an innovative transportation and recreational opportunity for those who do not own watercraft or a boat but want to enjoy a water experience. The system includes shared gear and storage that can be used to travel from point to point. These stations would occur at regular intervals, 4 miles or less, adjacent to denser populations.

Similar to bike share opportunities, the paddleshare system allows for recreation opportunity and financial savings for individuals. This initiative connects people to the Baylands that otherwise may not have the means.



## Trail Network

The trail network should connect and encourage users to visit and access the Baylands by using alternative and active modes of transportation. Providing connections from trails to on-street facilities extends the reach of the trail network throughout the Baylands.

Bike routes that promote bicycling as an everyday option are comfortable for most people and not just for experienced bicyclists. High comfort and low-stress facilities are vital to developing a fully functioning network that accommodates persons of all ages and abilities. The less stressful — and therefore more comfortable — a bicycle facility is, the wider its appeal to a broader segment of the population.

Separated, and low stress facilities are the priority when connecting the Baylands network to the adjacent communities.

While the San Francisco Bay Trail is intended to be a system of paths separated from vehicular traffic, other types of facilities, such as bike routes and bike lanes can be considered as near term solutions for non-Bay Trail Segments.

# PRECEDENT LOW-STRESS CONNECTORS

Throughout the Bay Area, low-stress bicycle and pedestrian routes connect people from downtown areas to the Bay Trail.

These precedents demonstrate how livable communities with comfortable networks reduce traffic, encourage walk-ability and bike-ability, and promote sustainable transportation infrastructure.

The trail network getting to and from the Baylands should also support resilient and active transportation networks.



Bicycle lanes on Shellmound Ave in Emeryville, CA connect cyclists from downtown to the Bay Trail. Separated bicycle lanes with physical barriers are preferred to make this experience more comfortable for all users.



Green paint, bicycle conflict striping, flex posts, and high visibility crosswalks improve the bicycling, walking, and wayfinding approaching the Bay Trail in Richmond, CA. The paint and posts are near-term solutions that can be upgraded to more substantial, separated facilities.



A bicycle route on a residential, dead-end street connects the adjacent residents to the Bay Trail along the Corte Madera Creek in Larkspur, CA. On-street facilities should only be considered on low volume streets and separated facilities are preferred.

# GUIDING PRINCIPLES FROM COMPLETE STREETS

Complete streets create a safe and inviting space for all users. When making connections between the trail network and on-street bicycle/pedestrian facilities, the following principles should be included:

Balance the needs of all users and all abilities including pedestrians, bicyclists, transit, vehicles, and service trucks.

Consider environmental needs and consider the street as a high-performance landscape using tree cover and storm-water management.

Improve intersection safety that accommodates all users.

Make space for walking.

Promote high quality cycling facilities that make people feel safe.

Add lighting and streetscape amenities to increase personal safety and the overall experience.

Implementing these guiding principle will further contribute to a resilient, equitable, and comfortable Baylands trail network.



Flow through planters and other types of green infrastructure help control storm runoff and reduce the need for supplemental irrigation.



Madison Street in Yountville, CA incorporates a separated cycle-track, planted buffer with canopy trees, lighting, a planted buffer, and narrow travel lanes. This streetscape contributes to a comfortable pedestrian and cycling experience.

# WAYFINDING FOR ACTIVE MOBILITY AND INCREASED ACCESS



Well-crafted wayfinding systems foster a sense of place and encourage people walking and bicycling to go that extra mile and explore new areas. Currently, the Baylands has existing access but does not have a cohesive wayfinding system. By implementing an array of wayfinding elements, the signage and branding helps orient both new and existing users on how to navigate the area. The wayfinding infrastructure is an affordable, environmentally sensitive way to bring people that have not been previously aware of the existing access at the Baylands.

The complete family of wayfinding elements should comply with relevant regulations and coordinate with existing wayfinding while also advancing the Baylands' design aesthetic and lending character of place to the project. Digital and innovative techniques should also be considered for resilient wayfinding solutions.

Places that are arranged intuitively so that we can see obvious destinations from a distance, determine pathways, and recognize areas of different character are more legible. The "legibility" of a place describes how easy it is to understand.

Legible wayfinding systems enable individuals to:

Easily and successfully find their destination

Understand where they are with respect to other key locations and networks with little misunderstanding

Discover new places and services

Feel safe (enhance the sense of safety)

The following six core principles aim to guide the placement and design of a wayfinding system to create a clear experience and achieve a more navigable trail system:

## 1. Connect Places

Wayfinding should enhance connections within the region and to neighboring communities. This information can also increase users understanding of the important ecological functions of the Baylands and contribute to the overall path identity and character.

## 2. Promote Active Travel and Recreation

Wayfinding should encourage increased walking, rolling, or kayaking by revealing a clear and attractive system that is easy to understand and navigate.

## 3. Maintain Motion

Walking, rolling, and kayaking require physical effort, and consistent, clear, and visible, easily comprehensible wayfinding elements allow people to navigate while maintaining their state of motion.

## 4. Be Predictable

When information is predictable, patterns emerge, and users of the network will be able to rely on the system to provide information when they expect it.

## 5. Keep Information Simple

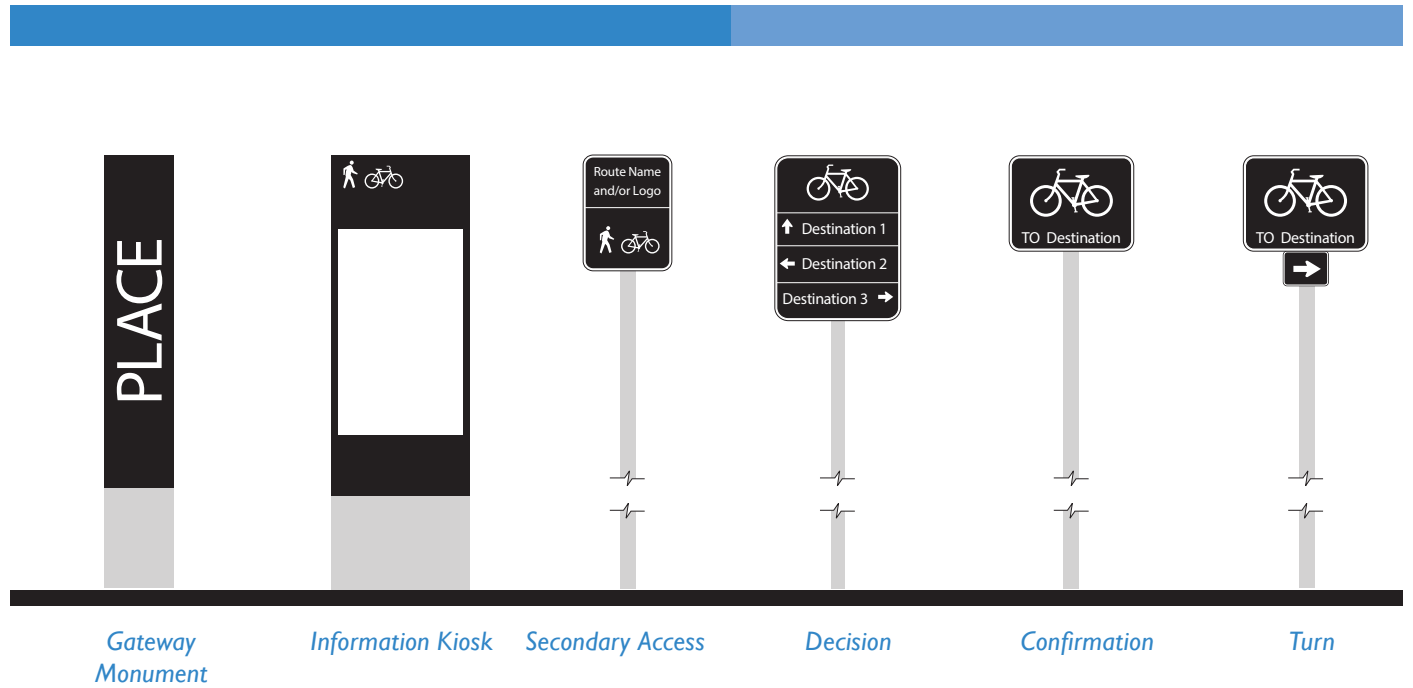
It is important to provide information in manageable amounts. Too much information can be difficult to understand; too little and decision-making becomes difficult.

## 6. Make it Accessible

Wayfinding signage should be accessible and be designed to be comprehensible by people of all ages and ability levels.

## ACCESS ELEMENTS

## FUNDAMENTAL ELEMENTS



## WAYFINDING ELEMENTS

The goal of a wayfinding system is to simplify navigation in the varying types of environments. This section describes the spectrum of elements that may be used in the Baylands Wayfinding Signage Plan.

### Access elements

#### Gateway Monument

Define the entry into a distinct neighborhood, or mark trailheads, access points, and landmarks. Opportunity for community-directed placemaking and integrated artwork.

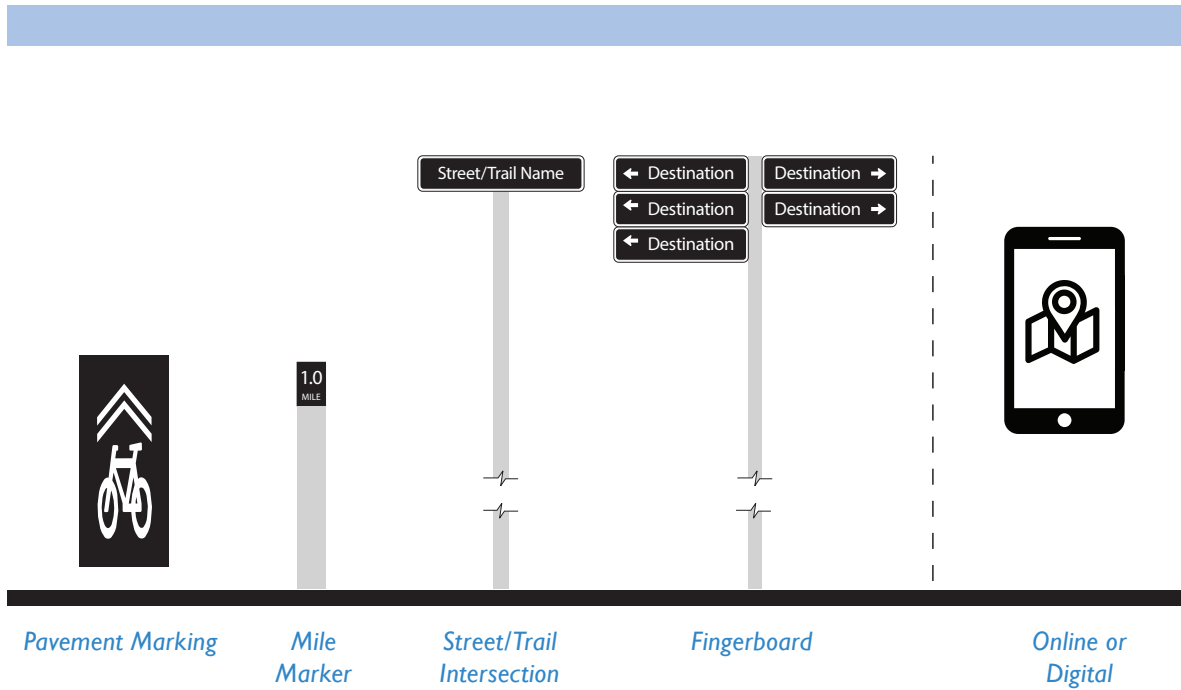
#### Information Kiosk

Provide system map and navigational information; most effective when placed in plazas, rest areas, or other locations where users may congregate, rest, or enter a trail or path.

#### Secondary Access Signage

Mark entry to trails or paths at locations where limited user traffic may not necessitate as much information as information kiosks

## ENHANCED ELEMENTS



### Fundamental navigational elements

#### Decision

Clarify route options where two or more routes converge, or at complex intersections.

#### Confirmation

Placed after a turn or intersection to reassure path users that they are on the correct route.

#### Turn

Placed before a turn or intersection to help users stay on the designated path.

### Enhanced navigational elements

#### Pavement Marking

Reinforce route direction, bicyclist positioning, intermodal cooperation, and/or system branding.

#### Mile Marker

Reinforce system branding and orient users along off-street trails or paths.

#### Street/Trail Intersection

Orient off-street trail users at street crossings and inform vehicular traffic of trail crossing.

#### Fingerboard

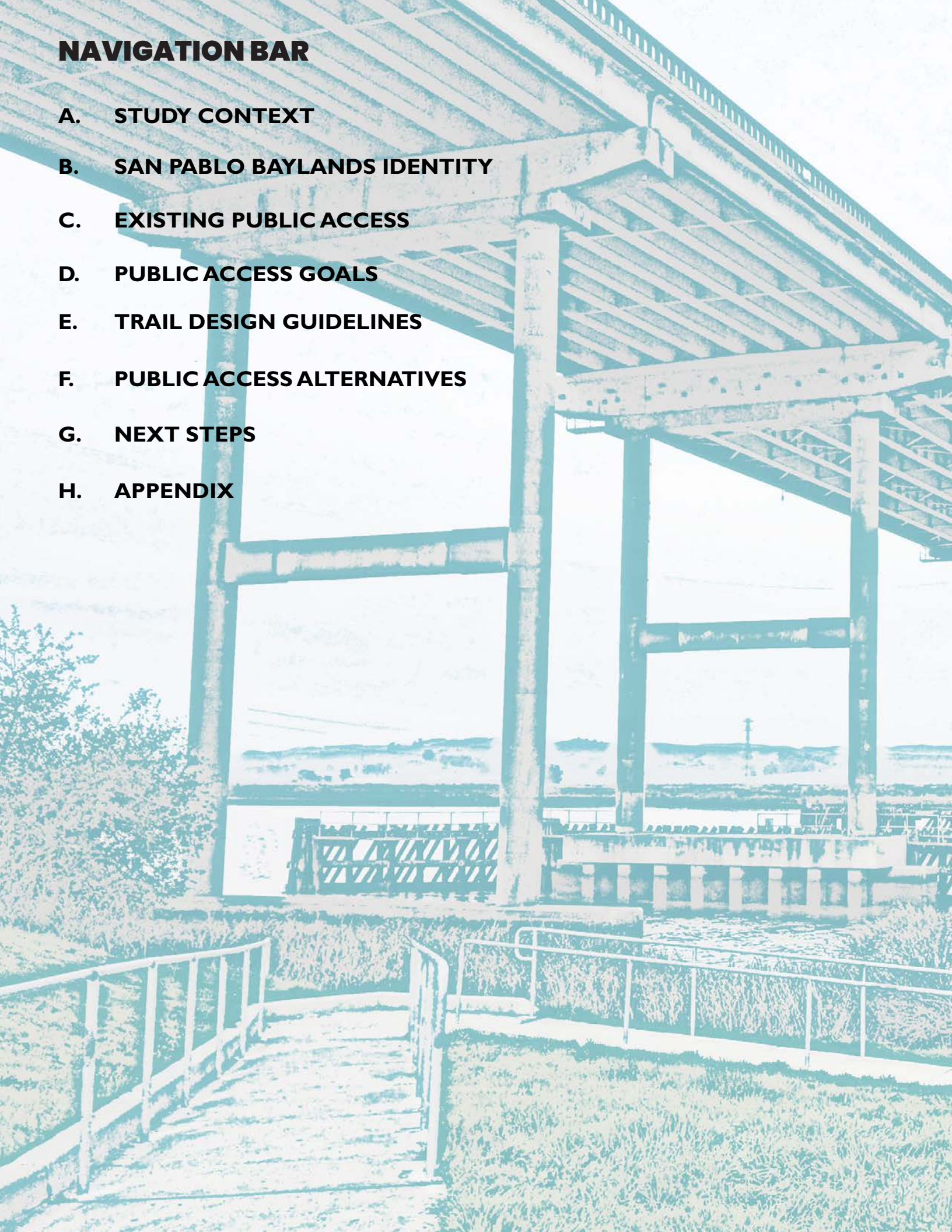
Clarify route options where two or more routes converge, or at complex intersections.

#### Online or Digital

Predict currents, tides, or flooding to support trip planning. Also includes maps or additional environmental wayfinding enhancements.

# **NAVIGATION BAR**

- A. STUDY CONTEXT**
- B. SAN PABLO BAYLANDS IDENTITY**
- C. EXISTING PUBLIC ACCESS**
- D. PUBLIC ACCESS GOALS**
- E. TRAIL DESIGN GUIDELINES**
- F. PUBLIC ACCESS ALTERNATIVES**
- G. NEXT STEPS**
- H. APPENDIX**



# **PUBLIC ACCESS ALTERNATIVES**

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# FOCUS AREAS

Each focus area diagram aims to improve connectivity to local destinations, close gaps in the trail system, increase safety and accessibility for all trail users, support economic development, and enhance the quality of life for area residents and visitors. The purpose of these diagrams are to provide clear direction to the community to invest in future trail connections while fostering additional opportunities to extend and expand access to the Baylands that is viable and appropriate.

Each focus area has two associated diagrams.

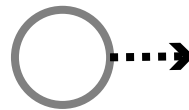
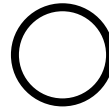
**TRAIL NETWORKS DIAGRAM.** The first diagram describes the types of network systems. The intent is to describe the concepts for the potential, comprehensive networks for these areas to avoid future gaps or piecemeal interventions. These concepts are described through:

**Spines:** Linear, regional connectors that provide connections between destination areas.

**Hubs:** Key nodes that not only provide access to multi-modal trails but are Baylands destinations and stewardship generators.

**Loops:** Closed circuits that provide users with new experiences since they do not dead end or cover the same area twice. These loops are not to be placed in areas that could potentially close off future water and marsh migrations.

**Spokes:** Shorter, linear extensions from spines hubs, or loops that provide an “out and back” experience primarily for recreation.



Note:

**Existing networks:** solid lines

**Network Opportunities:** dashed lines



**TRAIL OPPORTUNITIES DIAGRAM.** The second diagram includes the types of facilities and amenities for both on-land and water trails that either align with existing plans or promote opportunities. The comprehensive network explores opportunities to enhance and expand multimodal facilities, for both recreation and transportation purposes within the Baylands.

The following concepts are explored throughout these networks:

**Levee Leveraging:** utilize existing levees that coincide with restoration efforts as resilient, existing trail opportunities. Future efforts should develop long-term levee management plans and integrate public access into all future levee setbacks.

**Extend Connections:** close gaps between the various networks through bicycle and pedestrian facilities. Providing for seamless transitions between trails and on-street facilities encourages use of the facilities as one comprehensive network. Connectivity to on-street bicycle facilities and sidewalks provides access to destinations, neighborhoods, and recreation areas.

**Activate Hubs:** expand activities of existing nodes including: improved water access, picnicking, hiking, viewing, and educational opportunities that increase programming and community participation. Upgrade existing amenity areas with enhanced wayfinding, viewing areas, restrooms, and parking. These efforts minimize the infrastructural interventions needed.

Within these diagrams:

“Projects” or important major trail connections are noted

Other Opportunities, that have local value are also noted.

The specific streets or actual placement of these networks may need future study but these diagrams are intended to be a genesis to start these conversations for each jurisdiction. For the Water Trail Access Opportunities more detailed analysis would be needed to determine precise location. The best practices for the types of facilities are described in the Design Guidelines chapter of this report.

# Focus Area 01

## PETALUMA

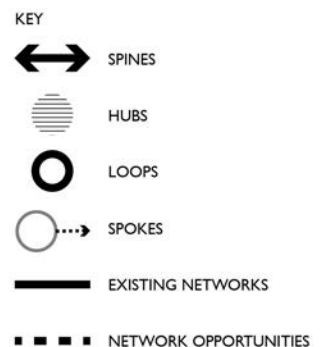
The Petaluma River focus area currently lacks safe active transportation connections between Petaluma and the Baylands. Near term recommendations within this area include:

Connect loop networks (downtown Petaluma and Shollenberger park) with riverfront.

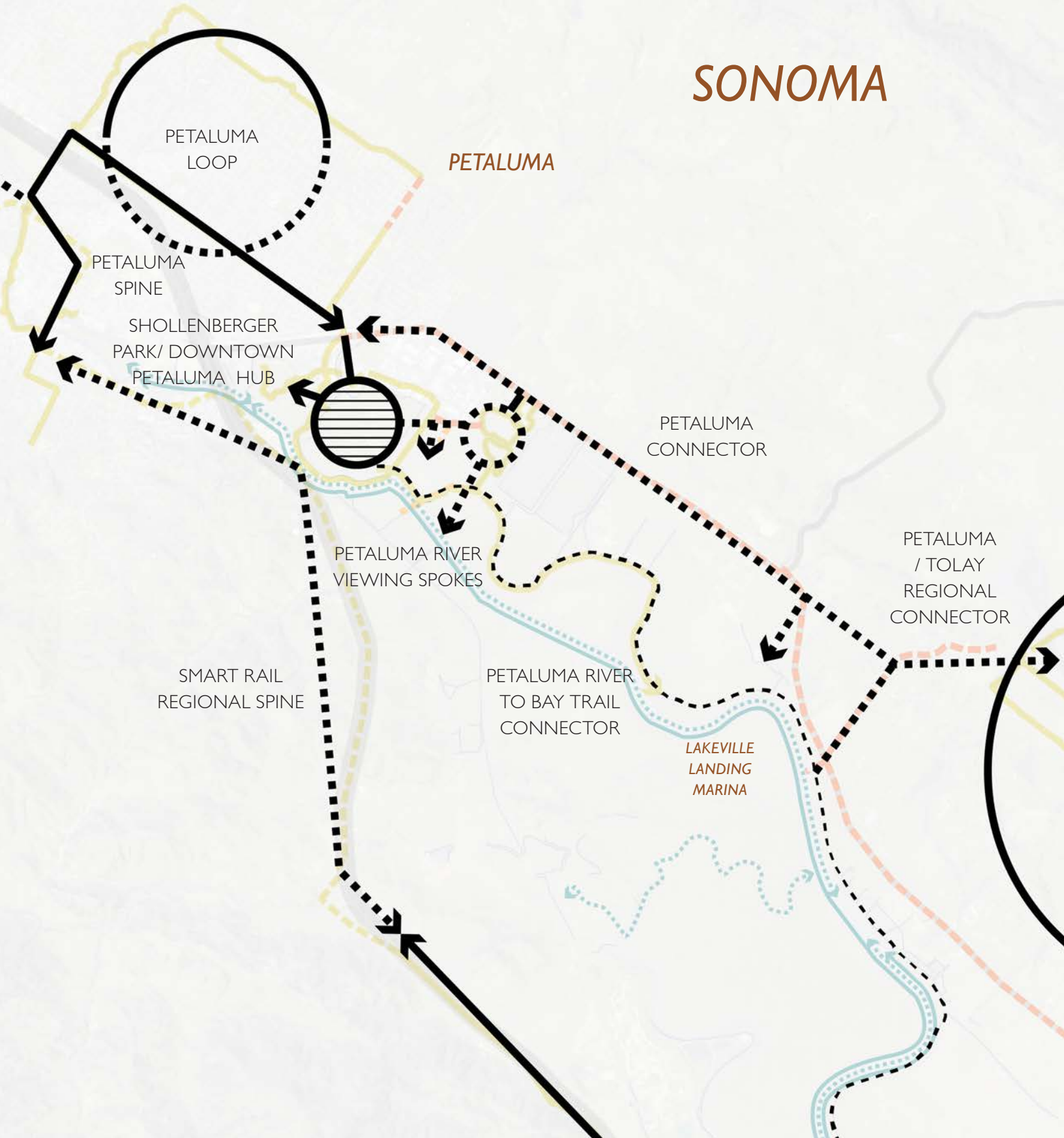
Enhance downtown Petaluma hub. This area is currently utilized well today, but could be an opportunity to educate and expand on connections to water trail.

Add new connections along the Petaluma River or along parallel streets are important Petaluma to Bay Trail connectors. These improvements will need to take into account the sensitive environmental resources along the river as well as sea level rise and future flooding.

Utilize proposed SMART pathway as a regional spine connector.



# SONOMA



# Focus Area 01

















## Projects:

#	Type	Project Name	Description
1.	Trail Corridor	N/S Connector - Marin (SMART)	Regional multi-use trail. Key northern and southern gap closure opportunities north and south of downtown water trail site.
2.	Trail Corridor	N/S Connector - Sonoma West (Lakeville Alt.)	Class II route to Sonoma and Baylands - identified as high priority opportunity in Sonoma County B/P plan.
3.	Water Trail	Petaluma Small Craft Center / Turning Basin	Existing Water Trail Site. Primary Launch Site at Petaluma Small Craft Center with paddleshare opportunities.
4.	Water Trail	Petaluma Marina	Existing Water Trail Site. Primary Launch Site with paddleshare opportunities.
5.	Water Trail	Lakeville Landing Marina	Existing private boat launch. Potential Secondary Launch location with paddle-in campsite and paddleshare opportunities for 4-8 mile trips from users coming from Downtown Petaluma and Black Point Boat Launch.
6.	Water Trail	Petaluma Marsh Wildlife Area	One to two Destination Sites.
7.	Education Node	Shollenberger Park	Hub opportunity with interpretive signage, etc.

## Other opportunities:

Letter	Description
A	Provide elevated river viewing spokes from trails at Shollenberger Park and perpendicular to Petaluma River and Ellis Creek Water Recycling Facility. Opportunity to leverage existing levees in coordination with Petaluma River Trail.
B	Opportunity for Sonoma County Parks and Sonoma Land Trust to integrate sea level rise planning, habitat restoration, and public access between Petaluma and the Bay Trail. Consider a high priority of connections perpendicular to the shoreline given private ownership of much of the land and access that can retreat with SLR.
C	Shared opportunity for Petaluma and Sonoma County to complete Class II loop identified in Sonoma County B/P plan.
D	Opportunity to enhance bicycle connection to Tolay Creek Regional Park.

### KEY

-  EXISTING TRAIL
-  PLANNED TRAIL COORDINATION OPPORTUNITY\*
-  SEPARATED TRAIL FACILITY OPPORTUNITY
-  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
-  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
-  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
-  EDUCATION NODES
-  VIEWING OPPORTUNITY
-  WAYFINDING BRANDING OPPORTUNITY
-  CROSSING IMPROVEMENT
-  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
-  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
-  DESTINATION SITES
-  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
-  PADDLESHARE OPPORTUNITY
-  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED

# SONOMA



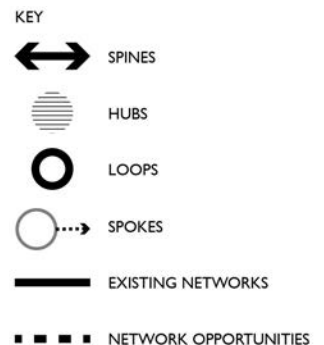
# Focus Area 02

## NOVATO

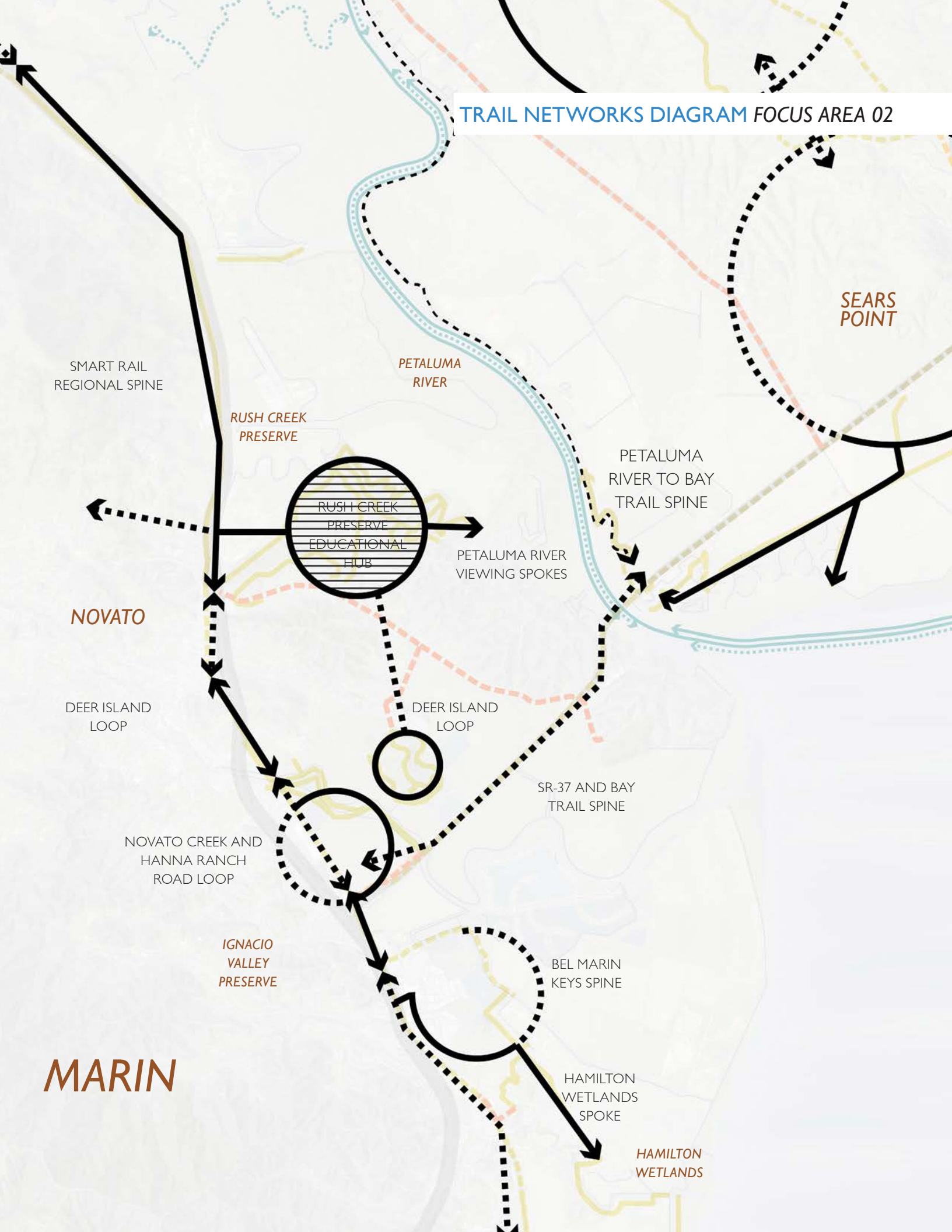
The Novato and Bell Marin Keys Focus Area includes two regional trail networks, the Bay Trail and the SMART Pathway. However, there are key gaps in connecting to these major trail systems. Near term recommendations within this area include:

Connect existing loop trail opportunities at Rush Creek Preserve. Rush Creek Preserve can be developed into an educational hub using existing trail network.

Use future SMART regional rail line to implement smaller loop networks that are set back from sea level rise and connect residents from Novato to the river and waterfront. Novato Creek and Hanna Ranch Road loop also an opportunity to connect the SMART Rail Regional Spine with the future SR-37 and Bay Trail Spine.



TRAIL NETWORKS DIAGRAM FOCUS AREA 02



SEARS POINT

SMART RAIL REGIONAL SPINE

RUSH CREEK PRESERVE

PETALUMA RIVER

PETALUMA RIVER TO BAY TRAIL SPINE

RUSH CREEK PRESERVE EDUCATIONAL HUB

PETALUMA RIVER VIEWING SPOKES

NOVATO

DEER ISLAND LOOP

DEER ISLAND LOOP

SR-37 AND BAY TRAIL SPINE

NOVATO CREEK AND HANNA RANCH ROAD LOOP

IGNACIO VALLEY PRESERVE

BEL MARIN KEYS SPINE

MARIN

HAMILTON WETLANDS SPOKE

HAMILTON WETLANDS

# Focus Area 02
















## Projects:

#	Type	Project Name	Description
1.	Trail Corridor	SR-37 Bay Trail: Segment A-1	Junction of SMART Pathway and Bay Trail. Key Novato link to regional trails and local loop opportunities.
2.	Trail Corridor	SR-37 Bay Trail: Segment A-2	SR-37 and Bay Trail/Petaluma River Crossing. Ultimate Bay Trail alignment opportunity to participate in current SR37 resiliency planning, including links to Petaluma River Marsh and Wendy Eliot Trail.
3.	Trail Corridor	N/S Connector - Marin (SMART)	.8 mile gap closure opportunity connecting Ignacio to downtown Novato and future SR-37 Bay Trail.
4.	Water Trail	Black Point Boat Launch	Existing Water Trail with upgrades to Primary Launch Site and paddleshare opportunity.
5.	Education Node	Deer Island	Education and interactive signage opportunity at existing parking and trail network facilities.
6.	Education Node	Rush Creek Preserve	Education and Interactive Signage opportunity at existing parking and trail network facilities.

## Other opportunities:

Letter	Description
A	Include trail connection from Petaluma Marina to SR 37 in Petaluma River Restoration Plans. Opportunity for Sonoma County Parks and Sonoma Land Trust to integrate sea level rise planning, habitat restoration and public access between Petaluma River and Bay Trail. Consider a high priority of connections perpendicular to the shoreline given private ownership of much of the land and access that can retreat with SLR.
B	Bay Trail gap closure connecting Hamilton wetlands to SR-37 and SMART pathway when Bel Marin Keys Unit V Wetland Restoration Phase II is funded. The current plan to finish the Bay Trail spine through the project area, most likely on the northwest side of Pacheco Pond on levee top.
C	Existing Class II facilities are loop opportunities with upgraded wayfinding and increased awareness to connect Rush Creek Preserve, Park and Ride, and Deer Island Preserve.

### KEY

-  EXISTING TRAIL
-  PLANNED TRAIL COORDINATION OPPORTUNITY\*
-  SEPARATED TRAIL FACILITY OPPORTUNITY
-  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
-  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
-  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
-  EDUCATION NODES
-  VIEWING OPPORTUNITY
-  WAYFINDING BRANDING OPPORTUNITY
-  CROSSING IMPROVEMENT
-  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
-  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
-  DESTINATION SITES
-  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
-  PADDLESHARE OPPORTUNITY
-  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED

# TRAIL OPPORTUNITIES FOCUS AREA 02



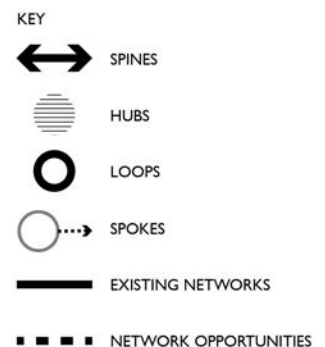
## Focus Area 03

### TOLAY LAKE REGIONAL PARK / SEARS POINT/ TUBBS ISLAND

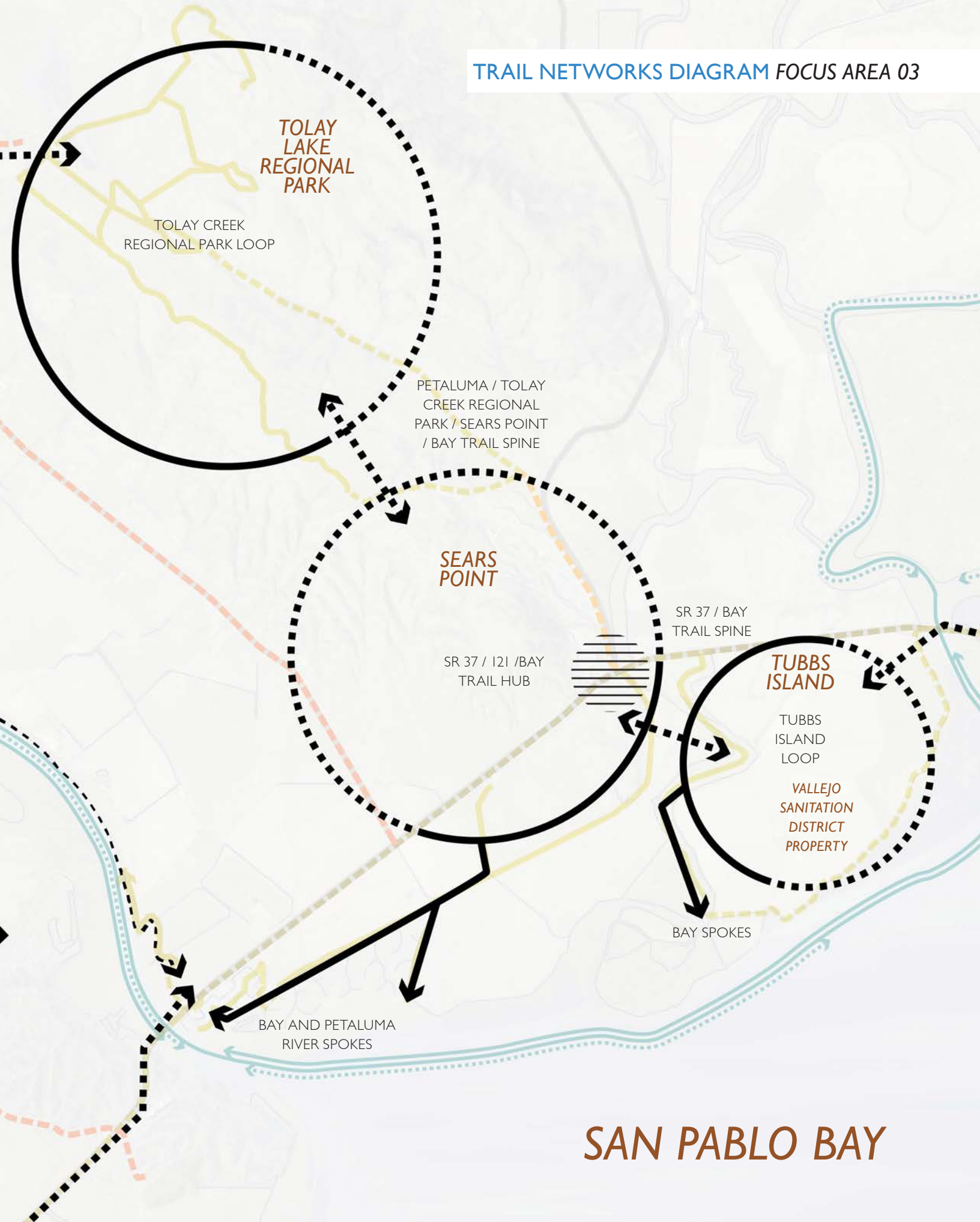
The Sears Point area and intersection of SR 37 with SR 121 has the potential to be one of the key focal points of the Baylands. The two Caltrans SHOPP projects and SR 37 interim congestion relief project are key near-term transportation projects that may incorporate access to address the Bay Trail Sears Point gap. Integrating active transportation facilities into those improvements are a near term priority and would close this key gap in the Bay Trail network. Other near term recommendations include:

Connect Tolay Lake Regional Park with future transportation and educational hubs at SR 37/ Sears Point.

Utilizing existing ROW and existing levees for future Bay viewing opportunities and interpretive nodes.



TRAIL NETWORKS DIAGRAM FOCUS AREA 03



SAN PABLO BAY

# Focus Area 03

















## Projects:

#	Type	Project Name	Description
1.	Trail Corridor	SR-37 Bay Trail: I21/ Tolay Creek	Bay Trail Gap Closure. Opportunity to implement Sonoma County Regional Parks plan connecting Bay Trail from Wendy Eliot Trail across Tolay Creek to Tolay Unit Parking Lot in NSMWA as part of the SHOPP projects and Interim SR-37 project.
2.	Trail Corridor	N/S Connector - Sonoma West (Lakeville Alt.)	Class II Connector. Opportunity identified as lower priority in Sonoma B/P Plan
3.	Trail Corridor	N/S Connector - Sonoma West (Tolay Lake Regional Park Alt.)	Class II Connector. Opportunity to link Tolay Regional Park to Bay Trail by upgrading Class II on SR-121 identified in Sonoma County B/P Plan to Class I in that section
4.	Trail Corridor	N/S Connector - Sonoma East (SR 121 Alt.)	Multi-use Park trail. Opportunity to construct connection to SR-121 as approved in Tolay Regional Park Master Plan.
5.	Water Trail	Dickson Ranch	Existing Water Trail site. Secondary Launch Site that could serve as destination site for 4 mile trips from users coming from the Petaluma River.
6.	Water Trail	Tubbs Island/ San Pablo Bay	Destination site opportunity for 4 mile trips from the Petaluma River.
7.	Education Node	Tolay Regional Park	Education and interactive signage opportunity at existing parking and trail network facilities.
8.	Education Node	Sears Point/Tolay Creek	Education and interactive signage opportunity at existing parking and trail network facilities.

## Other opportunities:

Letter	Description
A	Opportunity to negotiate public access along existing Vallejo Sanitation District levees from Tubbs Island trail terminus to Sonoma Creek.

### KEY

-  EXISTING TRAIL
-  PLANNED TRAIL COORDINATION OPPORTUNITY\*
-  SEPARATED TRAIL FACILITY OPPORTUNITY
-  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
-  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
-  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
-  EDUCATION NODES
-  VIEWING OPPORTUNITY
-  WAYFINDING  
BRANDING OPPORTUNITY
-  CROSSING  
IMPROVEMENT
-  CONCEPTUAL PRIMARY  
LAUNCH WATER TRAIL SITES
-  CONCEPTUAL SECONDARY  
LAUNCH WATER TRAIL SITES
-  DESTINATION SITES
-  DESTINATION OPPORTUNITY:  
BOAT-IN CAMPSITES OPPORTUNITY
-  PADDLESHARE OPPORTUNITY
-  EXISTING PARKING,  
CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED

TRAIL OPPORTUNITIES FOCUS AREA 03



SAN PABLO BAY

# Focus Area 04

## RAMAL ROAD, SR-37, AND SKAGGS ISLAND

The Skaggs Island Focus Area provides important east/west connections along the northern edge of the Baylands as well as the only currently adopted north/south connection between SR 121 and SR 29.

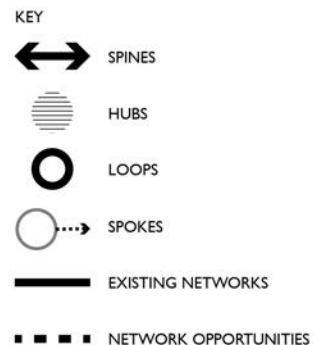
USFWS is currently developing a restoration strategy for Skaggs Island, and development of a Bay Trail connection will involve additional study and close coordination with USFWS.

Other near term recommendations include:

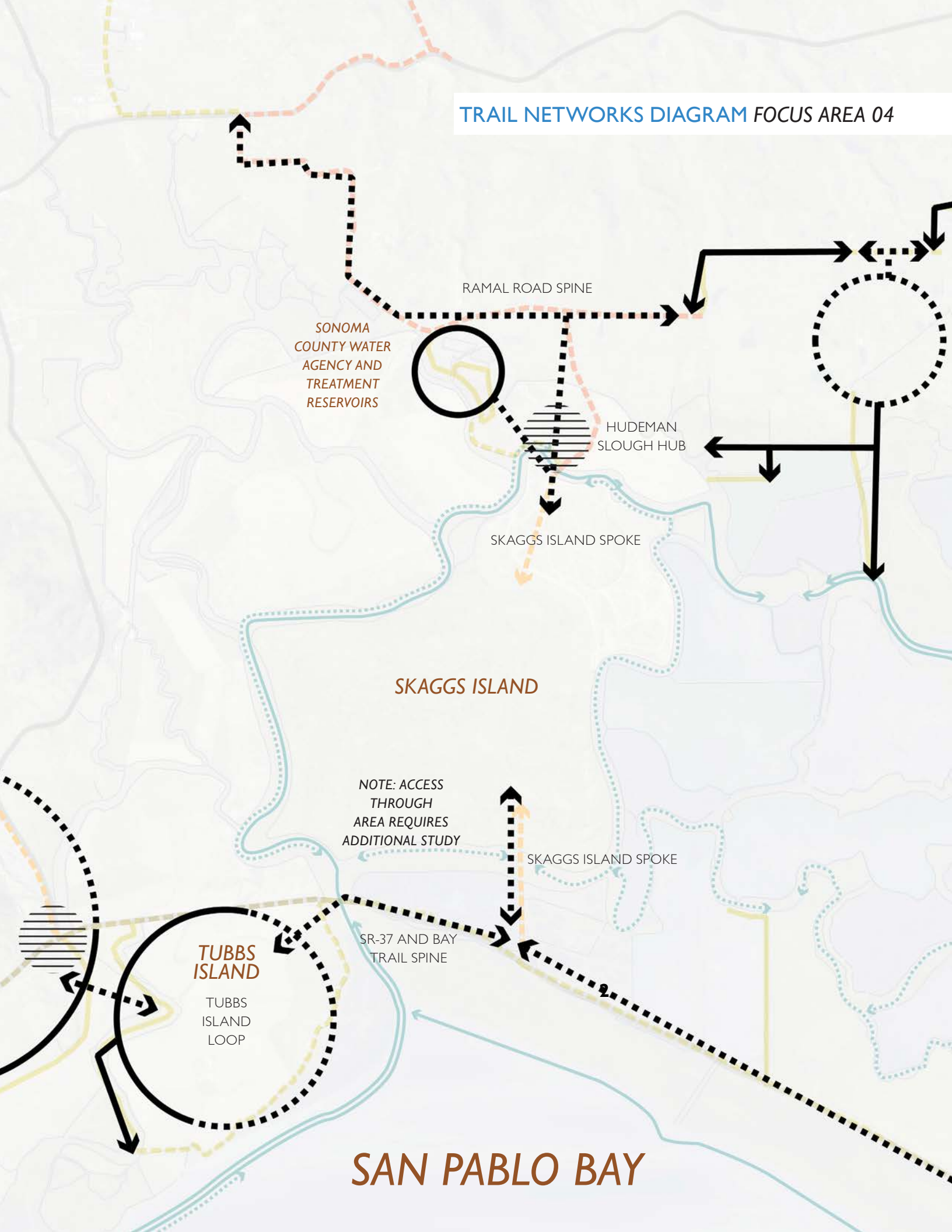
Improve/resurface Ramal Road. Ramal Road is an opportunity from bring people from Petaluma and Napa to the Baylands.

Enhance existing loop network at Sonoma County water agency and treatment reservoirs.

Develop trail spokes, and elevated overlooks to allow for views throughout the Baylands while remaining sensitive to habitat. Improve and enhance wayfinding at hubs to encourage Water Trail use of the sloughs.



TRAIL NETWORKS DIAGRAM FOCUS AREA 04


















# Focus Area 04

#	Type	Project Name	Description
1.	Trail Corridor	Northern Bay trail: Ramal Road	Class III connector. Opportunity to parallel narrow rural road with Class I facility identified in Sonoma County Integrated Parks Plan
2.	Trail Corridor	SR-37 Bay Trail: Segment B	Ultimate Bay Trail segment. Opportunity to integrate Class I facility into ultimate project design, including access to grade at intervals as identified in Caltrans PSR
3.	Water Trail	Hudeman Slough	Recreation Hub Opportunity. Existing boat launch (currently closed) with upgrades to Primary Water Launch opportunity with new campsites as identified in Sonoma County Integrated Parks Plan. Hudeman Slough boat ramp and parking lot facility is owned by the State of California.
4.	Water Trail	Skaggs Island/ Napa Slough	Potential Secondary Launch site and one to two destination sites for trips from various launch points in the Baylands.
5.	Water Trail	Sonoma Creek	Existing informal boat launch with upgrades to Primary Launch Site and paddleshare opportunity. Priority opportunity for users to more readily access San Pablo Bay.
6.	Education Node	Cullinan Ranch	Education and Interactive Signage opportunity at existing parking and trail.

## Other opportunities:

Letter	Description
A	Opportunity to add Class I link from Ramal Road to new campsite and existing Water Trail access site at Hudeman Slough as identified in Sonoma County Integrated Parks Plan.
B	Work with USFWS to determine public access route from Hudeman Slough to SR-37.
C	Work with owner to close gap from SCWA loop trail to Hudeman Slough on existing levee.
D	Existing Water Trail site at Cullinan Ranch. Opportunity for suggested 4 mile trips from Mare Island and within the Baylands.

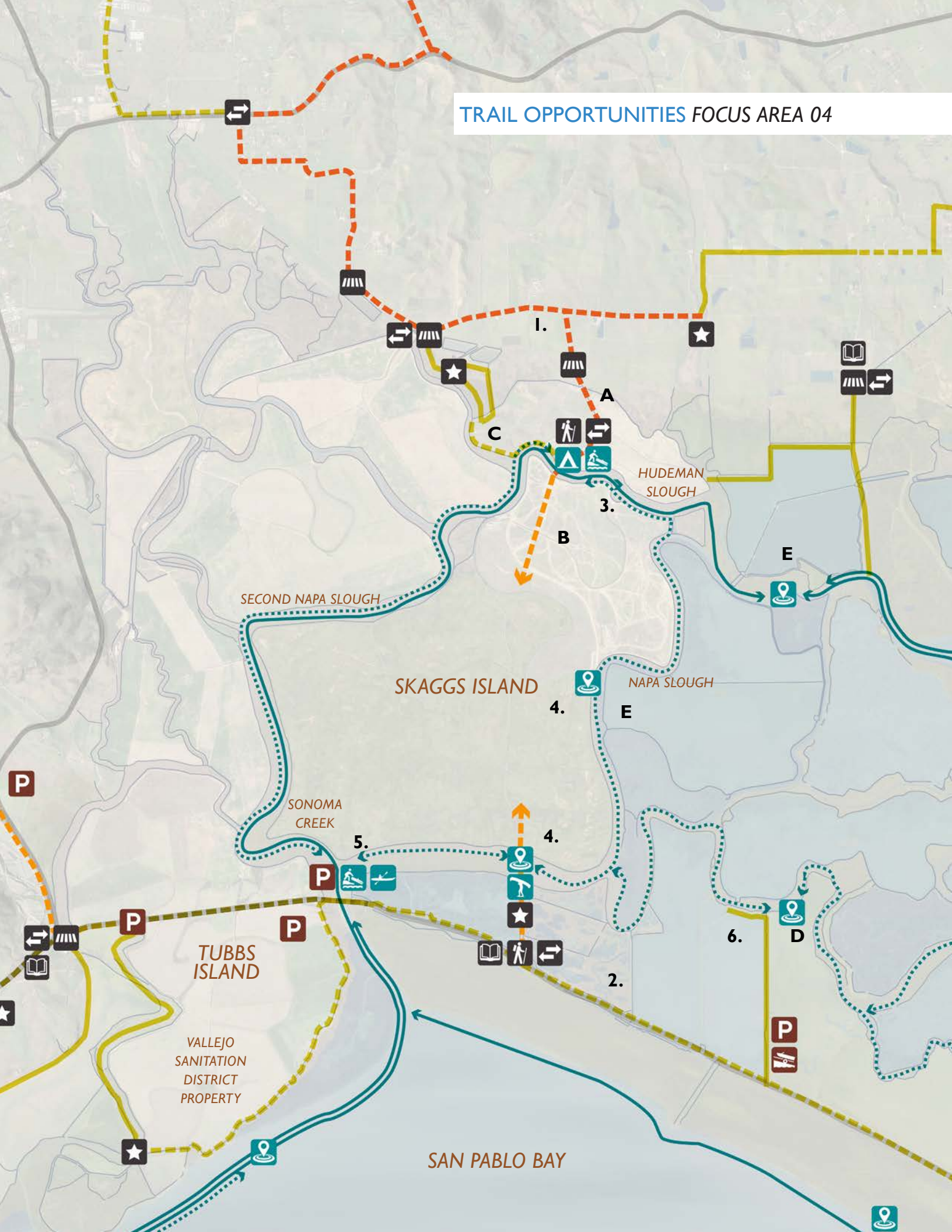
### KEY

-  EXISTING TRAIL
-  PLANNED TRAIL COORDINATION OPPORTUNITY\*
-  SEPARATED TRAIL FACILITY OPPORTUNITY
-  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
-  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
-  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
-  EDUCATION NODES
-  VIEWING OPPORTUNITY
-  WAYFINDING BRANDING OPPORTUNITY
-  CROSSING IMPROVEMENT
-  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
-  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
-  DESTINATION SITES
-  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
-  PADDLESHARE OPPORTUNITY
-  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED

# TRAIL OPPORTUNITIES FOCUS AREA 04



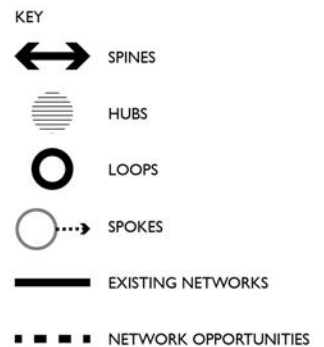
# Focus Area 05

## NAPA

The Napa focus area includes segments of the Vine Trail and Bay Trail, some of which overlap each other. The Napa River which is an important natural feature connecting those by trail and water trail to the baylands. This area also includes the River to Ridge Trail - a 2.5 mile trail connecting Kennedy Park with Skyline Park. Near term recommendations include:

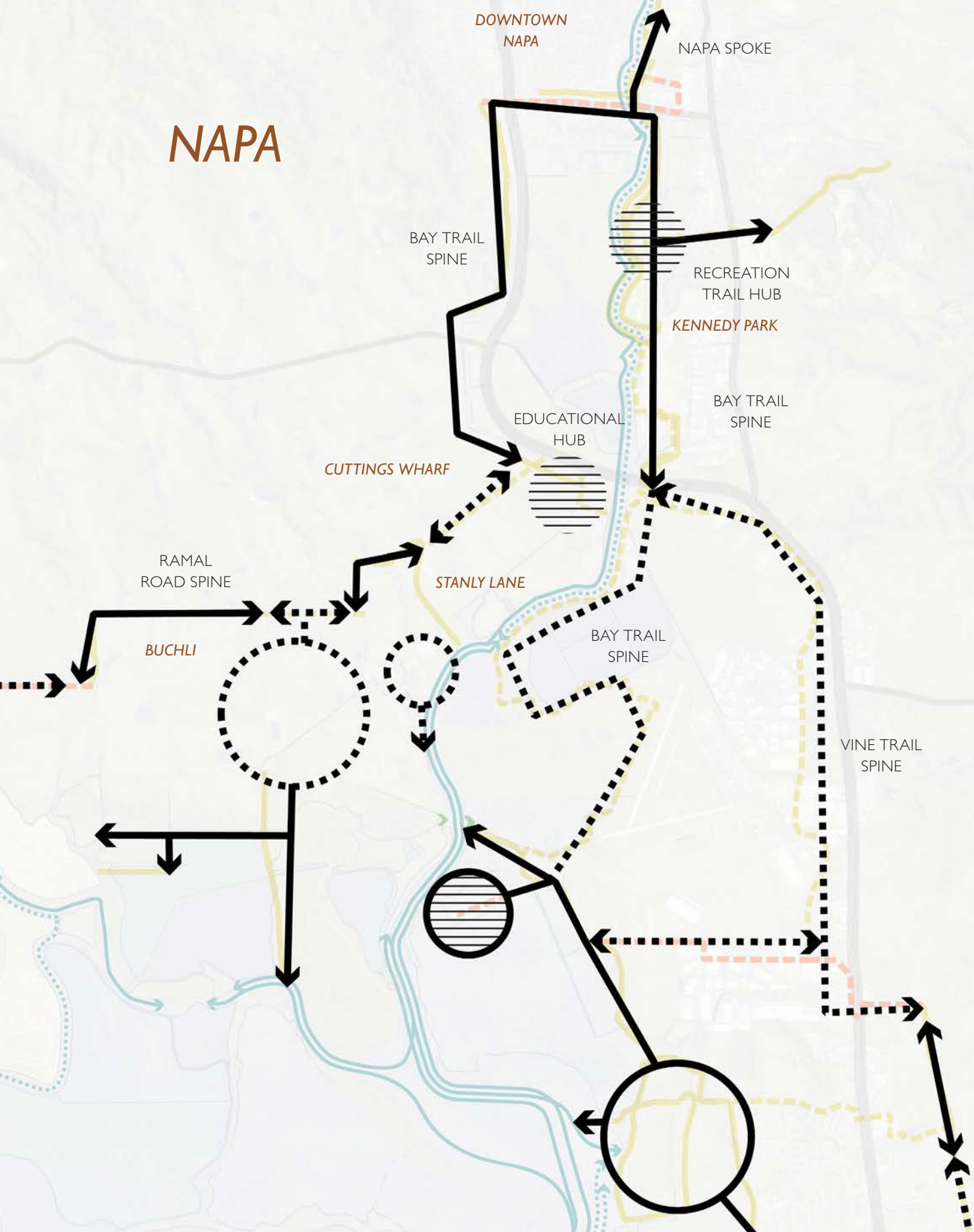
Continue spines that are set back from the flood zone

Enhance educational nodes that are adjacent to existing parks and access areas.



TRAIL NETWORKS DIAGRAM FOCUS AREA 05

NAPA



# Focus Area 05

#	Type	Project Name	Description
1.	Trail Corridor	N/S Connector - Napa (Bay Trail)	Bay Trail Gap Closure. Challenging gap closure past airport and through wastewater treatment facilities identified in Napa County Bike and Pedestrian Plans. The Planned SF Bay Trail Line along the Fagan Marsh Ecological Reserve is sourced from current SF Bay Trail maps. It is located on owned and managed by the CDFW. This report acknowledges that the CDFW oppose designation or commitment to this SF Bay Trail planned trail here. This line and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.
2.	Trail Corridor	N/S Connector - Napa (Vine Trail)	Vine Trail Gap Closure. Opportunity to connect a key inland neighborhood access route identified in Napa County Bike and Pedestrian Plans.
3.	Trail Corridor	Northern Bay trail: Las Amigas Road	Class III connector. Opportunity to parallel narrow rural road with Class I facility.
4.	Water Trail	Cuttings Wharf	Upgrade to Primary Launch Site with paddle-in campsite and paddleshare opportunity.
5.	Water Trail	Stanly Lane	Destination site for 4-8 mile trips from Napa, American Canyon, and Mare Island with paddleshare opportunity.
6.	Water Trail	Kennedy Park	Secondary Launch Site with paddleshare and paddle-in camping opportunity.
7.	Water Trail	Downtown Napa	Existing Water Trail site with paddleshare opportunity.
8.	Education Node	Buchli	Education and interactive signage opportunity at existing parking and trail.

## Other opportunities:

#	Description
A	Recreation Hub. Emphasize regional connection at River to Ridge Trail in Napa County that is part of the Bay Area Ridge Trail system.

- KEY**
-  EXISTING TRAIL
  -  PLANNED TRAIL COORDINATION OPPORTUNITY\*
  -  SEPARATED TRAIL FACILITY OPPORTUNITY
  -  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
  -  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
  -  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
  -  EDUCATION NODES
  -  VIEWING OPPORTUNITY
  -  WAYFINDING
  -  BRANDING OPPORTUNITY
  -  CROSSING IMPROVEMENT
  -  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
  -  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
  -  DESTINATION SITES
  -  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
  -  PADDLESHARE OPPORTUNITY
  -  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED



# Focus Area 06

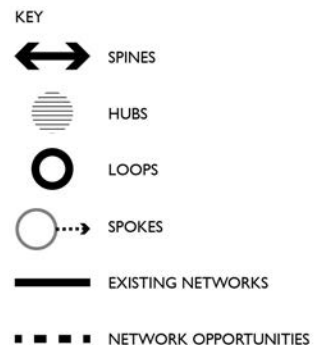
## GREEN ISLAND AND AMERICAN CANYON

The Green Island and American Canyon focus area includes segments of the Bay Trail and Vine Trail. Near term recommendations include:

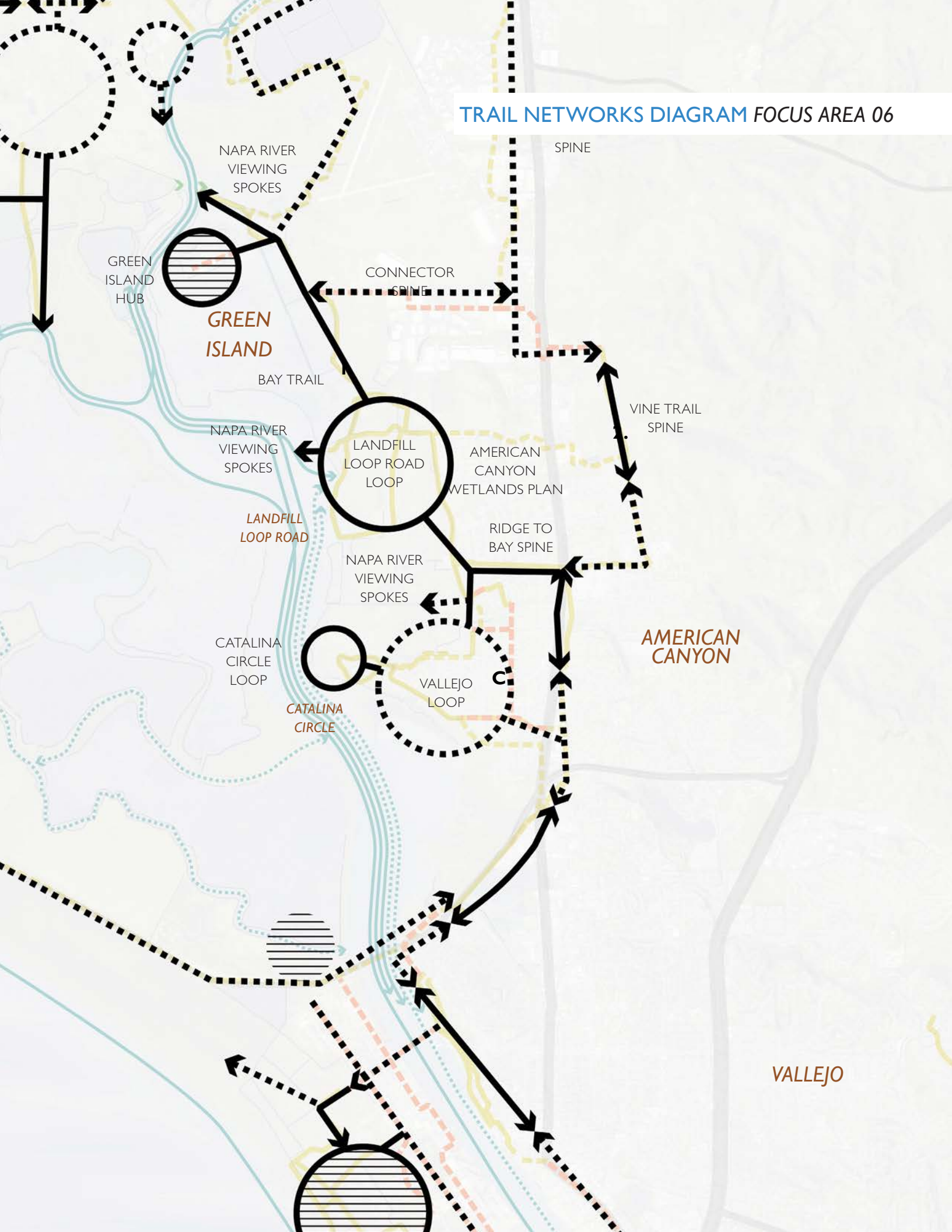
Improve the educational and interpretive facilities at Green Island as a potential hub.

Improve the loop network in adjacent residential area to Catalina Circle Loop. Improve educational signage at the Catalina Circle.

Add river viewing spokes to enhance education and appreciation of the Napa River



# TRAIL NETWORKS DIAGRAM FOCUS AREA 06



# Focus Area 06

#	Type	Project Name	Description
1.	Trail Corridor	N/S Connector - Napa (Vine Trail)	Vine Trail Gap Closure. Opportunity to acquire trail easement across private property between American Canyon Blvd. and Green Island Road as identified in Vine Trail Plan.
2.	Water Trail	Landfill Loop Road	Secondary Launch opportunity. SF Bay Restoration Authority will fund planning for the City of American Canyon Wetlands Plan, which includes feasibility studies for the designation of a Water Trail site and creation of an education center.
3.	Water Trail	Green Island	Existing boat launch.
4.	Education Node	Green Island	Education and interactive signage opportunity at existing parking and trail.

## Other opportunities:

#	Description
A	Opportunity to upgrade facility from Bay Trail to Green Island.
B	Proposed Class II connection from the Ridge Trail across SR-29 to the Bay Trail along Eucalyptus Rd. identified in the American Canyon Bike Plan.
C	Opportunity for on-street connection from Bay Trail. The American Canyon Bicycle Plan shows an on-street connection from Catalina Way to Wetlands Edge Drive.
D	Opportunity for on-street connection from Vine Trail to Bay Trail and Green Island. Identified in American Canyon Bicycle Plan.

- KEY**
-  EXISTING TRAIL
  -  PLANNED TRAIL COORDINATION OPPORTUNITY\*
  -  SEPARATED TRAIL FACILITY OPPORTUNITY
  -  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
  -  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
  -  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
  -  EDUCATION NODES
  -  VIEWING OPPORTUNITY
  -  WAYFINDING BRANDING OPPORTUNITY
  -  CROSSING IMPROVEMENT
  -  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
  -  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
  -  DESTINATION SITES
  -  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
  -  PADDLESHARE OPPORTUNITY
  -  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL SUGGESTED ROUTES ARE MAPPED



# Focus Area 07

## MARE ISLAND

The Mare Island Focus Area includes segments of the Bay Trail Vine Trail and connection between Vallejo and American Canyon.

Near term recommendations include:

Improve access to Water Trail at SR 37/Napa River Bridge.

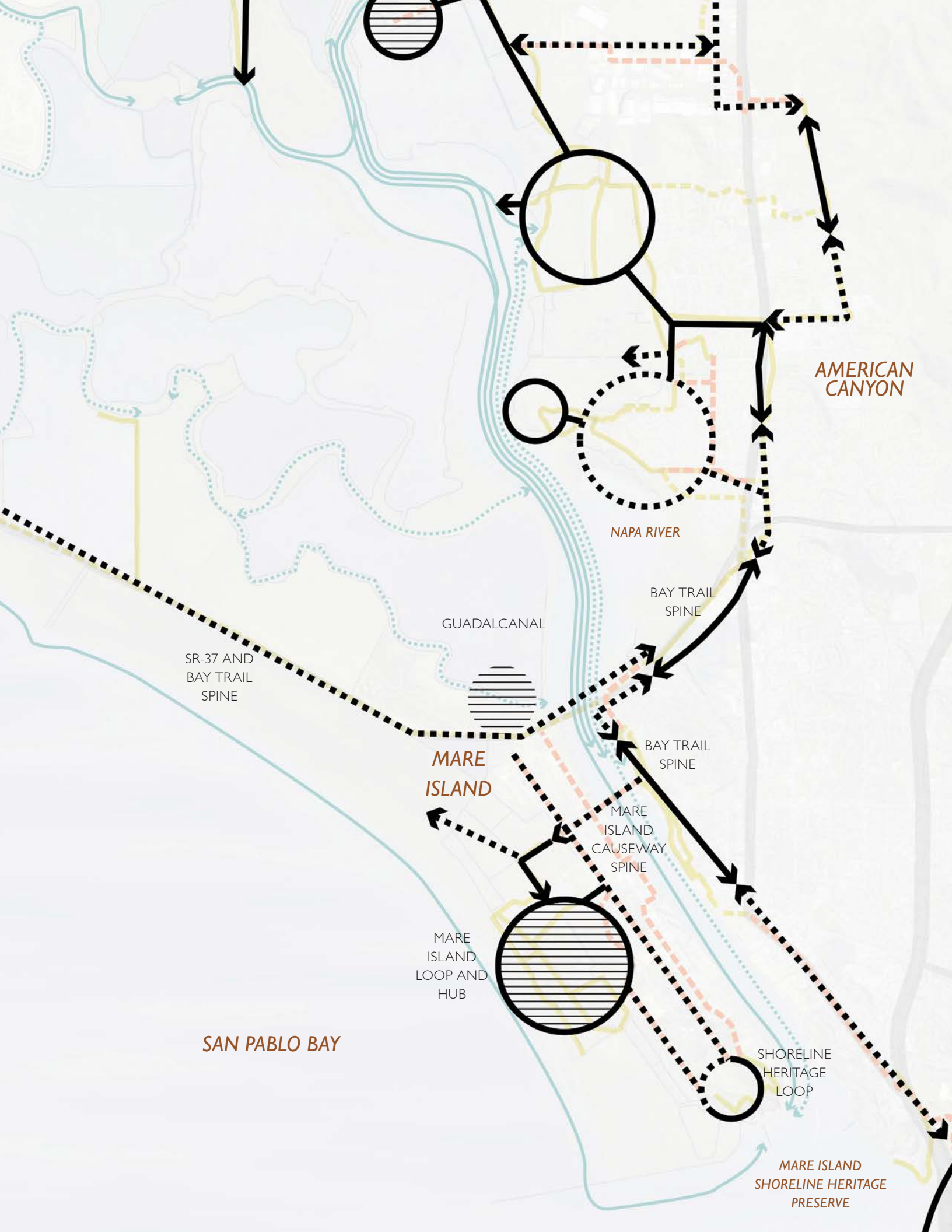
Improve active transportation connection between Vallejo and Mare Island.

Improve active transportation infrastructure on Mare Island through loops, connectors, and spokes.

Enhance SR 37, Mare Island, and Guadalcanal Village as a Hub and educational node.

KEY





AMERICAN CANYON

NAPA RIVER

GUADALCANAL

SR-37 AND  
BAY TRAIL  
SPINE

MARE  
ISLAND

BAY TRAIL  
SPINE

BAY TRAIL  
SPINE

MARE  
ISLAND  
CAUSEWAY  
SPINE

MARE  
ISLAND  
LOOP AND  
HUB

SAN PABLO BAY

SHORELINE  
HERITAGE  
LOOP

MARE ISLAND  
SHORELINE HERITAGE  
PRESERVE

# Focus Area 07

















## Projects:

#	Type	Project Name	Description
1.	Trail Corridor	N/S Connector - Solano (Mare Island)	Connection opportunity prior to ultimate 37 project. Opportunity to improve existing overpass, structures, and sidewalk to safely allow users to move from Guadalcanal Village parking lot to Mare Island/Railroad Ave as well as 37 bridge and Causeway bridges. Future feasibility and study needed.
2.	Trail Corridor	N/S Connector - Solano (Bay Trail)	Currently under design.
3.	Water Trail	Guadalcanal Village	Paddleshare opportunity.
4.	Water Trail	Vallejo Marina	Existing marina with upgrades to secondary launch opportunity. Further study on water access with tidal and currents needed within channel.
5.	Water Trail	Sacramento Street/ SF Bay Trail	Secondary launch site opportunity with paddleshare.
6.	Water Trail	Mare Island Shoreline Heritage Preserve	Secondary launch site opportunity with paddle-in camping.
7.	Education Node	Guadalcanal Village	Education and interactive signage opportunity at existing parking lot.
8.	Education Node	Mare Island Causeway	Education and interactive signage opportunity and overlook/stairs on overpass structure.

## Other opportunities:

#	Description
A	Opportunity for trail adjacent to waterfront along Nimitz. Set back from shoreline until remediation is complete.
B	Existing informal trail on levee. Opportunity to connect to Cullinan Ranch. Further study needed.
C	Potential Bay Trail Corridor running N/S along the island (to be explored by Bay Trail).
D	Improved facilities over Napa River.
E	Water Trail Access Improvements. New potential development with interest in kayak launch at Sunshine Beach. Brinkmans Marina with opportunity for upgrade to Primary Launch Site with paddleshare. Destination site opportunity adjacent to San Pablo Bay Trail. Further study on water access with tidal and currents needed within channel.

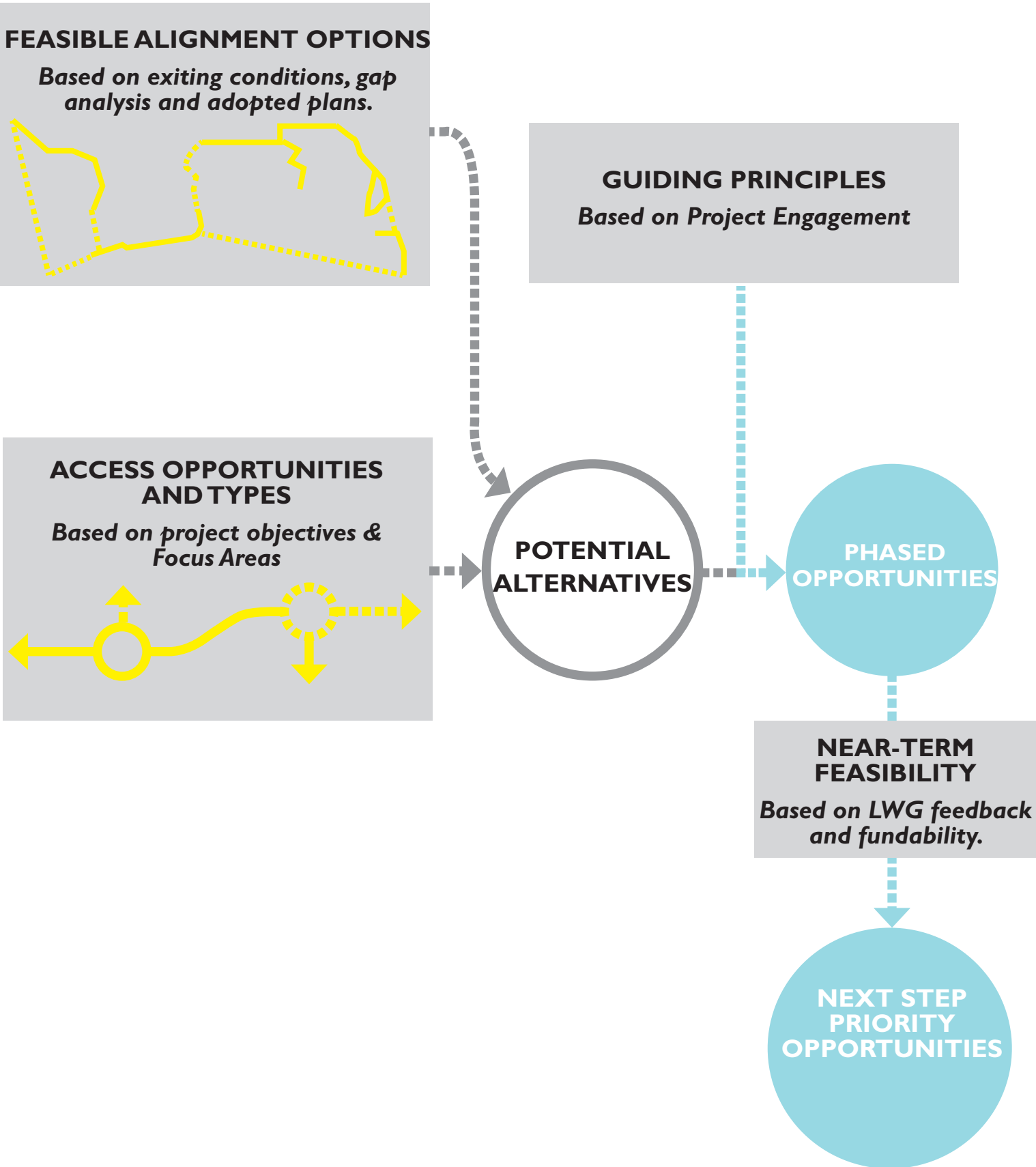
### KEY

-  EXISTING TRAIL
-  PLANNED TRAIL COORDINATION OPPORTUNITY\*
-  SEPARATED TRAIL FACILITY OPPORTUNITY
-  BICYCLE/PEDESTRIAN INFRASTRUCTURE OPPORTUNITY
-  WATER TRAIL SUGGESTED 4 MILE TRIPS\*\*
-  WATER TRAIL SUGGESTED 8 MILE TRIPS\*\*
-  EDUCATION NODES
-  VIEWING OPPORTUNITY
-  WAYFINDING BRANDING OPPORTUNITY
-  CROSSING IMPROVEMENT
-  CONCEPTUAL PRIMARY LAUNCH WATER TRAIL SITES
-  CONCEPTUAL SECONDARY LAUNCH WATER TRAIL SITES
-  DESTINATION SITES
-  DESTINATION OPPORTUNITY: BOAT-IN CAMPSITES OPPORTUNITY
-  PADDLESHARE OPPORTUNITY
-  EXISTING PARKING, CONNECTION OPPORTUNITY

\* SEE REFERENCE DOCUMENT AND DESCRIPTION IN CORRESPONDING TABLE

\*\*ALL LEVEES ARE OPEN TO WATER TRAIL. SUGGESTED ROUTES ARE MAPPED





# PUBLIC ACCESS ALTERNATIVES

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## APPROACH

There are numerous unique combinations of access routes, path types, public education sites and water trail launch areas that could be considered for this Public Access Study. Despite the study area being large in scale (around 96,000 acres), there is a relatively small portion of the area that is being considered for access opportunities in this report.

As discussed on page 142, the project team recommends a planning process be undertaken as a next step to determine a Zone Management Plan for the study area. This process and resulting plan should transcend jurisdictional boundaries and serve as an active planning document to guide compatible and appropriate levels of access for each sub-region in the study area as they become subject to Baylands restoration. Although this recommended planning process is not included in this report, the project team has designated three areas for the purposes of evaluating phased access in this report. The areas are based on a series of typical site conditions and feedback from the LWG to aid in the evaluation of various trail alignments and the relative hierarchy near-term access opportunities. These areas, shown on page 140 along with Guiding Principles are used to evaluate a set of phased access alternatives and opportunities.

A set of phased and resilient alignments have been evaluated to prioritize key 'next step' opportunities that should be targeted for funding, additional coordination with public or private landowners and additional study.

The project team used the information developed during the existing conditions assessments and Local Working Group/Focus Group project meetings to determine a range of feasible alignment options, including potential trail corridor connections, water trail sites and route, and educational nodes shown in the focus area maps. It should be understood that the Potential Alternatives and Phased Opportunities have gone through the an initial engagement process with landowners (such as CDFW, USFWS, SLT, CalTrans) for this scoping report but additional engagement with public/private land ownership and stewardship will need to occur should opportunities be further developed.

To ensure opportunities would best address both equitable access for nearby communities with the protection and adaptability of sensitive habitats, the project team has developed a phased evaluation of opportunities that prioritizes areas within one mile of disadvantaged communities. The potential alternatives were also screened against the six guiding principles. Various alternatives that responded best to these principles are noted in the near-term plan and recommended to be further developed.



# PHASING STRATEGY

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## APPROACH

A phasing strategy is vital to access planning in this region. Most of the study area projected to be inundated by Sea Level Rise and many areas are planned for large scale restoration or are in various stages of restoration. Access might be reasonably supported for the next 50 years with a gravel trail on a levee but by 2100 those levees might be breached - through a storm event or a yet to be planned restoration. The future scenarios for Sea Level Rise and any successful restoration habitat (upland, open water or marsh) are extremely complicated and difficult to model or predict at this point. Having a strong framework tied to the guiding principles of connectivity, equity and resiliency are critical so that routes make impactful near-term access that may adapt overtime yet still provide continuous access.

### **Near-Term (0-10 Years)**

The near-term efforts expand activities of existing nodes including: improved water access, picnicking, hiking, viewing, and educational opportunities that increase programming and community participation. Upgrade these existing amenity areas with enhanced for wayfinding viewing areas, restrooms, and parking. These efforts minimize the infrastructural interventions needed. Efforts should also utilize existing levees that coincide with restoration efforts as resilient, existing trail opportunities.

Planning should occur in this phase to close gaps in bicycle and pedestrian facilities. Providing for seamless transitions between trails and on-street facilities encourages use of the facilities as one comprehensive network. Connectivity to on-street bicycle facilities and sidewalks provides access to destinations, neighborhoods, and recreation areas.

### **Mid-Term (10-20 Years)**

The framework for the mid-term is to complete long stretches of continuous trail facilities to existing nodes or activity hubs. The strategy here is to complete regional connectors through routes that are lower risk of SLR or flooding. This route acts as at a resilient spine connecting existing facilities and other spur trails or loops that may adapt to changing environmental conditions.

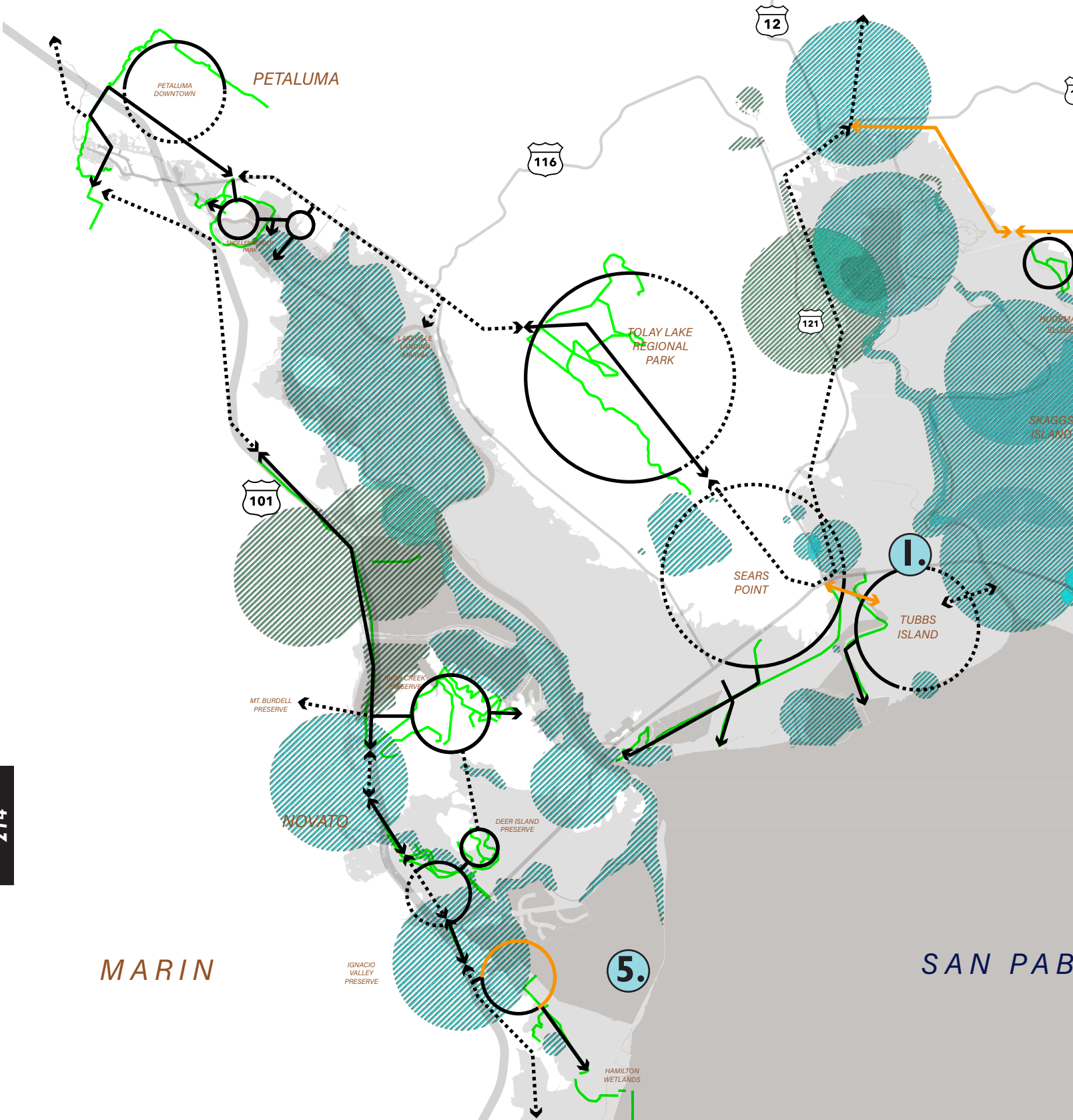
### **Long-Term (20+ Years)**

The completion of the ultimate resilient SR 37 will be a resilient and separated Bay Trail, providing key access for active transportation through the study area. It should also provide facilities for education, viewing and access down to existing trail and water trail facilities. Major gaps along SR 37 will likely only be completed in this phase, connecting Mare Island directly to Skaggs Island, Tubbs Island and Deer Island. A north/south Bay Trail connector long planned on Skaggs Island may be feasible with the planned restoration, connecting SR37 to areas in Sonoma and Napa County.

# NEAR-TERM OPPORTUNITIES (0-10 YEARS)

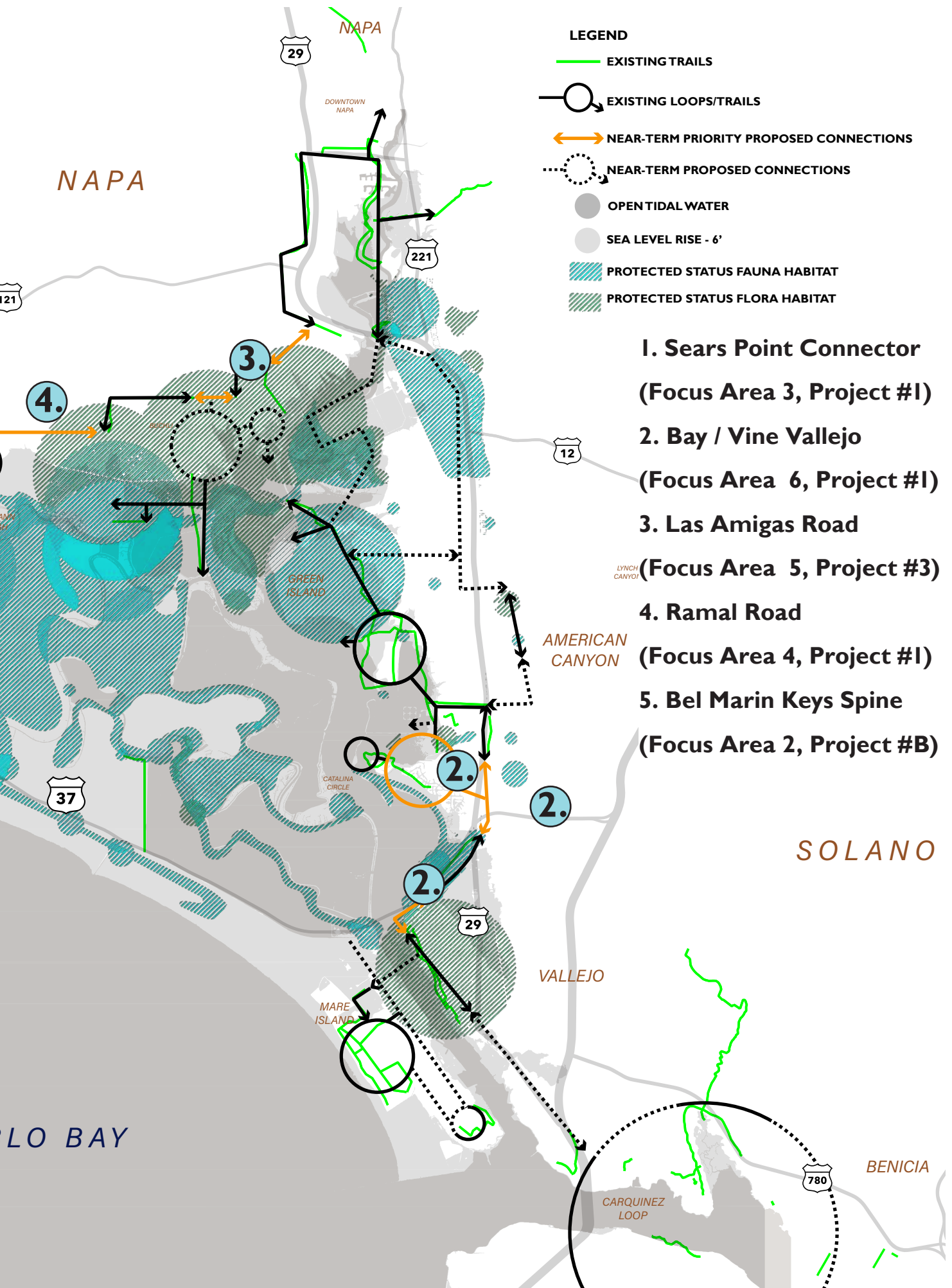
SONOMA

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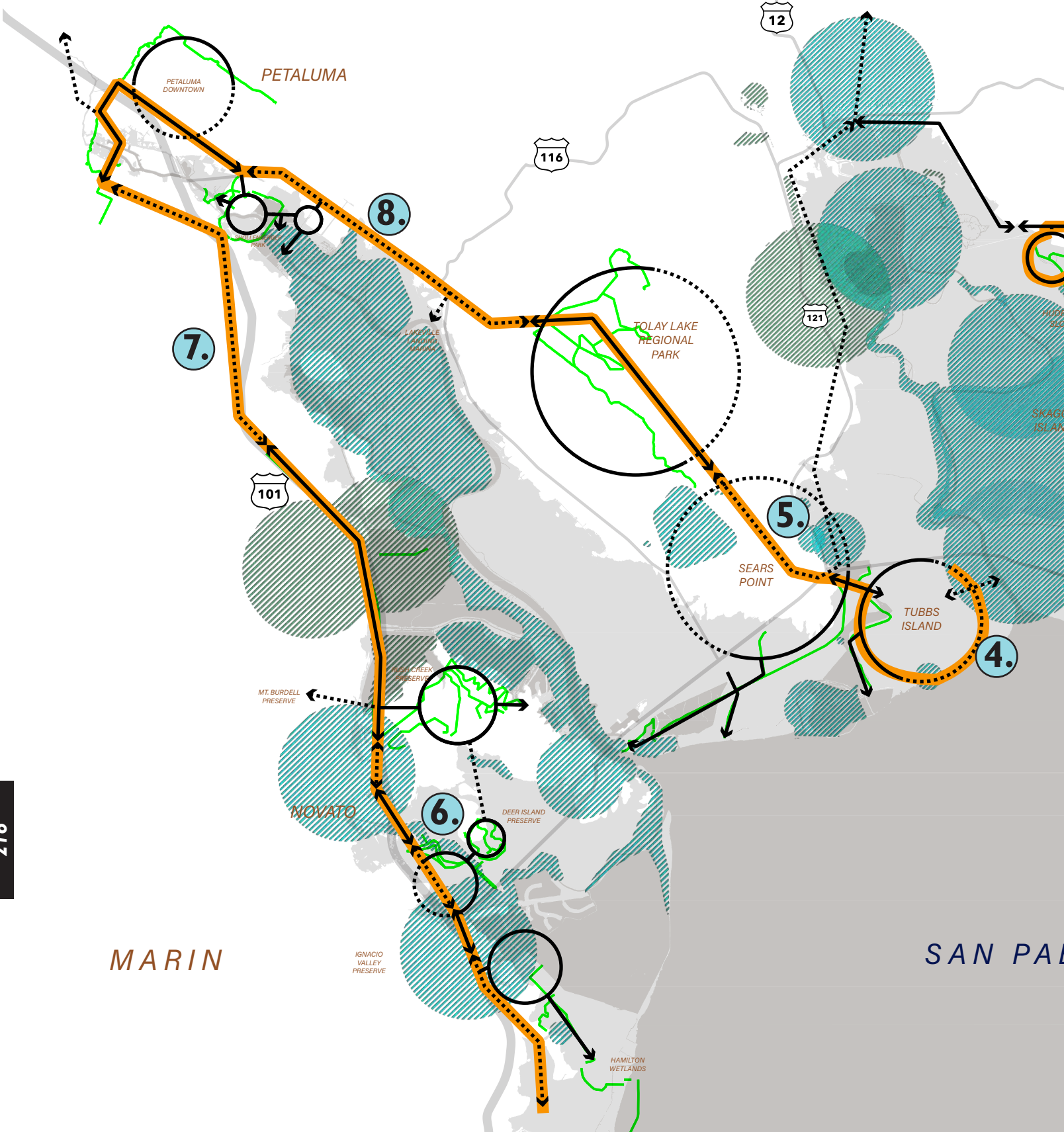
MARIN

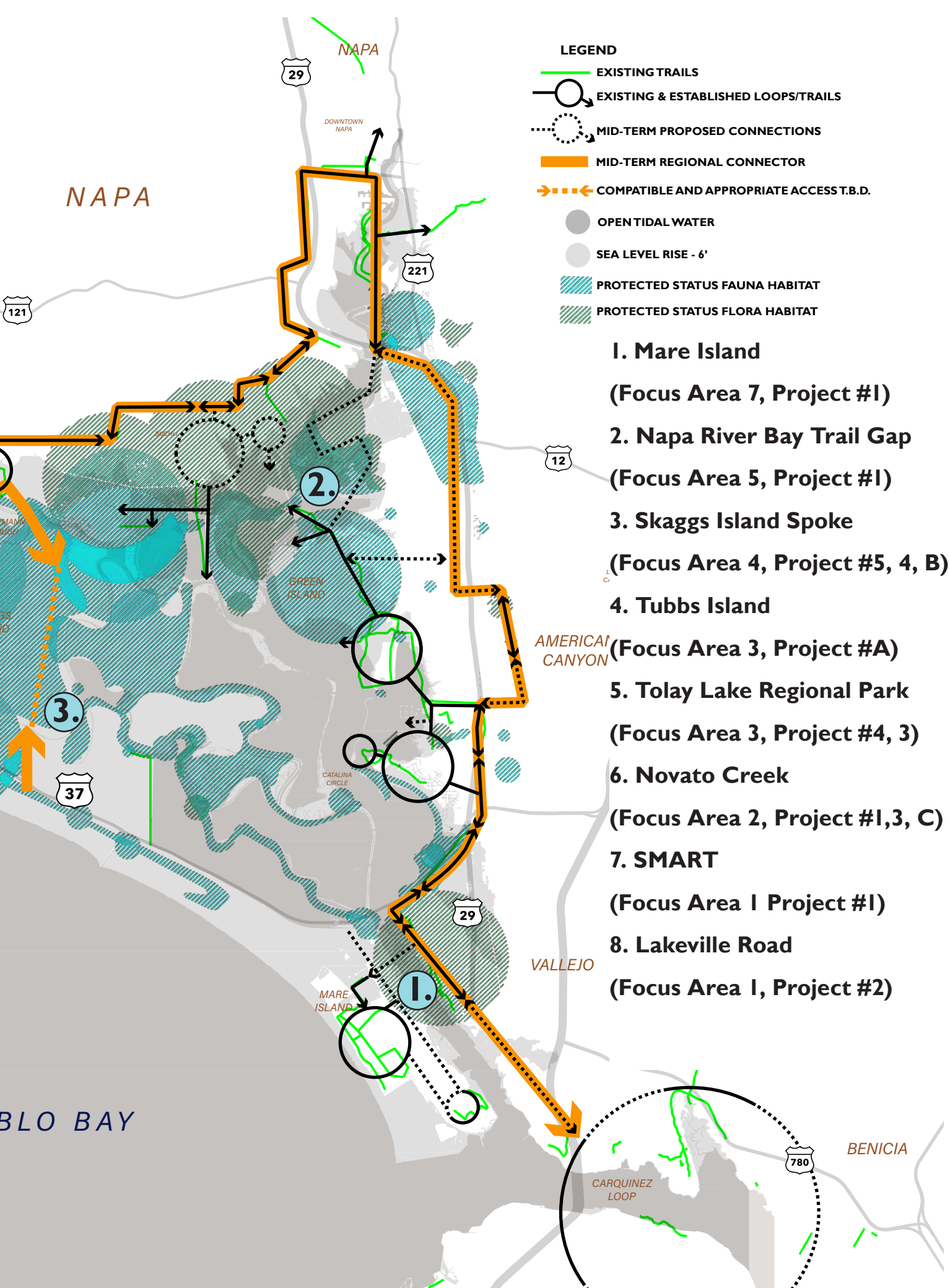
SAN PAB



# MID-TERM OPPORTUNITIES (10-20 YEARS)

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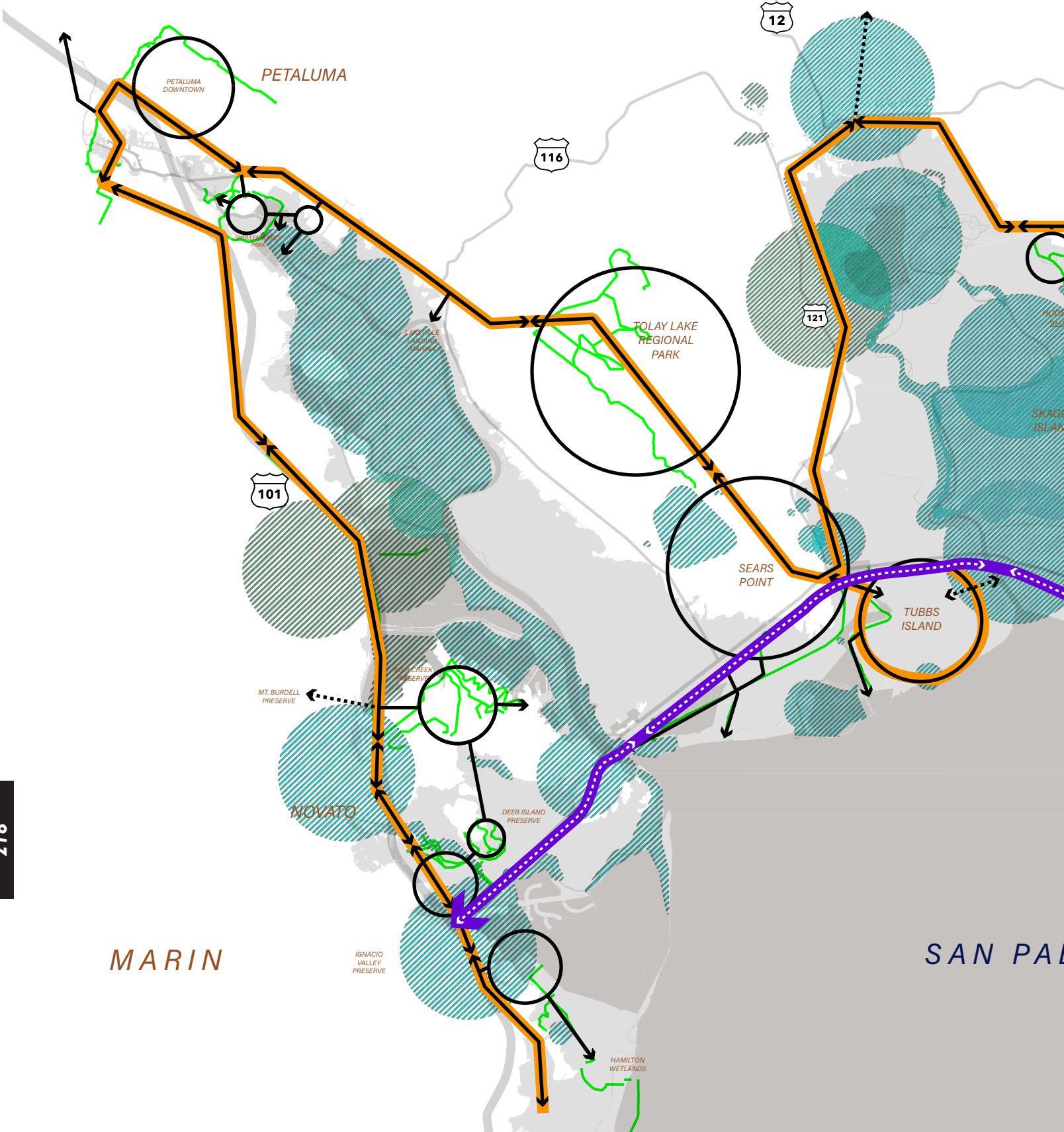




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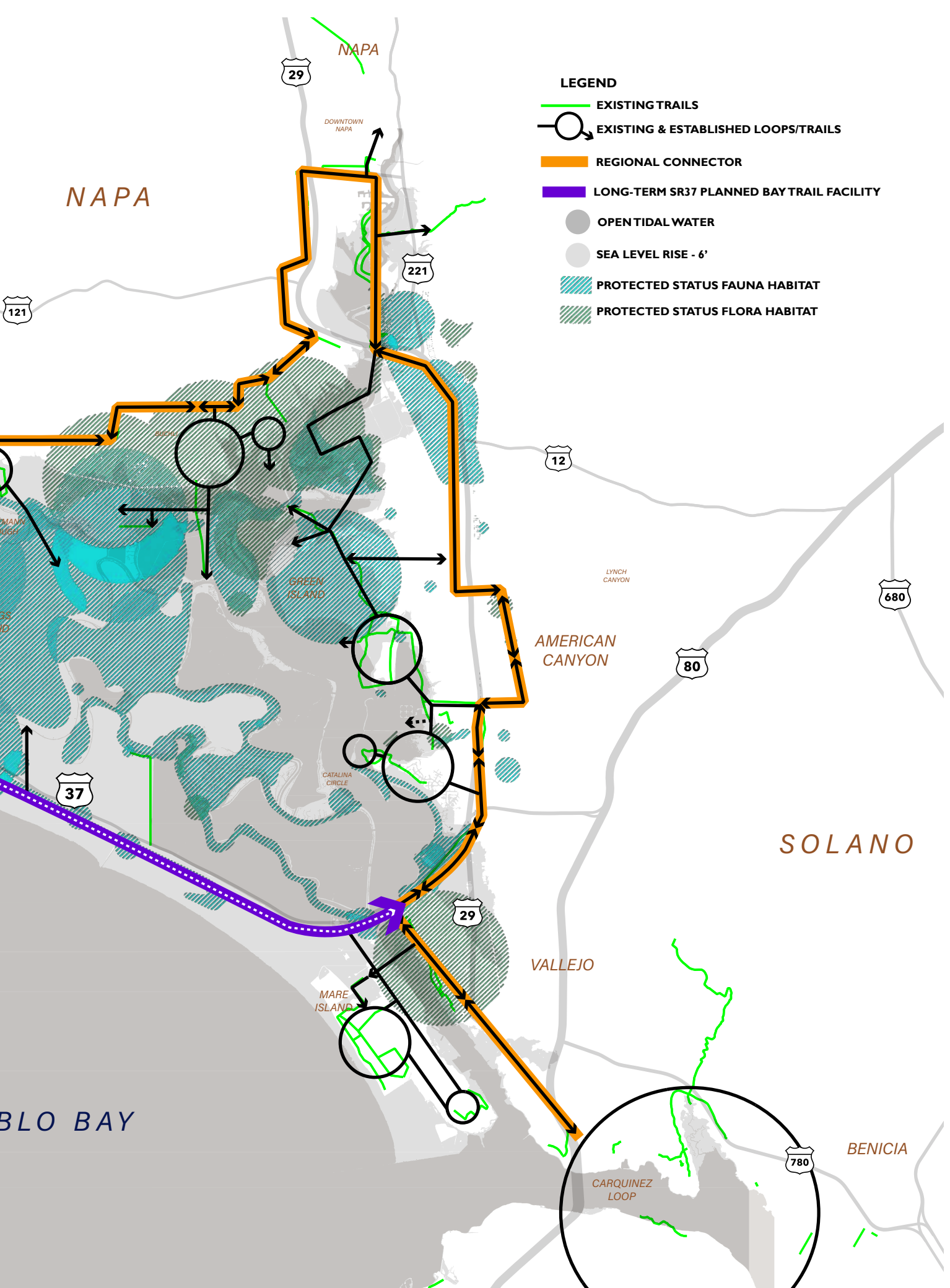
# LONG-TERM OPPORTUNITIES (20+ YEARS)

SONOMA



MARIN

SAN PABLO



**LEGEND**

- EXISTING TRAILS
-  EXISTING & ESTABLISHED LOOPS/TRAILS
- REGIONAL CONNECTOR
- LONG-TERM SR37 PLANNED BAY TRAIL FACILITY
-  OPEN TIDAL WATER
-  SEA LEVEL RISE - 6'
-  PROTECTED STATUS FAUNA HABITAT
-  PROTECTED STATUS FLORA HABITAT





# NEXT STEPS

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# SUMMARY OF KEY FINDINGS

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Throughout the project engagement our team heard strong interest in establishing and improving public access along SR37 and the San Pablo Baylands subregion. There is great value in also supporting public awareness through access - both water trail and built trails. Inviting the public to discover and appreciate the Bay's natural resources can not only aid active transportation goals but also increase public support for habitat restoration funding. Many areas have great existing access that can be enhanced by wayfinding, branding and public awareness. Developing opportunities for a more robust Water Trail system also becomes a great near-term access options that will provide access to miles of Baylands with relatively little investments in launch site and be resilient to future sea level rise.

With the interest in public access came some key caveats about access in this sensitive habitat context - that not all forms of public access are equal. There always needs to be a specific criteria to define what kind of access is appropriate in various site conditions with a high level of awareness of the various SLR scenarios. Often when the project team presented access, stakeholders visualized a concrete bay trail path that is maintained for the next 100 years, which often is not appropriate for many areas. For many project areas access might be limited for a set period of time (given SLR and planned habitat restoration). In other areas it might mean a fully separated trail facility (preferred), or limited for seasonal hunting, a gravel footpath or micro-transit connections to portions of the bay trail. A key lesson is to understand a hierarchy for access - what is more appropriate for core wildlife areas, what is appropriate for 'hub' facilities, what is appropriate for secondary facilities.

Advancing public access brought to light larger regional and policy discussions. There remains different interpretations of BCDC public access policy. A major concern from habitat restoration land owners and managers was an understanding of BCDC requirements that trails planned on their land must be maintained in perpetuity, extremely difficult from their perspective in planning or difficult restoration the face of SLR. These concerns remain a key issue, preventing

many stakeholders from fully supporting trails and Bay Trail on wildlife refuge land or areas planned for restoration. An increased understanding through place-based learning can lead to a long time stewardship of these Baylands.

Meeting with BCDC the project team understood that the "maintain a trail in perpetuity" issue isn't so black and white. It is determined on a project case basis with more nuance about where public access need only be resilient to mid-century. If the project life would extend beyond mid-century, the project must be adaptable to end-of-century. It is the project team's hope that raising this issue - a major concern of stakeholders could prove to open more possibilities to further plan and develop public access that is appropriate with sensitive habitat restoration projects.

One of the more difficult limitations on public access comes from the lack of funding available for maintaining trails and amenities on the baylands. State and Federal landowners have limited staff and resources to maintain levees and habitat in the ever-shifting baylands. For these agencies there is simply not enough resources to maintain additional trails or amenities. For our project team, a potential solution to this is to increase public awareness about these baylands, inviting the public to appreciate this incredible resource through more collaboration and voting to support future funding.

## **SUMMARY OF NEXT STEPS:**

1. Coordinate with Caltrans and the SR37 Policy Committee on a preferred direction of a separated and/or cantilevered trail section typology for the long-term Ultimate SR37 project (similar to what is shown on page 147).
2. Until the Ultimate SR37 Improvement project is complete, pursue a continuous bay trail access that can be achieved through building on smaller near-term connections around the perimeter of SR37 (regional connector shown on page 240 and 242).
3. Skaggs Island is planned for restoration and compatible and appropriate access on the Island is to be determined. With the understanding that the USFWS will be revisiting their CCMP, public access advocates and the project team should work with the USFWS on any public outreach and future planning for Skaggs Island.
4. Encourage additional partnerships including the State Coastal Conservancy, in association with Friends of the San Pablo Bay Wildlife Refuge, as a potential long-term funding partners to increase awareness of the these Baylands and environmental education opportunities. Continue a strategy to partner with local groups – like the Sonoma Land trust, Friends Group, developers, restoration efforts, tribal groups, and nearby schools to partner with communities as efforts move forward.
5. Communicate a list of the near-term opportunities (page 214) that meet the guiding principles to the 4 County Board of Supervisors (Napa, Solano, Marin, Sonoma). Recommend to include these priority opportunities and descriptions for potential adoption in any associated transportation master plans or reports (if not already included).
6. Based on project engagement feedback, guiding principles recommend two near-term priority projects that deliver strategic near-term trail and access options, in coordination with the long and short-term goals of the region.
7. Coordinate public access improvements with the CDFW, USFWS, SLT and other related stakeholders where improvements directly impact land managed or owned by these agencies.

# FUNDING OPPORTUNITIES

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# FUNDING

## Where does the money come from?

Identifying and securing funding for the projects identified in this scoping report is crucial to achieving the vision and goals established in this document. The table below identifies federal, state, regional, and local funding sources to support the design and implementation as well as its long-term maintenance.

Table 1. Funding Sources and Eligible Project Expenses	PLANNING & DESIGN	ACQUISITION	CONSTRUCTION	MAINTENANCE
<b>FEDERAL &amp; STATE</b>				
Active Transportation Program	●		●	
BUILD Program	●		●	
Highway Safety Improvement Program	●	●	●	
Recreational Trails Program	●	●	●	●
Affordable Housing and Sustainable Communities Program		●	●	
Cultural, Community and Natural Resources Grant Program - Proposition 68		●	●	
Urban Greening Program		●	●	
Local Partnership Program		●	●	
Road Maintenance and Rehabilitation Program				●
Regional Surface Transportation Program			●	
<b>FEDERAL &amp; STATE (CONT.)</b>				

	PLANNING & DESIGN	ACQUISITION	CONSTRUCTION	MAINTENANCE
Regional Surface Transportation Program			●	
<b>FEDERAL &amp; STATE (CONT.)</b>				
Coastal Conservancy Proposition I Grants	●	●	●	
Wildlife Conservation Board Public Access Program	●		●	
Habitat Conservation Fund			●	
Rivers, Trails, and Conservation Assistance Program (RCTA)	●			
<b>LOCAL &amp; REGIONAL</b>				
One Bay Area Grant	●	●	●	●
Bay Trail & Water Trail Grant Program	●		●	
Bicycle Facilities Grant Program			●	
Transportation Development Act Article 3	●	●	●	●
Measure M Parks (2018)	●	●	●	●
Sonoma County Agricultural Preservation and Open Space District Matching Grant Program		●	●	
<b>OTHER</b>				
The Trust for Public Land Acquisition Support		●		
The National Fish and Wildlife Foundation		●	●	

## State & Federal

### **BETTER UTILIZATION INVESTMENTS TO LEVERAGE DEVELOPMENT (BUILD) DISCRETIONARY GRANT**

The BUILD grant allows sponsors at the state and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional Department of Transportation (DOT) funding initiatives. Eligible projects include: recreational trails, road diets, separated bike lanes, shared use paths, sidewalks, signal improvements, signed pedestrian or bicycle routes, traffic calming, trailside and trailhead facilities, bicycle parking, racks, repair stations, storage, and bike share programs.

*Funds are programmed by the U.S. Department of Transportation.*

<https://www.transportation.gov/BUILDgrants>

### **CALIFORNIA ACTIVE TRANSPORTATION PROGRAM**

California's Active Transportation Program (ATP) funds infrastructure and programmatic projects that support the program goals of shifting trips to walking and bicycling, reducing greenhouse gas (GHG) emissions, and improving public health. Competitive application cycles occur every one to two years, typically in the spring or early summer. Eligible projects include design and construction of bicycling and walking facilities, new or expanded programmatic activities, or projects that include a combination of infrastructure and non- infrastructure components. Typically no local match is required, though extra points are awarded to applicants who do identify matching funds.

*Funds are programmed by the California Transportation Commission (CTC).*

<https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/active-transportation-program>

### **HIGHWAY SAFETY IMPROVEMENT PROGRAM**

Caltrans offers Highway Safety

Improvement Program (HSIP) grants every one to two years. Projects on any publicly-owned road or active transportation facility are eligible, including bicycle and pedestrian improvements. HSIP focuses on projects that explicitly address documented safety challenges through proven countermeasures, are implementation-ready, and demonstrate cost-effectiveness.

*Funds are programmed by Caltrans.*

<https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program>

### **RECREATIONAL TRAILS PROGRAM**

The Recreational Trails Program helps provide recreational trails for both motorized and non-motorized trail use.

Eligible projects include: trail maintenance and restoration, trailside and trailhead facilities, equipment for maintenance, new trail construction, and more.

*Funds are programmed by the California Department of Parks and Recreation.*

[https://www.parks.ca.gov/?page\\_id=24324](https://www.parks.ca.gov/?page_id=24324)

### **AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES PROGRAM**

The Affordable Housing and Sustainable Communities (AHSC) program funds land-use, housing, transportation, and

land preservation projects that support infill and compact development which reduce GHG emissions. Projects must fall within one of three project area types: transit-oriented development, integrated connectivity project, or rural innovation project areas. Fundable activities include: affordable housing developments, sustainable transportation infrastructure, transportation-related amenities, and program costs. Trail construction would have to accompany affordable housing development or housing-related infrastructure.

*Funds are programmed by the Strategic Growth Council and implemented by the Department of Housing and Community Development.*

<http://www.sgc.ca.gov/programs/ahsc/>

### **CULTURAL, COMMUNITY AND NATURAL RESOURCES GRANT PROGRAM – PROPOSITION 68**

Proposition 68 authorizes the legislature to appropriate \$40 million to the California Natural Resources Agency to protect, restore, and enhance California’s cultural, community, and natural resources.

Eligible projects include developing future recreational opportunities, such as: creation or expansion of trails for walking, bicycling, and/or equestrian activities and development or improvement of trailside and trailhead facilities, including visitor access to safe water supplies.

*Funds are programmed by the California Natural Resources Agency (CNRA).*

<http://resources.ca.gov/grants/ccnr/>

### **URBAN GREENING GRANTS**

Urban Greening Grants support the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits. Projects must include one of three criteria, most relevantly: reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes, or pedestrian facilities that

provide safe routes for travel between residences, workplaces, commercial centers, and schools. Eligible projects include green streets and alleyways and non-motorized urban trails.

*Funds are programmed by the CNRA.*

<http://resources.ca.gov/grants/urban-greening/>

#### **LOCAL PARTNERSHIP PROGRAM**

This program provides local and regional agencies that have passed sales tax measures, developer fees, or other transportation-imposed fees with a continuous appropriation from California's Road Maintenance and Rehabilitation Account to fund road maintenance and repair, sound walls, and other transportation improvement projects

using SB I funds. Jurisdictions with these taxes or fees are then eligible for a formulaic annual distribution of no less than \$100,000. These jurisdictions are also eligible for a competitive grant program. Local Partnership Program funds can be used for a wide variety of transportation purposes including roadway rehabilitation and construction, transit capital and infrastructure, bicycle and pedestrian improvements, and green infrastructure.

*Funds are programmed by the CTC.*

<https://catc.ca.gov/programs/sbl/local-partnership-program>

#### **ROAD MAINTENANCE AND REHABILITATION PROGRAM**

SB I created the Road Maintenance and Rehabilitation Program to address deferred maintenance on state highways and local road systems. Program funds can be spent on both design and construction efforts. On-street active transportation-related maintenance projects are eligible if program maintenance and other thresholds are met. Funds are allocated to eligible jurisdictions.

*Funds are programmed by the State Controller's Office with*

*guidance from the CTC.*

<https://catc.ca.gov/programs/sbl/local-streets-roads-program>

### **REGIONAL SURFACE TRANSPORTATION PROGRAM**

This program was originally established by California State Statute to support ongoing construction and maintenance of highways and bridges in California. However, this program can also fund bicycle transportation and pedestrian walkways on any public road as long as the bicycle facilities are used primarily for transportation purposes as opposed to recreational use.

*Funds are programmed by Caltrans.*

<https://www.fhwa.dot.gov/map21/factsheets/stp.cfm>

### **COASTAL CONSERVANCY PROPOSITION 1 GRANTS**

Coastal Conservancy Grants fund multi-benefit ecosystem and watershed protection and restoration projects. Priority project types include water sustainability improvements, fish habitat

enhancement, wetland restoration, and urban greening. However, these grants can also be used for urban greening or water sustainability elements incorporated into bicycle, pedestrian, and trail projects.

*Funds are programmed by the California Coastal Conservancy.*

<https://scc.ca.gov/grants/proposition-1-grants/>

### **WILDLIFE CONSERVATION BOARD PUBLIC ACCESS PROGRAM**

This grant program is focused on creating wildlife-oriented recreation and conservation experiences in California. The program supports the construction and rehabilitation of public access facilities including fishing piers, parking, restrooms, boat ramps, trails, boardwalks, and interpretive facilities that promote activities such as bird watching, kayaking, hiking, hunting, and fishing.

*Funds are programmed by the California Wildlife Conservation Board.*

<https://wcb.ca.gov/Programs/Public-Access>

## **HABITAT CONSERVATION FUND**

The Habitat Conservation Fund Program supports projects that bring urban residents into park and wildlife areas, protect plant and animal species, and acquire and develop wildlife corridors and trails.

*Funds are programmed by the California Department of Parks and Recreation.*

[https://www.parks.ca.gov/  
?page\\_id=21361](https://www.parks.ca.gov/?page_id=21361)

## **Local & Regional**

### **ONE BAY AREA GRANT**

The One Bay Area Grant (OBAG) program emphasizes funding for projects within Priority Development Areas in the region that are in-line with housing and land-use goals, which can align with bicycle and pedestrian improvements. The OBAG program also funds improvements to Priority Conservation Areas (PCAs). The Baylands Study project area falls within multiple designated PCAs.

*Funds are programmed by the Metropolitan Transportation Agency (MTC).*

[https://mtc.ca.gov/our-work/fund-invest/  
investment-strategies-commitments/  
focused-growth/one-bay-area-grants](https://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/focused-growth/one-bay-area-grants)

[https://mtc.ca.gov/our-work/fund-invest/  
investment-strategies-commitments/  
focused-growth/priority-conservation-area](https://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/focused-growth/priority-conservation-area)

## **SAN FRANCISCO BAY TRAIL AND WATER TRAIL GRANT PROGRAM**

Through a successful partnership with the State Coastal Conservancy, the Bay Trail Project has been able to offer grants to local entities to assist in the completion of trail. Through coordination with the San Francisco Bay Conservation and Development Commission, many shoreline projects are required to provide public access—and that often means the Bay Trail. Bay Trail staff works closely with state and federal agencies, towns, cities, counties, park districts, bicycle coalitions, trail advocates and engaged citizens to move the project forward

The Water Trail program accepts grant applications from eligible public agencies and nonprofit organizations for Water Trail site enhancement projects.

<https://baytrail.org/about-the-trail/building-the-trail/>

<https://scc.ca.gov/2019/11/13/san-francisco-bay-area-water-trail-1/>

## **BICYCLE FACILITIES GRANT PROGRAM**

Throughout the nine-county Bay Area, the Bicycle Facilities Grant program strives to reduce emissions from on-road vehicles and improve air quality by helping residents and commuters shift to bicycling and walking as alternatives to driving for short distances and first-and-last mile trips. The Bay Area Air Quality Management District (BAAQMD) has grant programs that fund both on-street facilities and bicycle parking facilities, such as the Transportation Funds for Clean Air Program.

*Funds are programmed by BAAQMD or the SCTA.*

<http://www.baaqmd.gov/funding-and-incentives/public-agencies>

## **TRANSPORTATION DEVELOPMENT ACT ARTICLE 3**

Transportation Development Act Article

3 (TDA 3) provides funding annually for bicycle and pedestrian projects. Two percent of TDA funds collected within the county are used for TDA 3 projects. Metropolitan Transportation Commission policies require that all projects be reviewed by a Bicycle and Pedestrian Advisory Committee such as the Sonoma County Bicycle & Pedestrian Advisory Committee.

*Funds are programmed by the SCTA.*

<https://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/transit-21st-century/funding-sales-tax-and-0>

### **MEASURE M PARKS (2018)**

Measure M is a one-eighth cent sales tax to improve and protect Sonoma County's

parks, safeguard water and wildlife, and expand walking, bicycling, and hiking trails. Trail maintenance projects and active transportation projects that improve access to regional parks and trails will be eligible for Measure M's expenditure list.

*Funds are anticipated to be programmed by Sonoma County Regional Parks (SCRIP).*

<https://parks.sonomacounty.ca.gov/Learn/Funding/>

**SONOMA COUNTY AGRICULTURAL  
PRESERVATION AND OPEN SPACE  
DISTRICT MATCHING GRANT PROGRAM**

Every other year, Ag + Open Space provides funding to public agencies and nonprofits for the protection of open spaces within Sonoma County communities for local agriculture, community recreation, natural resource restoration, and public access. In the last round of funding requests, grants up to \$800,000 were awarded. Funds are programmed by the Sonoma County Agricultural Preservation and Open Space District.

[https://www.sonomaopenspace.org/  
how-we-work/matchinggrant-program/](https://www.sonomaopenspace.org/how-we-work/matchinggrant-program/)

**Other**

**THE TRUST FOR PUBLIC LAND  
ACQUISITION SUPPORT**

The Trust for Public Land (TPL) helps structure, negotiate, and complete land transactions to create parks, playgrounds, and protected natural areas. TPL works with willing landowners and then conveys land or easements to public agencies at or below fair market value. In most cases, TPL does not charge public agencies a fee for staff time or costs.

<https://www.tpl.org/>

[how-we-work/protect](#)

**THE NATIONAL FISH AND WILDLIFE  
FOUNDATION ACRES FOR AMERICA  
GRANT PROGRAM**

The Acres for America grant program works to conserve fish and wildlife habitat, protect public lands, provide access to outdoor recreation, and ensure the future of local economies that depend on outdoor recreation, forestry, or ranching. The program supports bicycle and pedestrian trails projects.

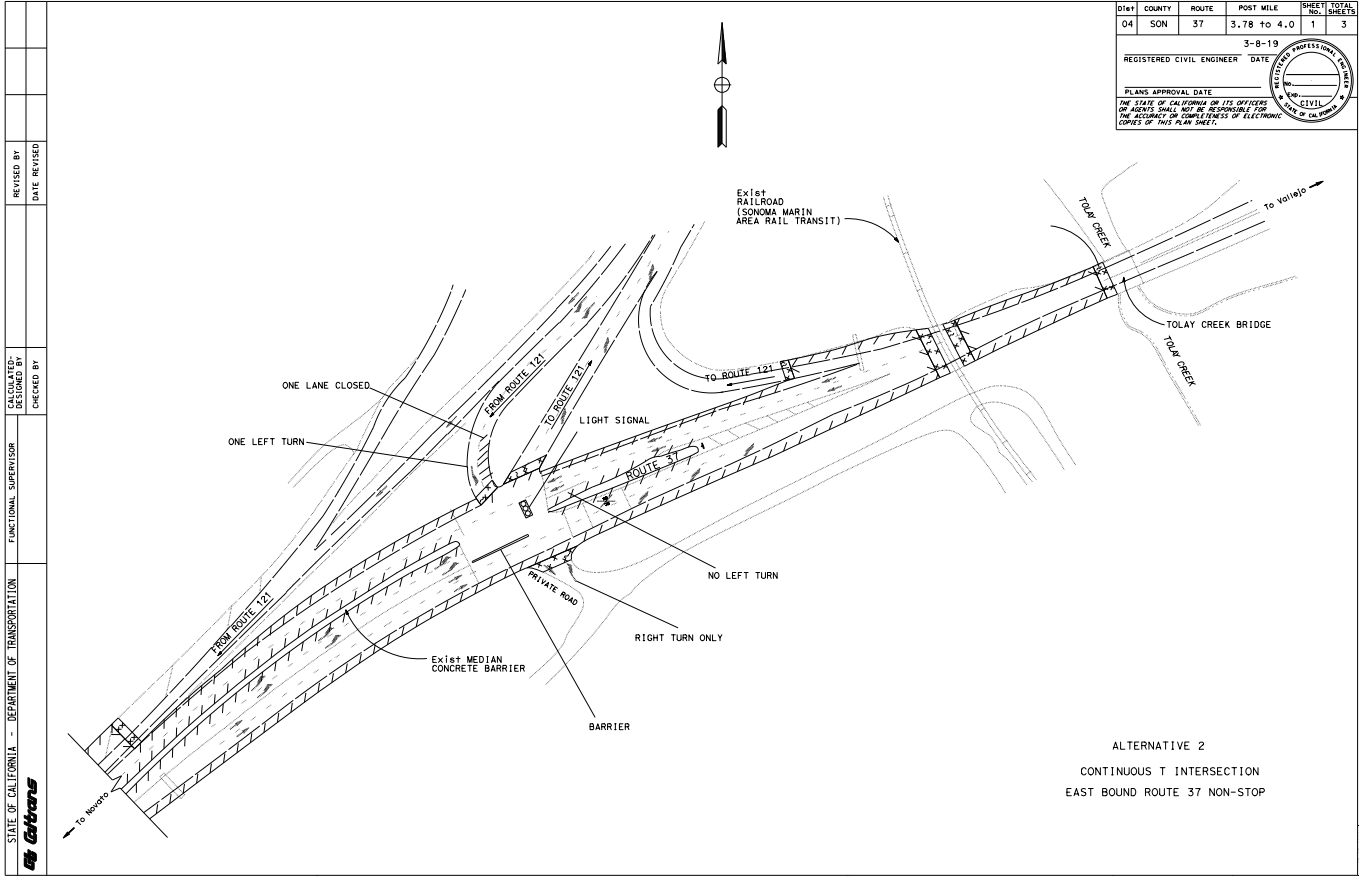
[https://www.nfwf.org/  
acresforamerica/Pages/2019rfp.aspx](https://www.nfwf.org/acresforamerica/Pages/2019rfp.aspx)



# NEAR-TERM PRIORITY #1 SEARS POINT

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# CALTRANS SHOPP PROJECT: SR37 & 121



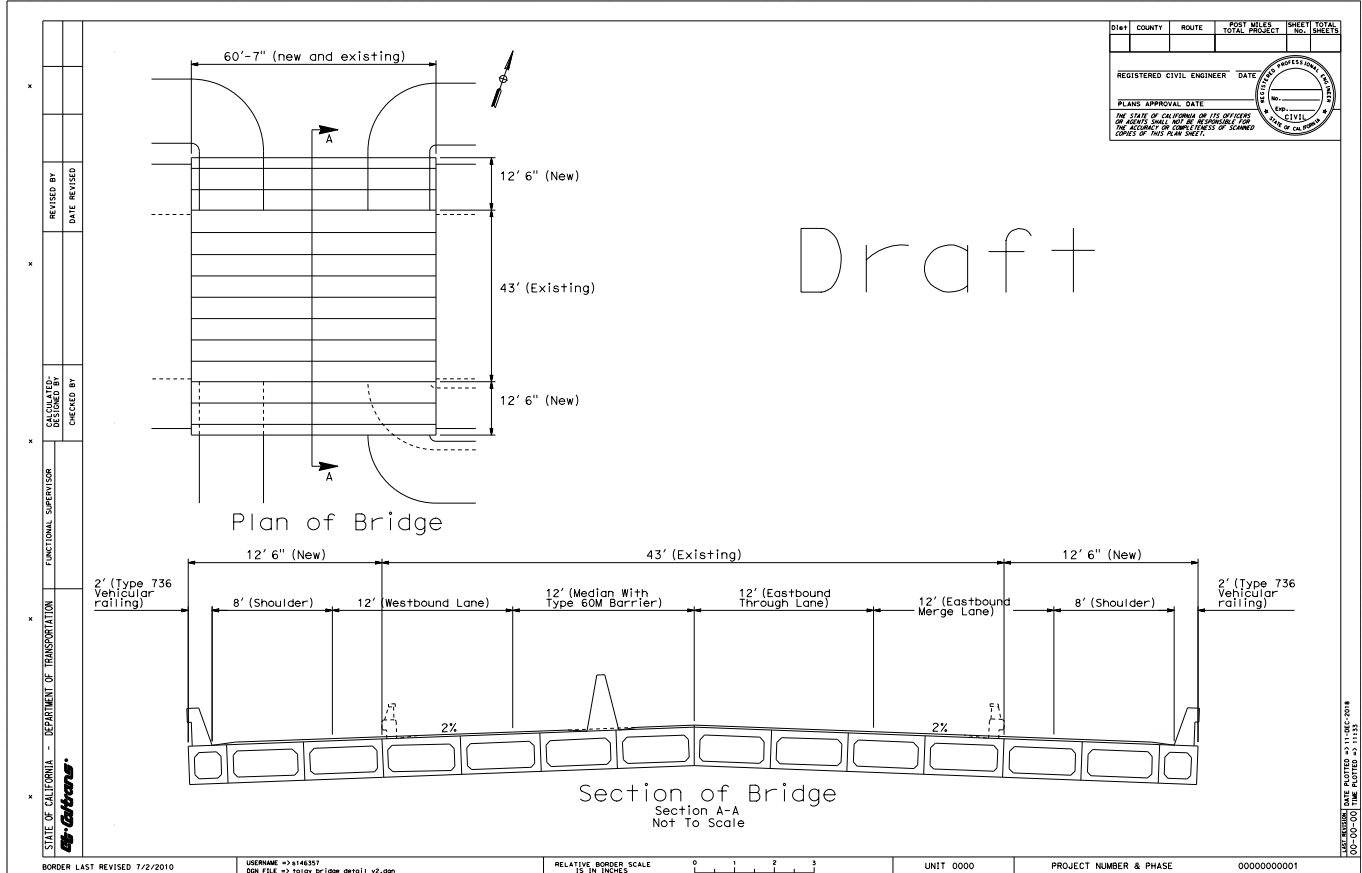
Source: CalTrans Project Initiation Report to Request Programming in the 2020 SHOPP Project, SR37 at Junction 37/121

## **NEAR-TERM PUBLIC ACCESS OPPORTUNITY AT SEARS POINT**

Through the public access alternative evaluation process, the project team developed a list of priority projects that meet and exceed the guiding principles. With feedback from the LWG the project team determined that of these priority projects, two areas provided the best opportunity and feasibility to become a built prototype, exemplifying the larger goals of the SR37 corridor and region. The opportunity at Sear Points aims to take advantage of near-term improvements planned for SR37 including:

- Two CalTrans SHOPP projects shown on pages 262 and 263. Currently there is no bicycle or pedestrian facilities included in the initial SHOPP PID. This section provides a first step at describing some key public access opportunities that could be included in coordination with these highway improvements including connecting the Sears Point (Elliot) trail with Tolay Regional Park.
- The interim Congestion relieve project on Segment B of SR37 shown on page 268. The opportunity here can connect a key San Francisco Bay trail gap between the Sears Point (Elliot) trail and the Tubbs-Tolay Trail.

# CALTRANS SHOPP PROJECT: SR37 & TOLAY CREEK BRIDGE



Source: CalTrans Project Initiation Report to Request Programming in the 2020 SHOPP Project, SR37 at Tolay Creek Bridge

## SHOPP Project at 37/121

The project team met with Caltrans' about the two SR37/121 SHOPP projects. At that meeting, we were informed that no bicycle or pedestrian facilities are planned to be incorporated into the project. The project team outlined a few of the initial benefits and opportunities to include public access in the planning process for consideration and potential coordination. The project team also had a follow up call with Sergio Ruiz, the Senior Transportation Planner responsible for Pedestrian and Bicycle Planning and Coordination for the region to review some thoughts and suggestions for opportunities to incorporate bike and pedestrian access design elements into SHOPP projects on SR-37. While the project team was unable to get Caltrans to update the PID or confirm access planning can occur with these SHOPP project, this report is an attempt to reiterate and visualize the opportunity for Caltrans to include the improvements listed below in keeping with Deputy Directive 64 which requires that the Department "...fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products..."

### Needed Baseline Bicycle/Pedestrian Improvements

- Trailhead parking facility/potential bus stop on south side of 37/121 intersection
- Design allowing bicycles and pedestrians safe-and-separated travel through 37/121 intersection to points north on 121 and east/west on SR 37 regardless of the final design chosen
- Provision of 10' set-aside on newly expanded Tolay Creek Bridge for Bay Trail accommodation in Interim Project.

There is precedent for the provision of width for a future trail in the Bay/Ridge/Delta Trail project in Vallejo. Caltrans is replacing the I-80/Sequoia overcrossing and rebuilding the underpass with an additional 12' feet to allow for future construction of the Vallejo Bluff Trail. This is an excellent example of the State Department of Transportation working collaboratively with both the local CMA (Solano Transportation Authority) and the San Francisco Bay Trail Project to accommodate an important link in the regional, 9-county trail that will provide a safe and separate pathway for residents, school children, commuters and visitors to the area.

# SR37 Interim Congestion Relief

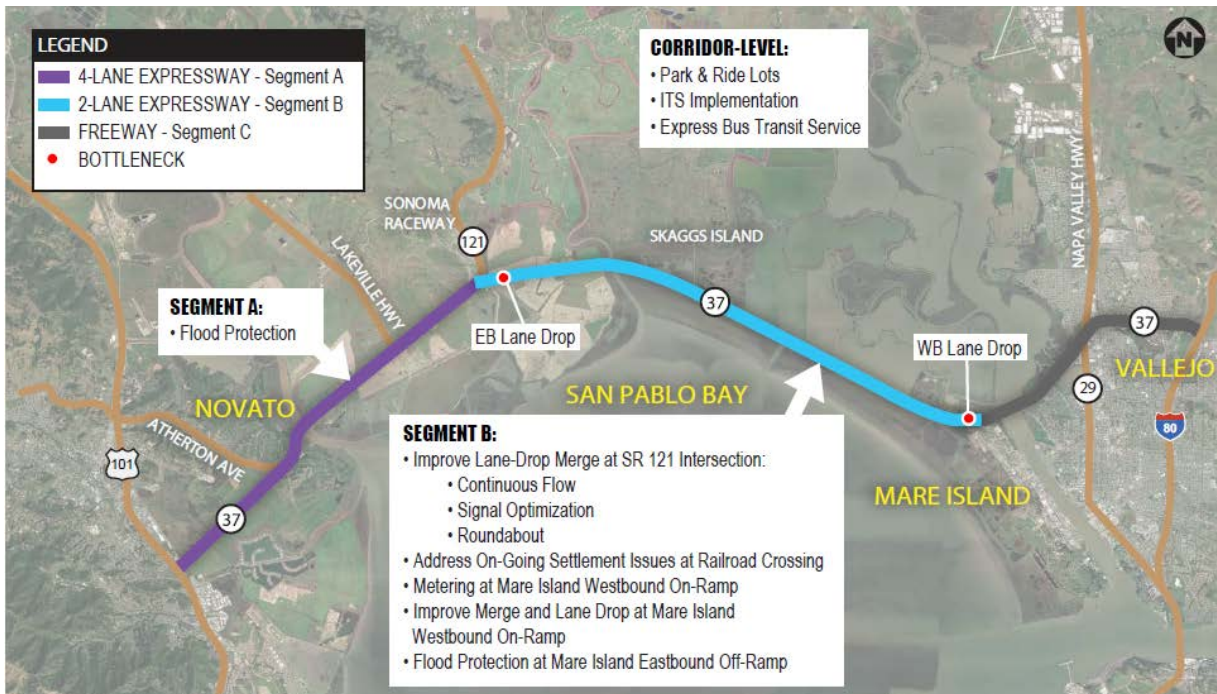


Exhibit 19: Near-Term Improvements

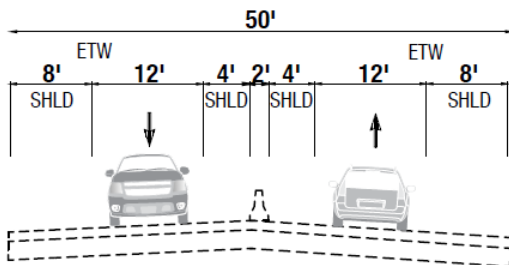


Exhibit 27: Existing Segment B

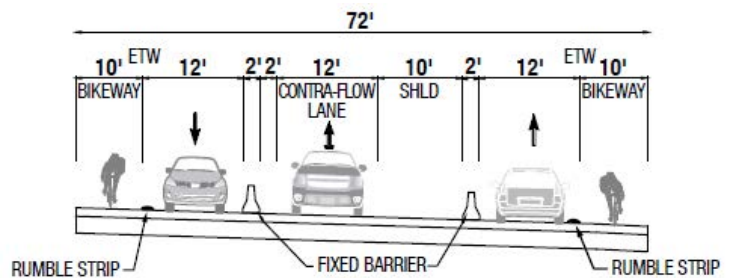


Exhibit 28: Three Lanes Section with Fixed Barrier

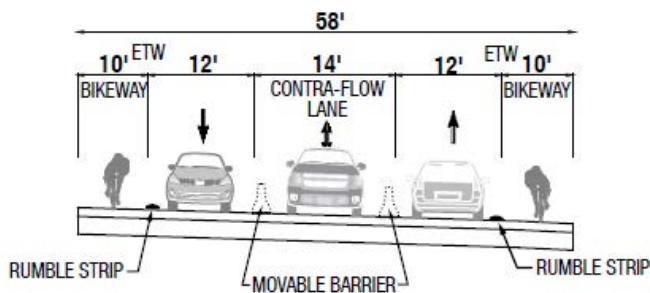


Exhibit 29: Three Lanes Contra-Flow Section with Movable Barrier and Bikeways

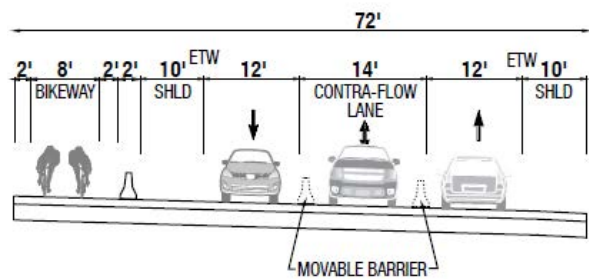


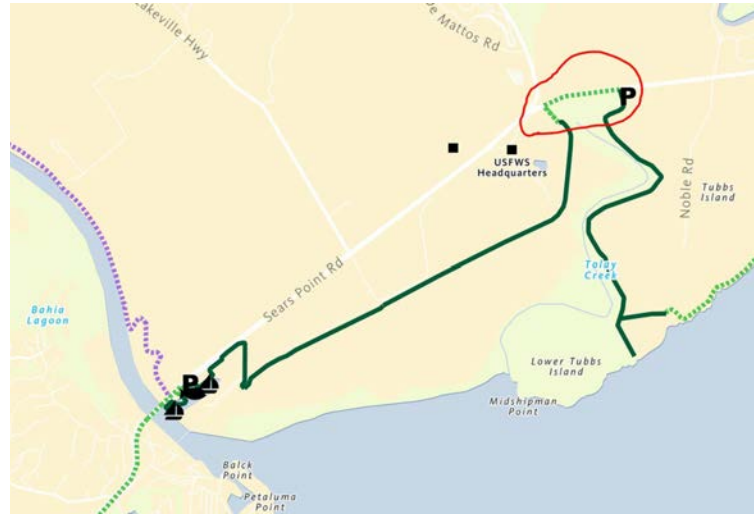
Exhibit 30: Three Lanes Contra-Flow Section with Movable Barrier and Bikeway

## Interim Project

It is the project team's understanding that two options are currently under consideration as an Interim Project to address the current traffic congestion and flooding issues on SR 37: A four-lane option, and a three-lane reversible flow option. If the four-lane alternative is chosen, existing bicycle access would be removed from 9-miles of SR 37 between SR 121 and Mare Island. A bicycle shuttle has been proposed as mitigation for the loss of this access. A bicycle shuttle is a poor substitute for actual, meaningful access to the shoreline, particularly in the San Pablo Bay region where opportunities for such engagement are so limited.

The San Francisco Bay Trail has two superb-yet-disconnected segments of trail in this immediate vicinity—the Sears Point (Elliot) Trail and the Sonoma Baylands Bay Trail to the west with a combined length of five miles, and the Tubbs-Tolay Trail to the east measuring 3.3 miles. Only 4,300 feet separate these two segments of Bay Trail. This gap was the subject of a Bay Trail grant-funded feasibility study in 2018 that evaluated seven options for closing this gap, three of which are located in the Caltrans right-of-way. In addition to the trail, the buttress fill option would offer flood protection to the 3,300 feet of highway between 121 and the Tubbs/Tolay Trailhead. The two boardwalk options would require less fill, but would not offer roadway protection.

Recent policy guidance from Governor Newsom directs Caltrans to "...align transportation spending, programming and mitigation with the state's climate goals to achieve the objectives of the state's Climate Change Scoping Plan, where feasible. Specifically the Governor is ordering a focus for transportation investments near housing, and on managing congestion through innovative strategies that encourage alternatives to driving." (emphasis added). To meet this goal in addition to Deputy Directive 64 and SB 375, Caltrans should



*Bay Trail Map of the The Sears Point gap.*

implement 3,300 feet of Class I trail adjacent to SR 37 as mitigation for loss of 9.5 miles of bicycle access between 37/121 and Vallejo. The Bay Trail in partnership with Sonoma County Regional Parks would seek other funds to complete the trail on Old Tolay Road, closing the 1,100 foot gap between the Elliot Trail and SR 37.

The San Francisco Bay Conservation and Development Commission (BCDC) will have permitting authority over this project and will require maximum feasible public access be provided. Providing this connection would create nine miles of continuous public access via the Bay Trail, starting at the Port Sonoma Marina, bookended by the Tubbs/Tolay trail—the exact amount of access that would be lost to cyclists during the interim project. Partnering with the Association of Bay Area Governments and Sonoma County Regional Parks in this way not only has the potential to satisfy BCDC permitting requirements, but would also demonstrate Caltrans' commitment to holistic planning, the state's climate change goals, and those who desire to use the State Highway system without a private vehicle.



*View from Sears Point of the two superb-yet-disconnected segments of the San Francisco Bay Trail—the Sears Point (Elliot) Trail and the Sonoma Baylands Bay Trail to the west with a combined length of five miles, and the Tubbs Island-Tolay Trail to the east measuring 3.3 miles. Only 4,300 feet separate these two segments of Bay Trail. The Sears Point gap closure shown in red is fundamental connection for the Sears Point near-term opportunity.*

## **Additional Amenities and Opportunities at Sears Point**

Alternative I of the SHOPP project at intersection of SR37/121, the roundabout design provides a unique opportunity within the public row. As laid out in the draft PID design there is a significant amount of space created south of the roundabout near an existing access drive to accommodate a more established public access opportunity and trailhead.

to access the Bay and the Sears Point and Tolay trail. The bike ramp includes an elevated outlook deck for birdwatching and tide observation. An elevated crossing at this upland are could provide that added benefit of solid ground for pier construction and still being clear of the long-term ultimate SR37 elevated road project.

The area could provide a hub for active or recreational transportation for and bikers trying to traverse from a future entrance to Tolay Regional Park off 121 to the Sears Point (Elliot Trail) and further connection to the Tolay Unit Parking Lot in NSMWA. As envisioned, the opportunity could be an elevated bike ramp over SR37 for all hikers and bikers coming from Sonoma and Tolay Regional Park

At the base of the ramp, south of the roundabout and within the public ROW, could hold a mobile field station, public education hub or gateway to the Baylands viable for the coming decades. Other amenities could include solar and lunar cycle observation deck, picnic tables, marsh walk , CA natural fire study area, salt marsh harvest mouse station, ranger/scientist station and restrooms.



## Sears Point Gateway Narrative

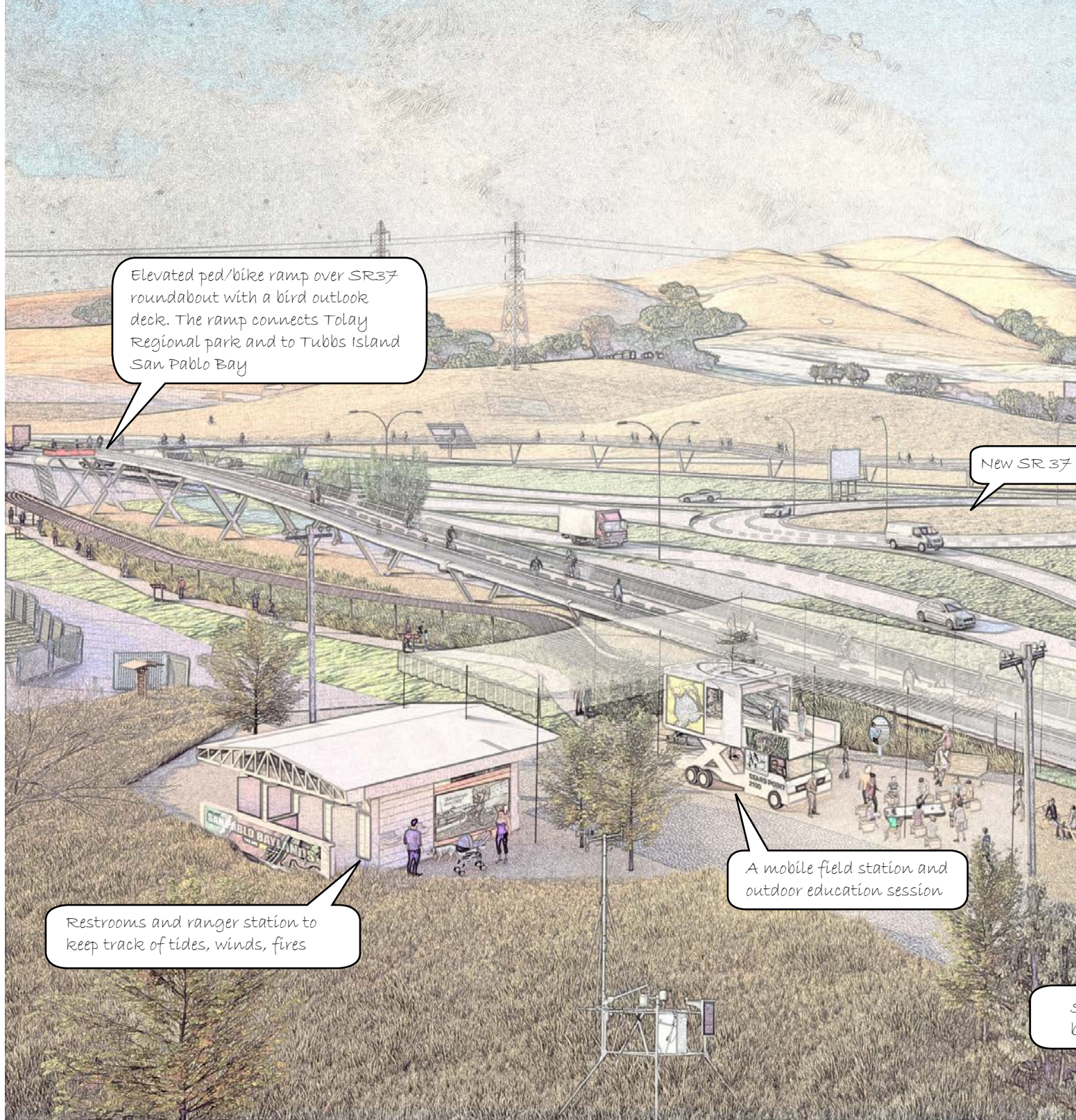
Sears Point was initially a headland jutting into the Bay surrounded by marshlands. It is the southern most point of a large fault ridge. The Rodger's Creek fault plunges under the bay joining the Hayward fault.

Before European settlement in the 1850's transportation through the marshlands was by foot trails, or boat along the sloughs. The old Camino Real, the former route of 101, followed Indigenous trails across the marsh, turned inland around Cougar Mountain and traveled up what is now 121 to the Mission in Sonoma. The intersection of SR 37, 121 and Tolay Creek was likely an important junction for centuries. Into the 1960's this intersection was home to a combination gas station, convenient store and lunch counter.

Following the influx of settlers in the 1850's this landscape experienced considerable change with much of the marshlands being acquired, drained and diked. Approximately 90 % of the San Francisco Bay wetlands were filled and used for agriculture, industry, the Navy and residential development. Since the 1960's these marshes are slowly being acquired again and returned to wetland conditions.

Coast Miwok, as well as other indigenous groups, foraged here before European contact, likely following Tolay Creek down to the Bay from their villages near Tolay Lake or further upland. Tolay Lake is known as a spiritual place, where indigenous people from across California, and as far away as Mexico made pilgrimages. European Settlers drained the Lake in the 1860's to discover thousands of charmstones and ritual objects. Members of Graton Rancheria are developing a cultural and education plan to reveal aspects of this important story working with the Tolay Lake Regional Park.

# ADDITIONAL AMENITIES AND OPPORTUNITIES AT SEARS POINT (SR37 and I2I)

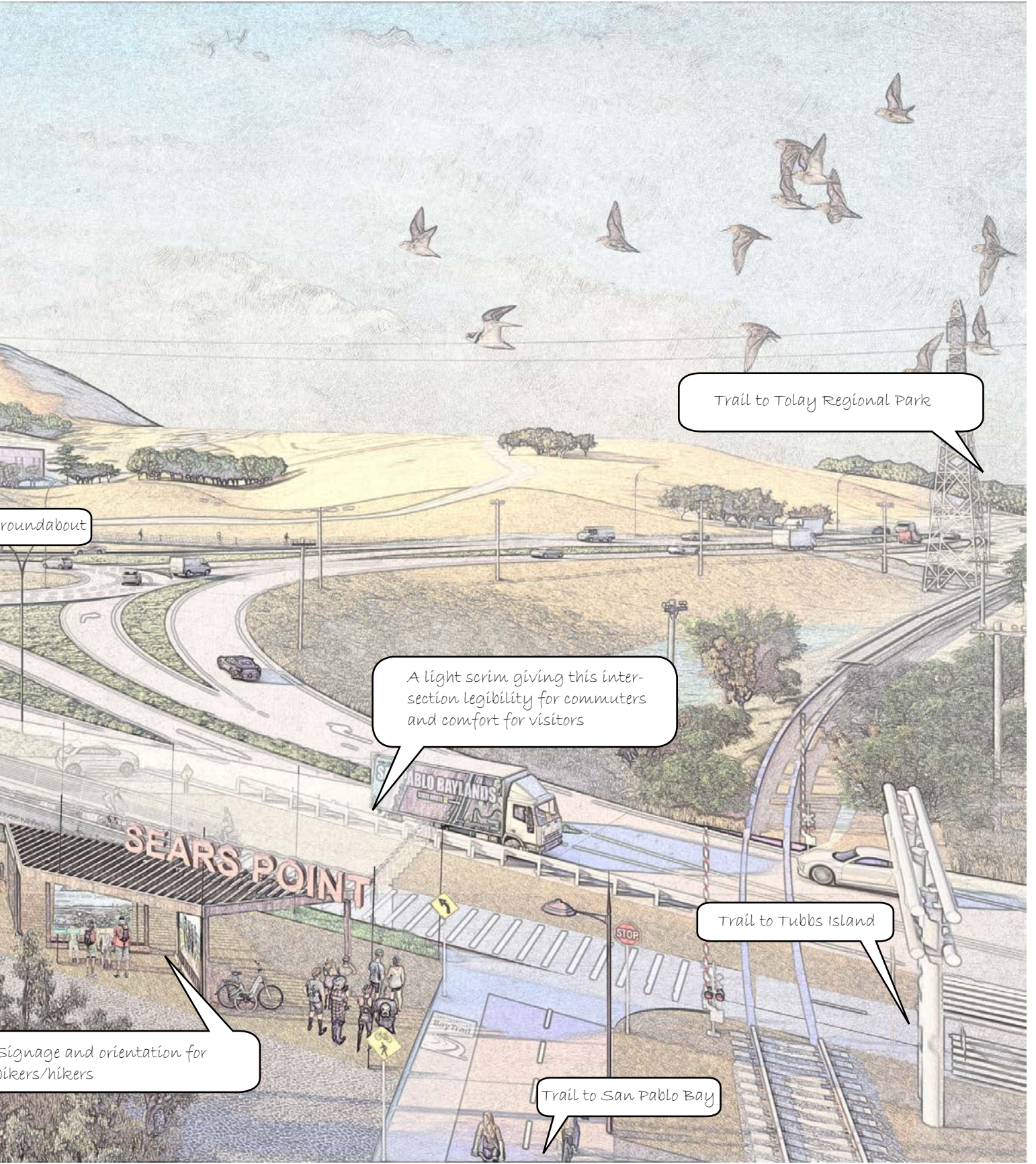


Elevated ped/bike ramp over SR37 roundabout with a bird outlook deck. The ramp connects Tolay Regional park and to Tubbs Island San Pablo Bay

New SR 37

A mobile field station and outdoor education session

Restrooms and ranger station to keep track of tides, winds, fires



roundabout

Trail to Tolay Regional Park

A light scrim giving this intersection legibility for commuters and comfort for visitors

Trail to Tubbs Island

Signage and orientation for bikers/hikers

Trail to San Pablo Bay

# ADDITIONAL AMENITIES AND OPPORTUNITIES AT SEARS POINT (SR37 and I2I)







*Hay Schooner, ca. 1900, Locally harvested hay was shipped via the sloughs by flat bottom schooners to San Francisco and beyond.*

Franklin Sears was lured west during the Goldrush but settled here to raise cattle. In 1846 he, his family and other local settlers participated in the Bear Flag revolt, an uprising in Sonoma to declare California a republic. Sear's sister-in-law used fabric remnants from her petticoat to create the earliest known version of the California State Flag.

Tubbs Island was likely filled and named by the Tubbs Family who later established Tubbs Cordage Company in San Francisco, becoming the primary provider of marine rope to the fastest growing port on the west coast. Norm Yenni whose father began farming here in 1969 farms the current Tubbs Island Ranch primarily for hay.

Long time residents describe the Baylands as a place where everyone knew each other and shared advice, but few people ever really lived here. They describe the marshes and sloughs as being spotted by “duck” camps and simple settlements for workers, their families and sportsman well into the 20th century.

### **The Story – Sears Point Gateway**

At this junction of SR 37, 121, Tolay Creek and the former rail line, a stopping point and Gateway could be created to reveal these virtually unknown stories of this remarkable landscape. Segments of the Bay trail could be connected bringing visitors from the edge of the Bay along Tolay Creek to the uplands, Tolay Lake and the regional park. A series of pedestrian pathways could carry bikers and hikers over SR 37 to a modest plaza equipped with restrooms, a meeting space and an area where a mobile Field Station could further enhance visitor experience through exhibits, maps, workshops and viewing devices.

This crossroads could help orient visitors to what they might see and learn here—As an outdoor learning lab, it could provide a vantage point and vista for understanding the marsh, its history and future. Stories could range across culture, history,



**Look Mobile, A mobile set of learning tools in use in San Mateo County, traveling between branch libraries. Developed by the Studio for Public Spaces at the Exploratorium the van is equipped with exhibits, activities, observing devices which engages youth in activities about their local landscape.**



**Book viewer, Viet Nam Memorial, Washington DC. A protective view cabinet holding a range of informative materials; tidelogs; almanacs; images; stories.**



**Observing station**

science and wildlife. By partnering with Indigenous groups, local historical institutions, educators and the local conservation and farming communities these histories could be made more human and tangible.

While the SF Bay Area is culturally rich with museums and libraries, there are few spaces that are truly interdisciplinary layering geography and history, science and culture, or wildlife and engineering. All these ideas come together in the Baylands as it plans for future restoration, sea level rise and resilience. By the cultivation of a place where recreational users, conservationists, educators and the public might come together

these different forms of knowledge might be connected in a more holistic way.

Exhibits could come in the form of layered maps to see how the geography has been transformed. Simple instruments might reveal the geology, watershed and tides. Observing devices, wildlife guides, and workshops for how one should see, appreciate and behave in a wildlife refuge could be offered. Imaginative signage and artworks using historic maps, images and oral histories could be introduced. This could be a destination for a lunch-time experience, class field trip, or a launch pad to further explore the landscape beyond.



*Northern tip of Mare Island looking South along the Napa River*

**NEAR-TERM  
PRIORITY #2  
MARE ISLAND**

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Photos from the September 28th Mare Island Public Access Walk

## **NEAR-TERM PUBLIC ACCESS OPPORTUNITY AT MARE ISLAND**

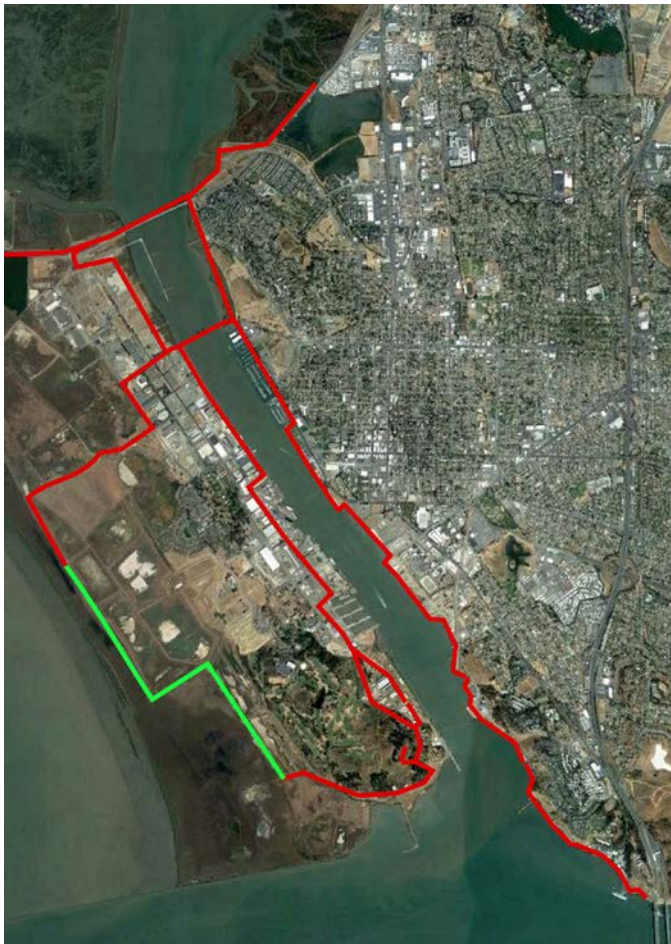
On September 28th, members of the project team attended a community meeting hosted by Stacy Madigan from the Nimitz Group at Quarters H at 1195 Walnut Ave. The meeting was attended by interested members of the Vallejo and Mare Island community, members of our Local Working Group including Katy Beistel, Maureen Gaffney and Ben Botkin. The purpose of this meeting was to learn more about current efforts of the Nimitz Group at Mare Island, review opportunities for increased public access on the island and to have a site walk.

The project team gave a quick overview of SR37 Public Access Scoping Report and reviewed in progress work, including interest from the LWG and project team on exploring additional opportunities for coordinated public access on Mare Island. There was a clear consensus from the group on exploring future opportunities for access up and down Mare Island. After hearing from the Nimitz Group and members of the community, the group went on a guided walk that ran from Walnut Ave through the Historic Core and along the shore to the new WETA ferry plaza and back.

The group's goal was to have a walkable waterfront around the Napa River on the Vallejo and Mare Island side, with several water access points, as well as a destinations for historic and educational opportunities. The group also indicated which areas are already providing public access for pedestrians, bikes, kayaks and identified Bay Trail or other connecting opportunities.

Another takeaway was the need for directional signage and identifying landmark buildings and other structures for which interpretive markers can be prepared.

In summary, there was an interest in connecting northern parts of Mare Island along the water to the historic core and an interest in developing renderings to gain interest, funding and support for future opportunities. The SF Bay Trail is currently in conversations with the City of Vallejo regarding opportunities for the inclusion of a Bay Trail alignment on Mare Island.

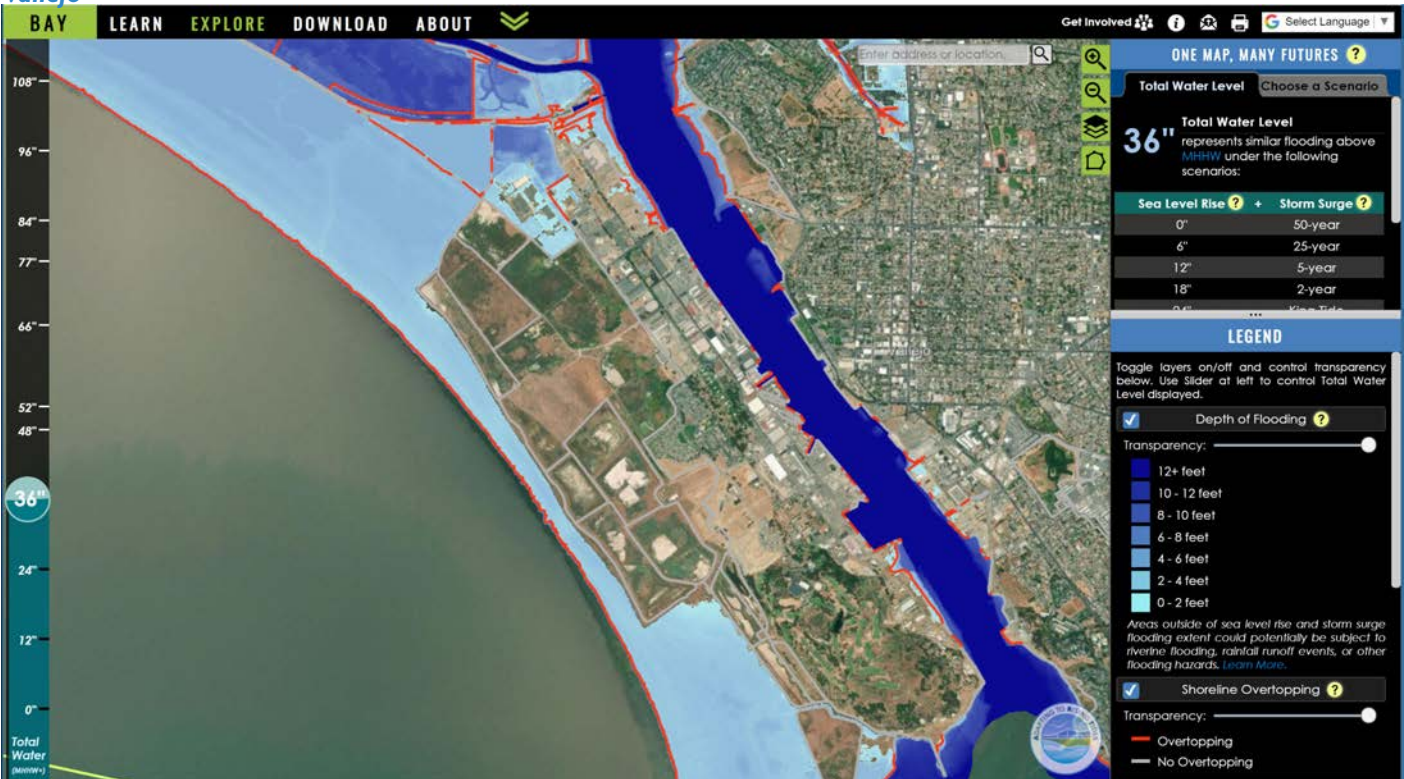


## Near-Term Transit Improvements for SR37 at Mare Island

The current plans for improvements on SR37 at Mare Island include:

- **Metering at Mare Island WB On-Ramp:** Improvements include ramp metering at the westbound SR 37 on ramp to smooth traffic flows and limiting the SB approach from the vista parking lot to right turn only movement.
- **Improve Merge and Lane Drop at Mare Island WB On-Ramp:** Improvements include modifying the lane drop and merge west of Mare Island on-ramp to provide a standard merge and taper. This will increase existing WB bottleneck throughput west of Mare Island.
- **Park and Ride Lots:** STA is studying potential locations for park and ride lots along the SR 37 corridor. These park and ride lots could provide opportunities for vanpool/carpool services and transit connections.

Riverwalk Map from Dr. Kay Flavell - New Pacific Studio, Vallejo



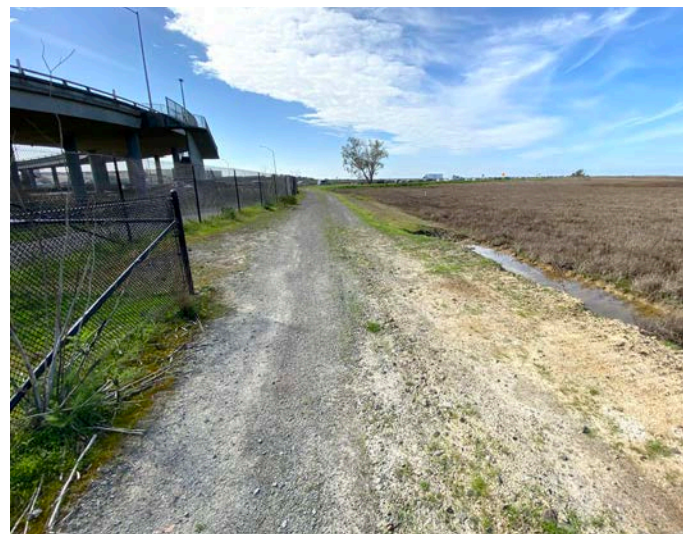
36" SLR Map of Mare Island Vallejo - Source: <https://explorer.adaptingtorisingtides.org/>



*Northern end of Mare Island at S37 interchanges - showing parking and overlook*

## The Opportunity

The near-term improvements planned for SR37 and Mare Island address traffic congestion for the corridor, yet to date no plans are in place to address risk to flooding or SLR. The Nimitz Group planning for Mare Island have just begun and are at the information gathering stage. The City of Vallejo has discussed the need to start a city-wide resiliency plan yet the timing and status of this process is not known. Despite all of these in-progress or yet to begin planning processes, the project team understands that the northern end of Mare Island is especially at risk for flooding and SLR – the interchange at SR37 has been closed periodically due to flooding in the last 5 years. With all the opportunity and potential at Mare Island, there remains a lack of urgency to address the flooding risk and a lack of awareness of the access opportunities and historic resources. More importantly, Mare Island offers a great opportunity to provide equitable access opportunities, within 1 mile to a severely disadvantaged community. It is with this context, that the project team and LWG determined that the Northern end of Mare Island provide an excellent opportunity for pursue as a Near-Term Public Access opportunity.



*Guadacanal Village informal access road*



*Mare Island Shoreline at Napa River south of SR37*



*Commemorative Plate, 1954 Mare Island Centennial*

The northern end of Mare Island, adjacent to the SR37 bridge over the Napa River has a great gateway potential with proximity to the Vallejo waterfront and pending development on Mare Island – it is Vallejo’s and the Bay Area’s gateway to the San Pablo Baylands. Given the planning context, flooding and SLR risk, the project team feels that this opportunity needs to be resilient without major investment in protection infrastructure. For this area an opportunity more focused on water access that can adapt rising water, while increasing awareness of the Bayland’s dynamic natural systems at play makes a lot of sense.

Initial considerations include connecting the existing Caltrans Public Viewing/parking lot, potentially along the SR37 ROW, to a new boat launch and kayaking deck to launch onto the Napa River - getting access to numerous sloughs in the Napa-Sonoma Marsh complex. Additional opportunities could include connecting this with a bike/ped path to the Historic Core along the Napa River, potentially looping back around on the western side. Along the boat ramp could be facilities for Kayak renting and storage with a field station to provides better legibility through installed



*Map of Mare Island, June 30 1954, produced during the Centennial commemorating the arrival of Commander David Farragut, commissioned to establish a Pacific Naval base in 1854. McCune Collection*

tide gauges, water quality prisms, diurnal tide hydrology and marine life in Napa River.

### **Mare Island Gateway -- North Mare island, Highway 37 turnoff a brief history**

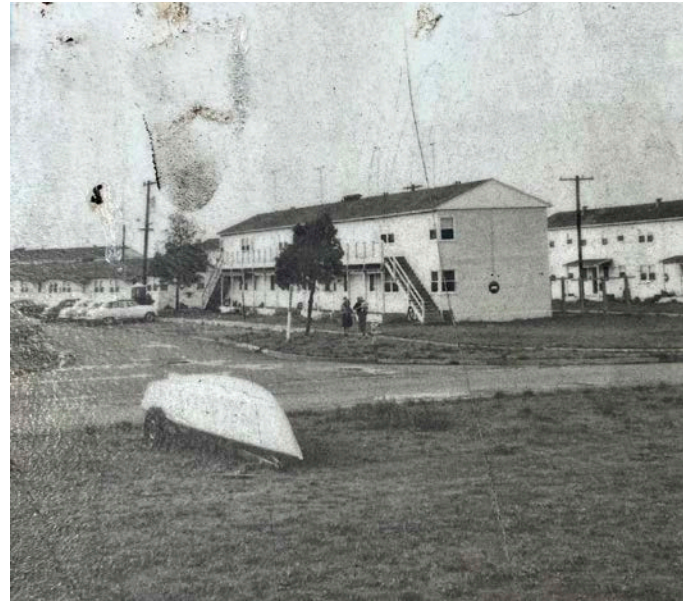
Various histories of SR 37 describe the route along the marsh to have once been an indigenous trail. The Sears Point Toll road opened in 1928 traveled from Sears Point to Vallejo and was operated by Golden Gate Ferry. It was purchased by the Navy in 1938 and became a freeway.

One enters Mare Island here off SR 37 at the north end of the island. Though once a thriving shipyard and community of workers, today most of the buildings in this part of the Naval Shipyard have been decommissioned or removed not considered part of the core historic district.

In the 1940’s the Navy began construction of residential housing in this area, once tidal marsh,



**Faded signage of people and housing at the former site of Guadalcanal Village, Mare Island, image from National Archives, San Bruno Ca.**

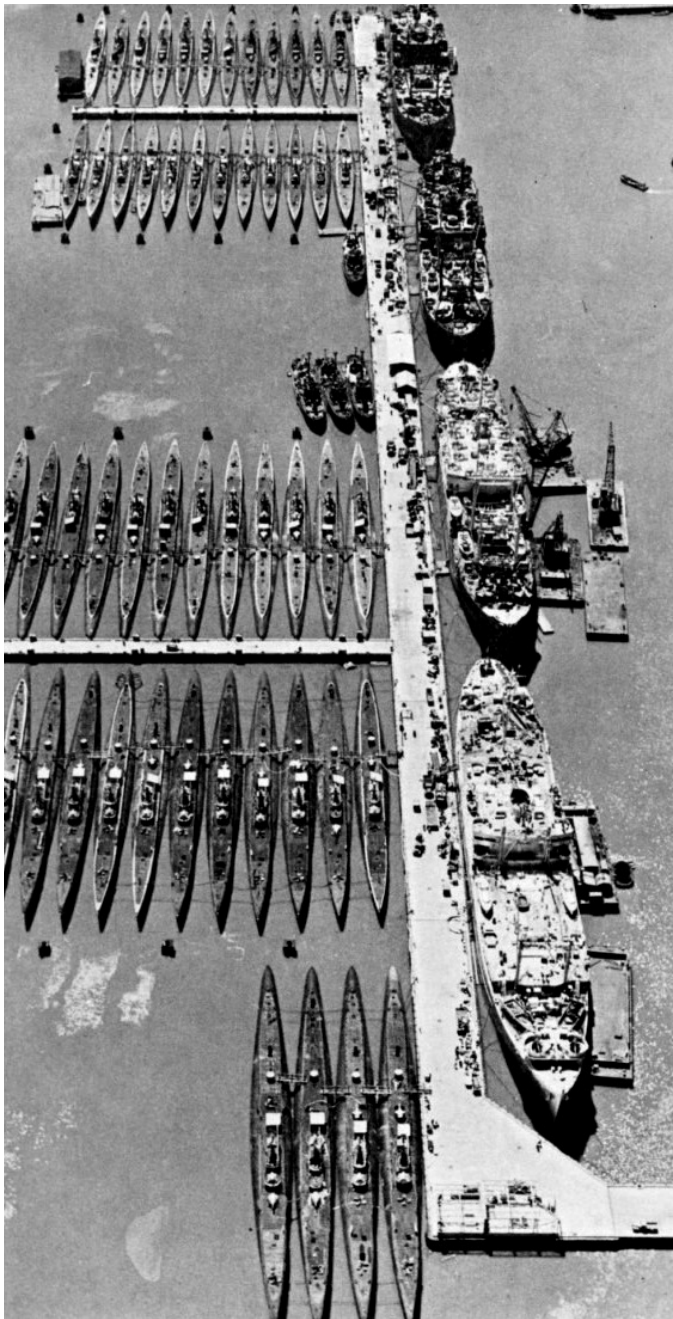


**Former playing field, Mare Island**

but filled during the 1920's and 30's—technically ending Mare Island's status as an island! The housing was to accommodate the influx of war workers. Over 40,000 people were employed on Mare Island during World War II. On either side of SR 37 several housing developments were built including; Coral Sea Village, Guadalcanal Village and Farragut Village. Guadalcanal Village housed 42 naval families in 2 story homes with outside play areas. The street names memorialized ships that had been built on Mare Island, but were lost or damaged at sea during the war. After the war, the village was abandoned and then dismantled during the late 1960's, as this area was prone to flooding and many homes were water damaged.

This entire northern end of Mare Island was home to several temporary barracks and housing complexes on both sides of SR 37. Between the homes were schools and recreational fields – where even today rusty goal posts are still standing.

In 2000 Cal Trans rebuilt and widened the SR 37 bridge over the Napa River, resulting in a mitigation program at Guadalcanal Village to remove the roads and foundations, breach a levee and thus return the site to wetlands. From a satellite perspective one can still see the ghost outline. Connected to the Cullinan Ranch restoration, this site is now part of the San Pablo Bay Wildlife Refuge where many varieties of native plants including pickleweed and



Decommissioned World War II submarine pier, Mare Island ca. 1946



FLEET ADMIRAL CHESTER M. NIMITZ, U. S. NAVY  
 FEDERAL OFFICE BUILDING  
 SAN FRANCISCO 3, CALIFORNIA

We, who survived World War II and were privileged to rejoin our loved ones at home, salute those gallant officers and men of our submarines who lost their lives in that long struggle. We shall never forget that it was our submarines that held the lines against the enemy while our fleets replaced losses and repaired wounds.

C. W. Nimitz, Fleet Admiral, USN.

Letter from General Nimitz honoring human casualties in the Submarine Fleet during World War II

cordgrass, as well as several endangered animal species have returned and may be observed. While one can enter the trail system from under the bridge, the parking lot there is currently blocked off due to dumping and homeless residents.

From the SR 37, Mare Island Bridge one can look down and see the expansive Reserve Pier structures that were home to de-commissioned

submarines after World War II. The piers remained in use as home to this mothball submarine fleet until 1976. Just beyond the pier structure one can see the indents in the shoreline where the submarine construction docks once were. Submarines were a vital component in the War in the Pacific and were responsible for destroying 55% of Japan's Merchant fleet. Each sub held a crew of 80 and with a loss of 4,000 sailors approx. 1 in 5 lost their lives.



*Mare Island Straight looking toward the Vallejo Causeway Bridge.*

## **The story -----A Mare Island Gateway**

There is an opportunity to suggest an identity and sense of welcome to what could be considered a Mare Island Gateway or portal. To consider this area around SR 37, under the Mare Island Bridge along the Napa River including the Reserve Pier all the way to the Mare Island/Vallejo causeway as a pedestrian parkway could provide a sense of welcome and of being here. On the north eastern side of the Napa River could be a trail or walkway to bring people from the Mare Island historic district on a walk through remnant histories of ships, shoreline, human recollections and into the marshes. Here at the edge of the Guadalcanal site there is some old signage that is in need of repair and could be re-considered.

This is the only entrance from Highway 37 on to Mare Island, so this is one of the first areas visitors will encounter. Here could be recreation fields and pathways to the Napa River, Dutchman Slough and San Pablo marshes. The concrete historic Reserve Piers though no longer in use, could be partially re-furbished as a promenade. Located at the end of one structure is a building that might

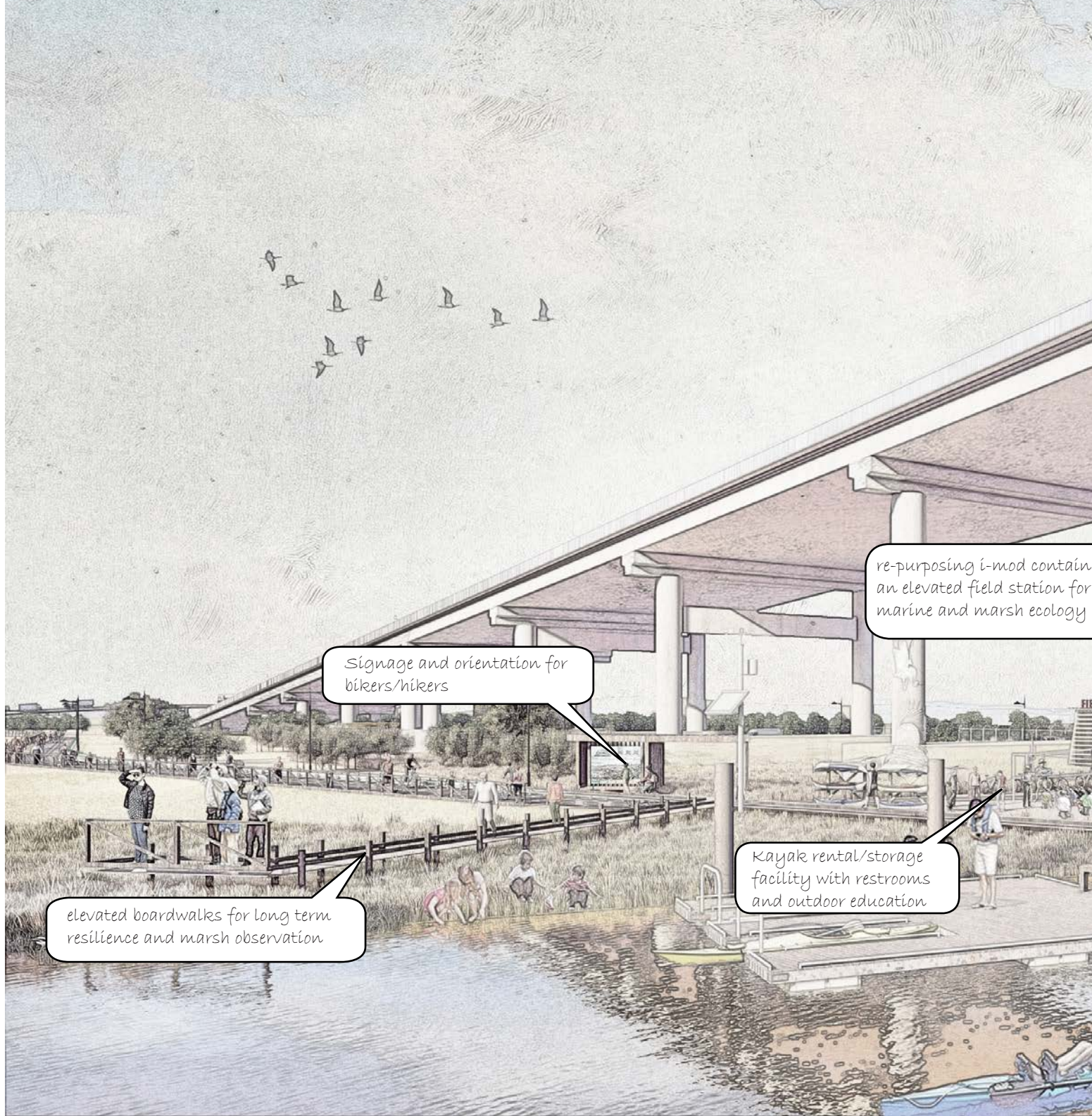
be re-used as a Field Station education center for interpretation of the wildlife, as well as the naval/submarine history. Perhaps an old submarine might be returned and used for educational tours.

Along the side of the piers towards the shore a stairway and elevator might bring people down to a kayak launch and a boardwalk or trail under the bridge to the former Guadalcanal Village site and entry to the San Pablo Bay Wildlife refuge.

The young people who lived in this residential housing are likely still alive today and an oral history program might further punctuate a story of place with anecdotes of growing up on Mare Island.

While future plans are now underway by the Nimitz Group to develop a new plan for Mare Island, at present, when entering via the SR 37 turnoff, there is no clear sense of entry or an introduction to where you are, what you might see here and the valuable cultural and wildlife resources immediately at hand.

# MARE ISLAND GATEWAY OPPORTUNITY (SR37 and NAPA RIVER)

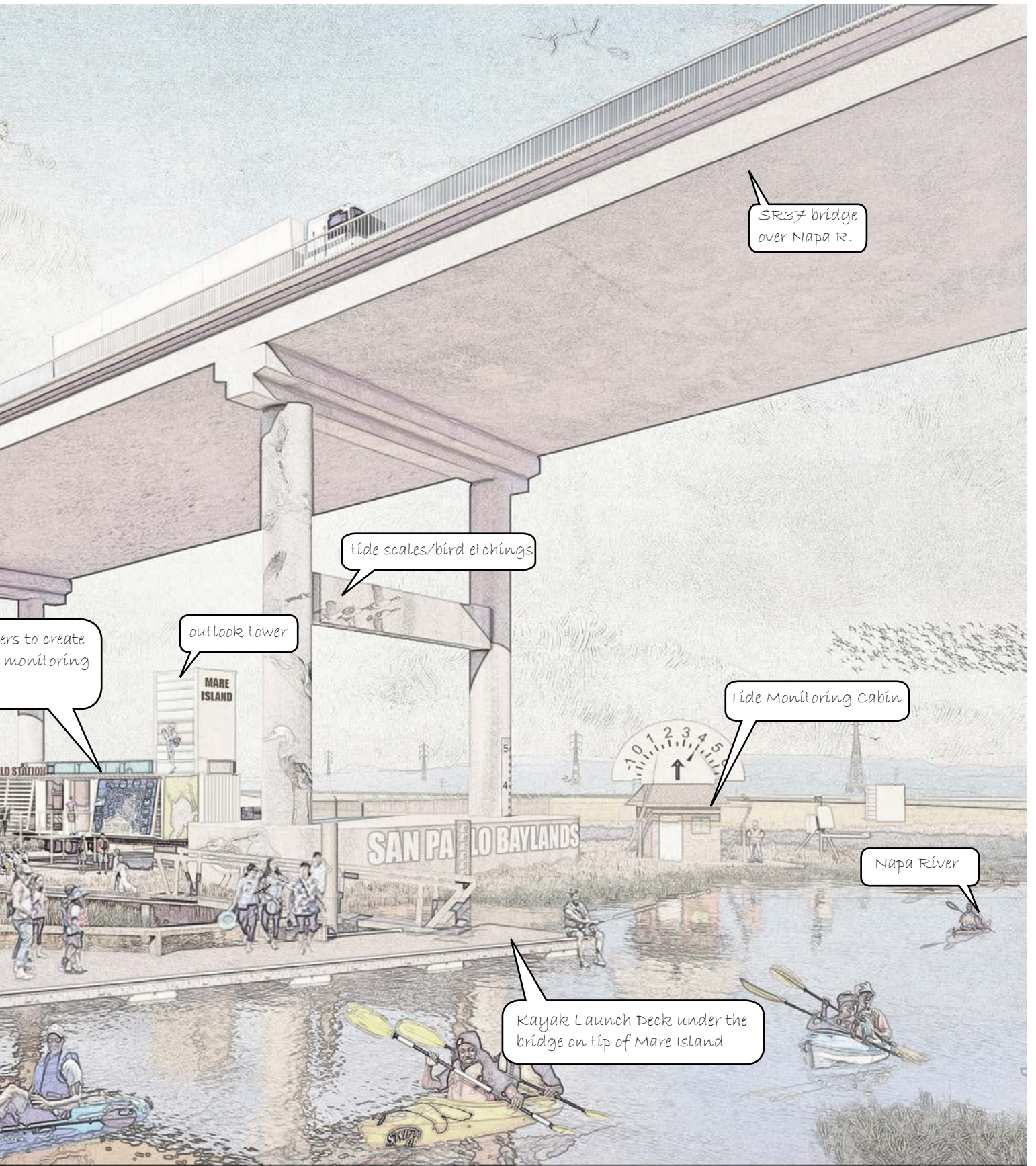


Signage and orientation for bikers/hikers

re-purposing i-mod contain an elevated field station for marine and marsh ecology

elevated boardwalks for long term resilience and marsh observation

Kayak rental/storage facility with restrooms and outdoor education



SR37 bridge  
over Napa R.

tide scales/bird etchings

outlook tower

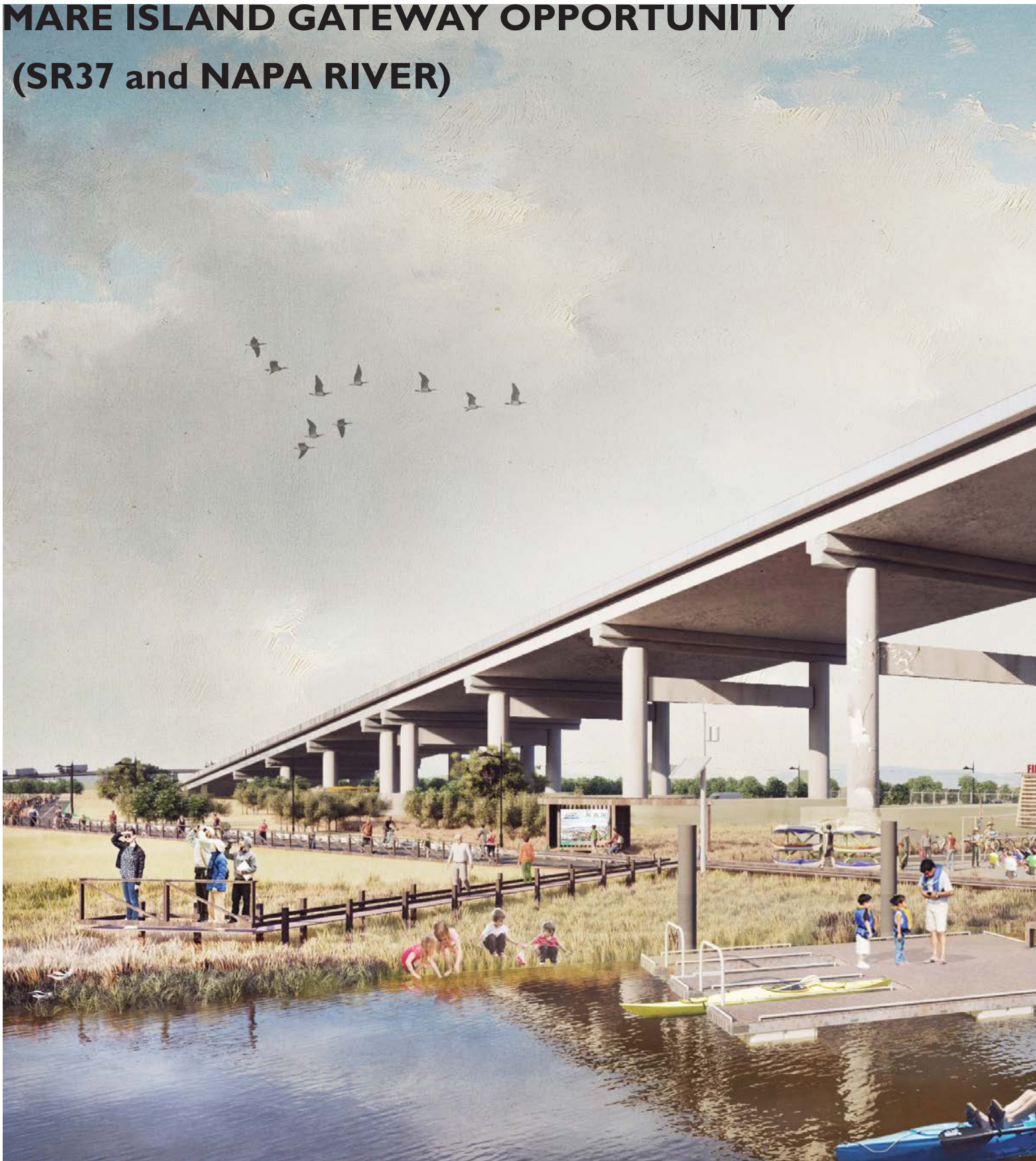
ers to create  
monitoring

Tide Monitoring Cabin

Napa River

Kayak Launch Deck under the  
bridge on tip of Mare Island

# MARE ISLAND GATEWAY OPPORTUNITY (SR37 and NAPA RIVER)







*Tidal Indicator, New York Harbor, ca 1900. US Coast Survey/NOAA. A series of tidal indicators were used along US coastal cities to alert incoming vessels of predicted tidal levels. A replica was erected on Alcatraz facing the Golden Gate.*

## Field Stations – Descriptions and alternatives

These Field Stations or Centers could be considered as community-use spaces and might be shared by schools, local museums, and for community gathering. This might also be home to a modest restaurant serving kayakers, birders, hikers and other recreational users. A simple array of imagery or hands-on exhibits might give some local history and introduce people to the wildlife, tides and local weather conditions. Other public programs might feature the restoration science and efforts underway in the Baylands. These Field Stations could be spearheaded by the Exploratorium, but the goal would be to develop them in partnership with local organizations in Vallejo to ensure their sustainability and success.

## Alternative Field Station ideas

A mobile van might be utilized by a local library or museum and park here at specific times equipped with a set of tools, maps, and noticing experiments to help people connect to the local landscape. These could be devices that can help people observe wind, tides, and the changing color of water in the Napa River. There could be guides for identifying wildlife and marsh plants, or binoculars or infrared viewers people could borrow. Visitors may be prompted to draw maps of where they are, or capture stories, or make drawings of what they see. Historical materials – including artifacts, stories, books and photographs might also be displayed.



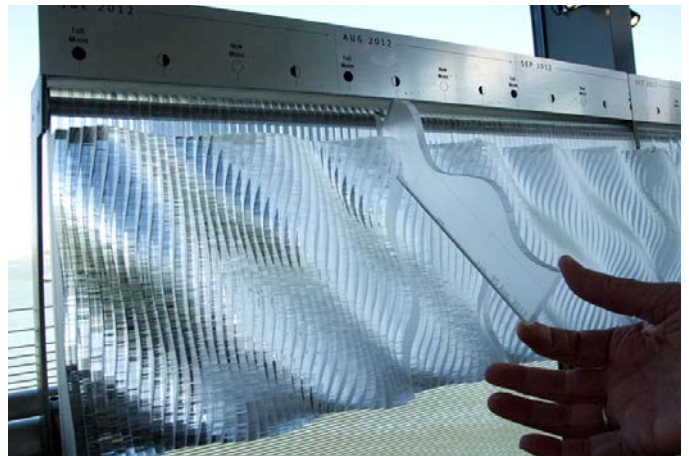
**Bay Window** – One of a series of discs holding Bay water and sediment collected from different parts of the Bay, may be spun to see sediment distribution/turbidity.



**Pier Piling lift**, A mechanized piling allows one to observe the marine life living along the tidal zone. Fort Mason/ Outdoor Exploratorium/Pier 15

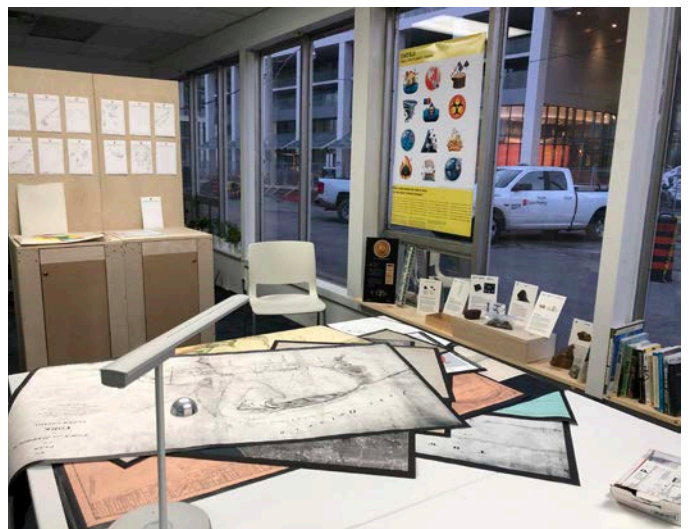


**Look Mobile** - wall of camera obscura lenses, Studio for Public Spaces/Exploratorium, 2017-ongoing

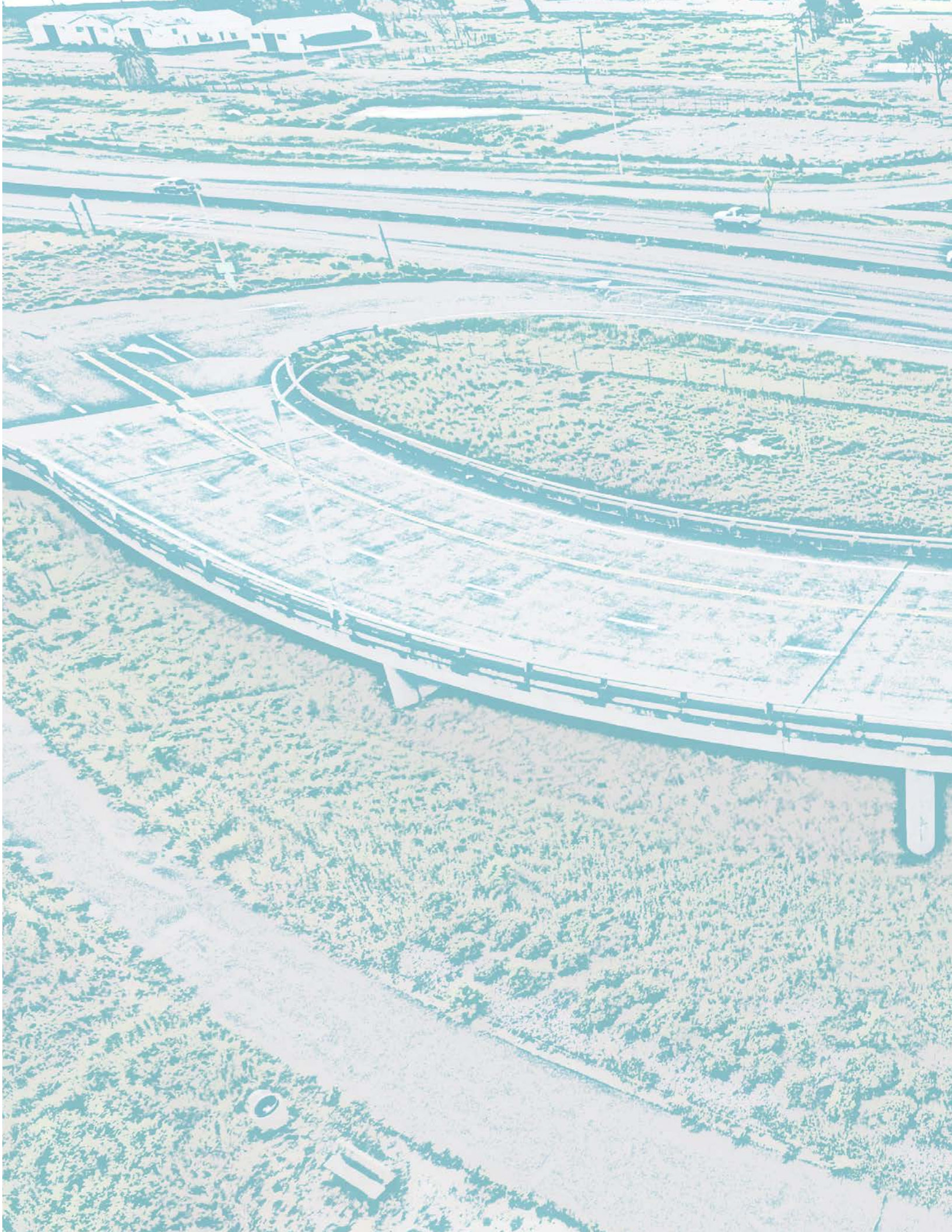


**Tidal Ribbon** – One year of tidal data made physical. Each “slice” represents the record of tides each day. Bay Observatory/Exploratorium, 2013-ongoing

Imod – Currently a new company is in residence on Mare Island called Imod. They build container/style classrooms in modules fully equipped with cabinets, white boards, monitors, toilets and running water. They are designed as mobile classrooms, meeting or conference spaces. Perhaps one could be donated or secured through funding to experiment with these off site Field Modules to engage visitors with all aspects of their surrounding landscape.



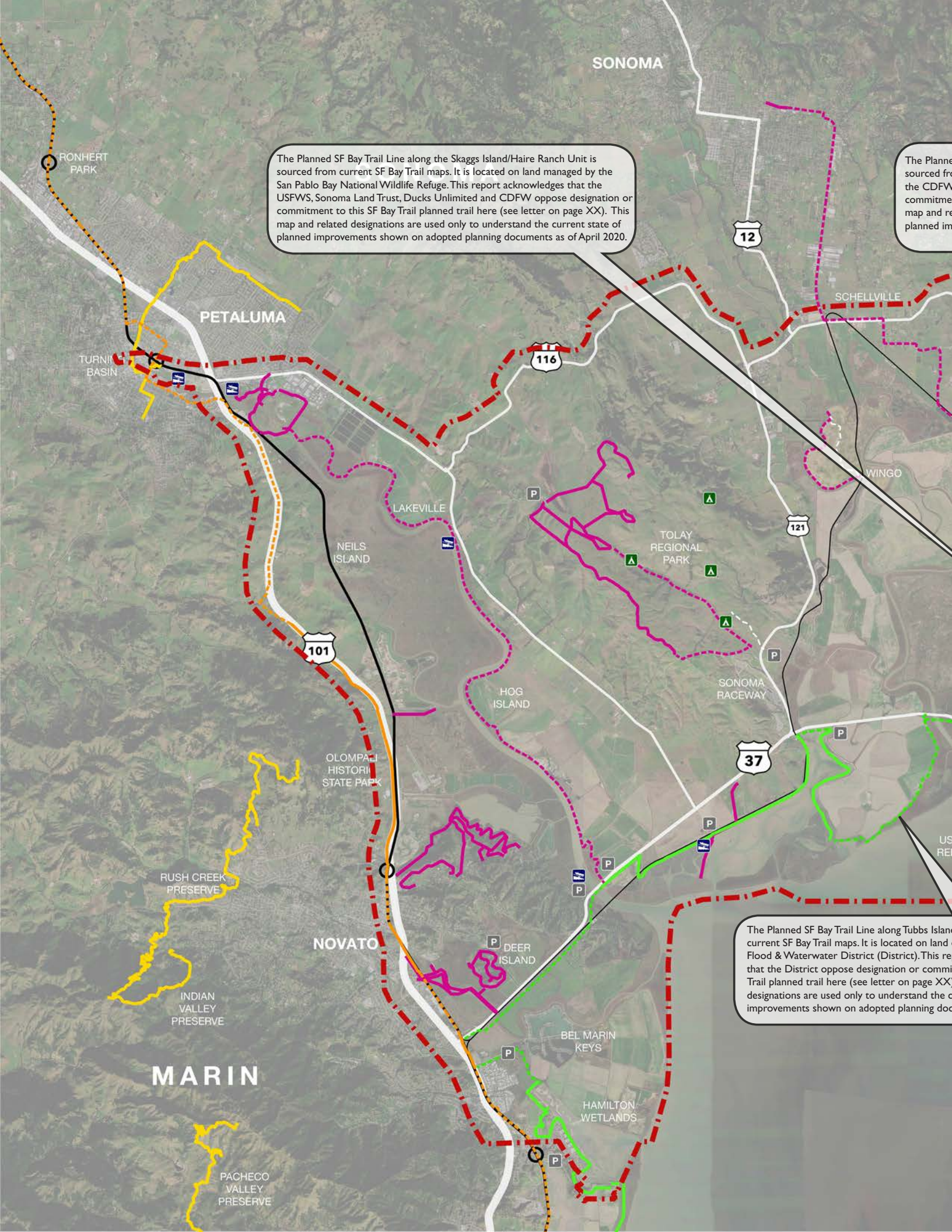
**Toronto Field Station** – Creation of a place-based field station modeled on the Bay Observatory/Exploratorium, Toronto Biennial 2019





# APPENDIX

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SONOMA

The Planned SF Bay Trail Line along the Skaggs Island/Haire Ranch Unit is sourced from current SF Bay Trail maps. It is located on land managed by the San Pablo Bay National Wildlife Refuge. This report acknowledges that the USFWS, Sonoma Land Trust, Ducks Unlimited and CDFW oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page XX). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

The Planned SF Bay Trail Line along Tubbs Island is sourced from current SF Bay Trail maps. It is located on land managed by the San Francisco Bay Flood & Waterwater District (District). This report acknowledges that the District oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page XX). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

RONHERT PARK

PETALUMA

12

SHELLVILLE

TURNER BASIN

116

WINGO

LAKEVILLE

121

NEILS ISLAND

TOLAY REGIONAL PARK

101

HOG ISLAND

SONOMA RACEWAY

OLOMPA HISTORIC STATE PARK

37

RUSH CREEK PRESERVE

NOVATO

DEER ISLAND

MARIN

BEL MARIN KEYS

HAMILTON WETLANDS

PACHECO VALLEY PRESERVE

**GIS SOURCES**

- Bay Trail
- Vine Trail
- Bay Area Ridge Trail
- SMART Pathway (Marin County Bicycle Coalition)

**OTHER SOURCES**

- Tolay Lake Regional Park Master Plan
- Rush Creek OSP
- Deer Island OSP + Adjacent Trails around Duckbill and Heron's Beak Pond

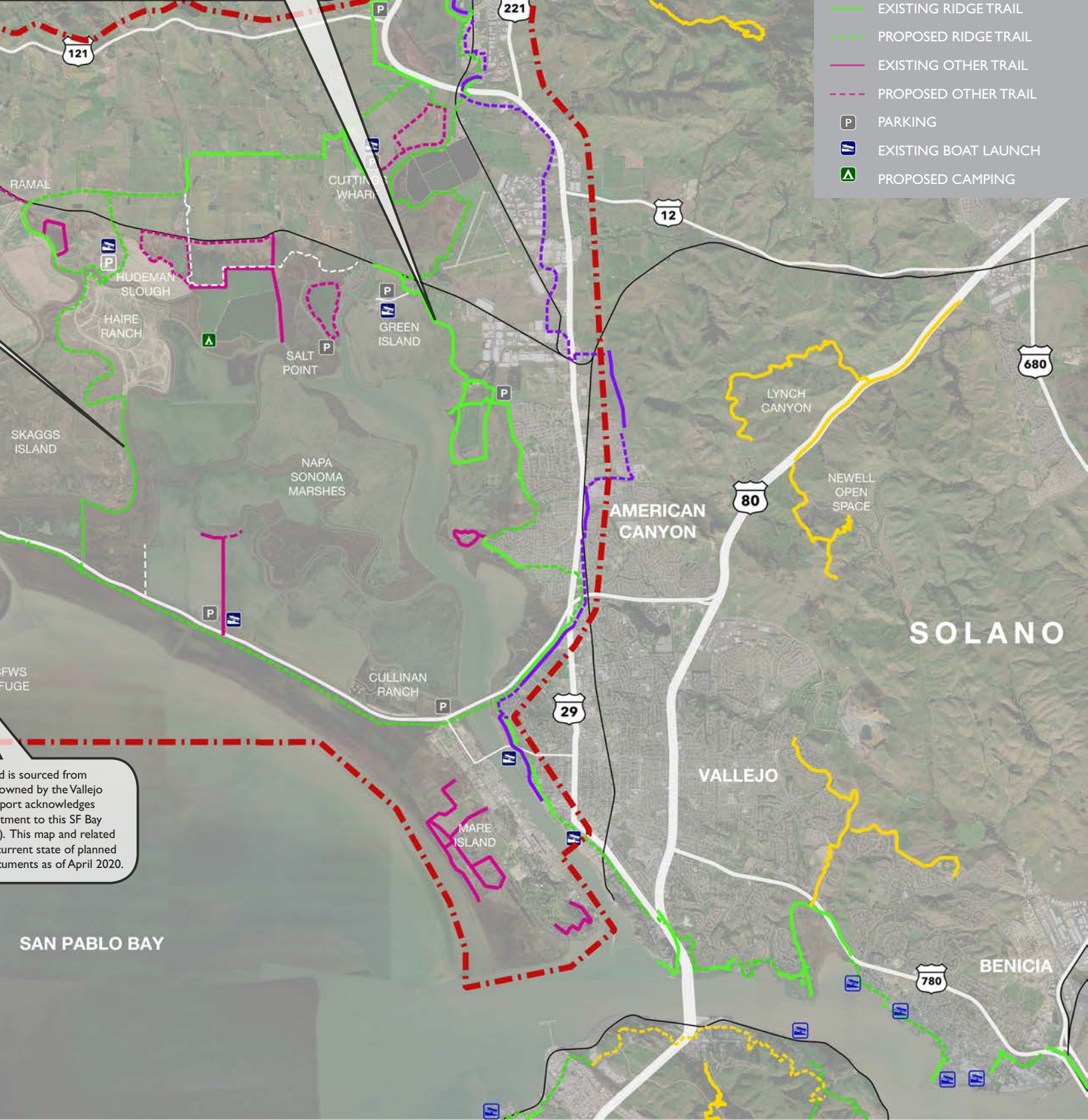
**NAPA**

- SPBNWR
- San Pablo Bay Trail
- Hudeman Slough Map
- SFBJV Map

**LEGEND**

- STUDY BOUNDARY
- ROADS
- RAIL
- EXISTING BAY TRAIL
- PROPOSED BAY TRAIL
- EXISTING VINE TRAIL
- PROPOSED VINE TRAIL
- EXISTING RIDGE TRAIL
- PROPOSED RIDGE TRAIL
- EXISTING OTHER TRAIL
- PROPOSED OTHER TRAIL
- PARKING
- EXISTING BOAT LAUNCH
- PROPOSED CAMPING

ed SF Bay Trail Line along the Fagan Marsh Ecological Rserve is from current SF Bay Trail maps. It is located on owned and managed by . This report acknowledges that the CDFW oppose designation or ment to this SF Bay Trail planned trail here (see letter on page XX). This related designations are used only to understand the current state of improvements shown on adopted planning documents as of April 2020.



FWS  
FUGE

is sourced from owned by the Vallejo port acknowledges ment to this SF Bay ). This map and related current state of planned uments as of April 2020.

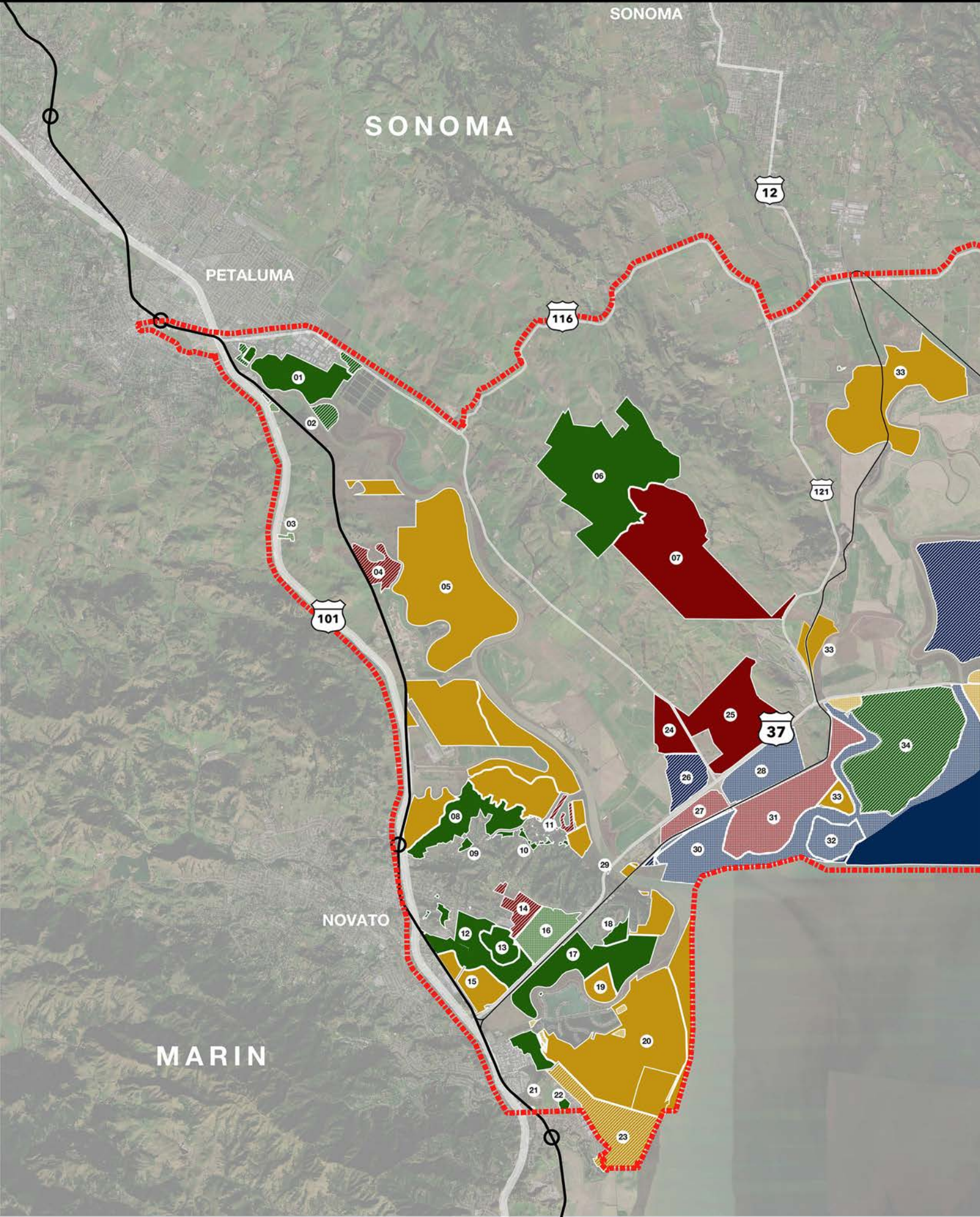
**SAN PABLO BAY**

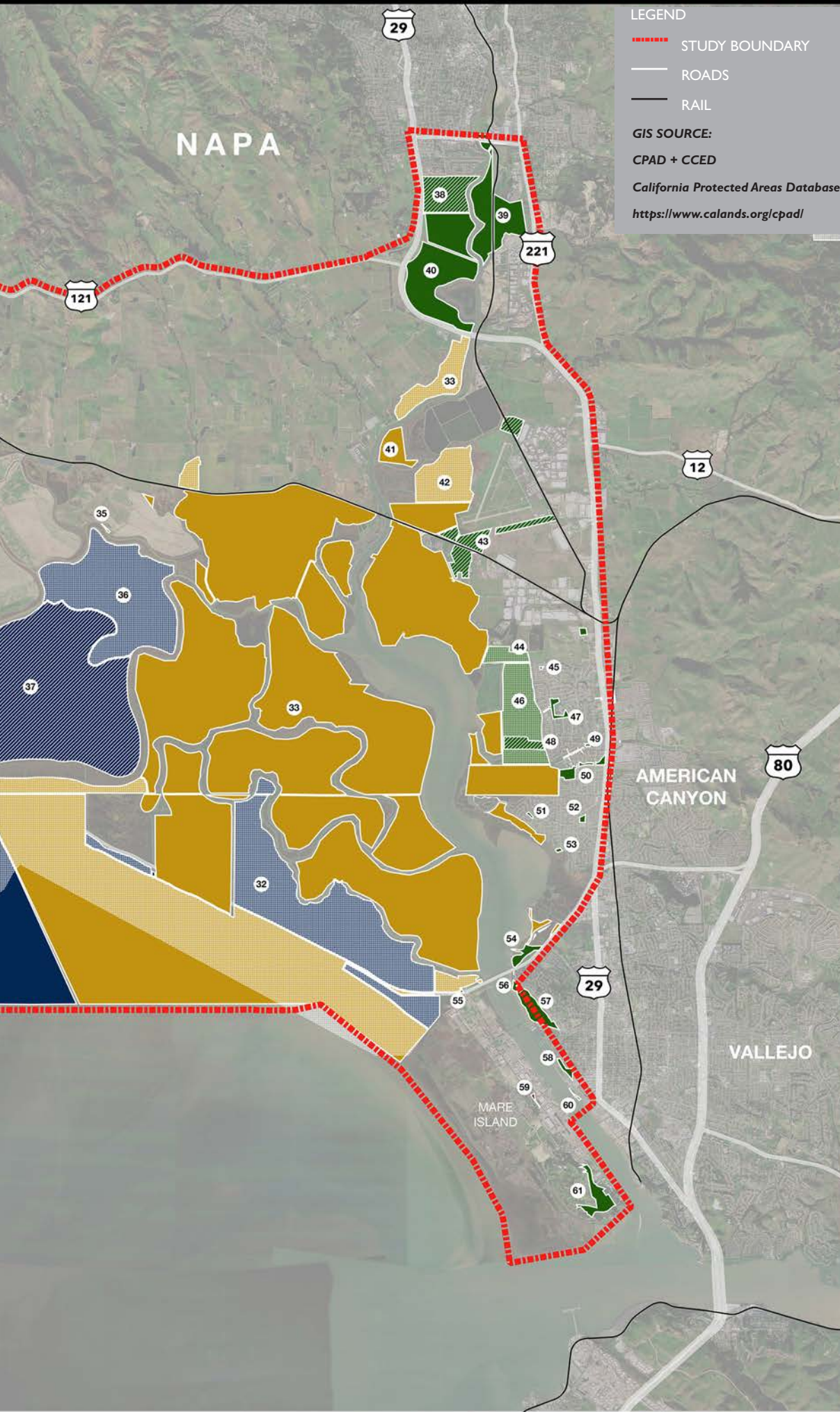
**SOLANO**

**VALLEJO**

**BENICIA**

# OWNERSHIP





**LEGEND**

- - - - - STUDY BOUNDARY
- ROADS
- RAIL

**GIS SOURCE:**

CPAD + CCED

California Protected Areas Database

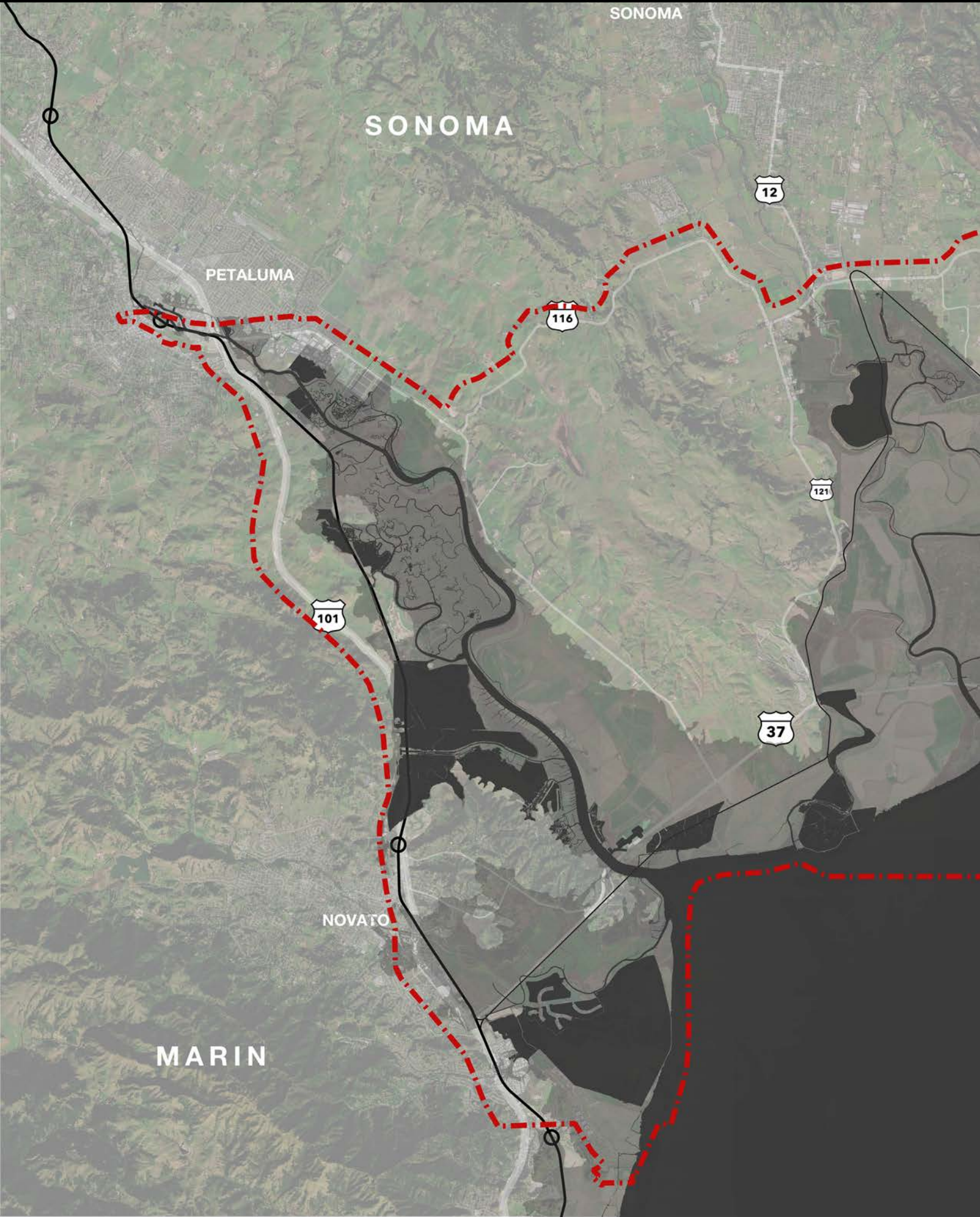
<https://www.calands.org/cpad/>

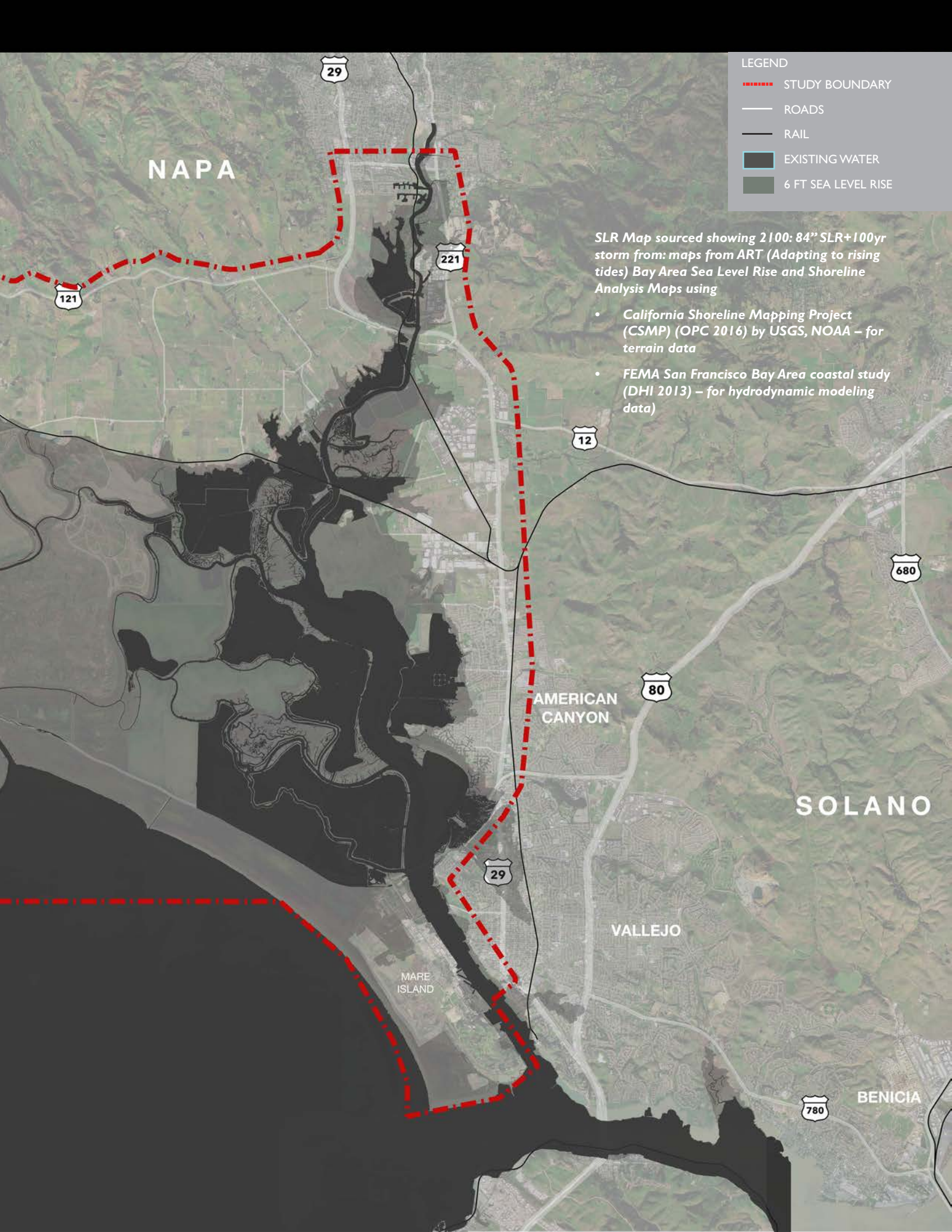
**OWNERSHIP AND ACCESS**

- FEDERAL
- STATE
- LOCAL AGENCY LAND
- NOT FOR PROFIT LAND
- NO ACCESS
- RESTRICTED ACCESS

1. Shollenberger Park
2. Petaluma Marsh Acquisition, Enhancement Access
3. SCWA
4. Petaluma Marsh
5. Petaluma Marsh Wildlife Area
6. Tolay Lake RP
7. Tolay Creek Ranch
8. Rush Creek OSP
9. Rush Creek Park
10. Novato Lands 005
11. Bahia Parks
12. Slade Park
13. Deer Island OSP
14. Main Audubon Simmons Slough Wildlife Corridor
15. Scottsdale Marsh
16. Novato Sanitation District
17. Marin County Flood Control
18. Black Point Nature Preserve
19. North Antenna Field
20. Bel Marin Keys V
21. Novato Lands 003
22. Reservoir Hill
23. Hamilton Wetlands
24. Lakeville Property
25. Sears Point Ranch
26. San Pablo bay NWR
27. Leonard Marsh
28. San Pablo Bay NWR
29. Black Point Boat Launch
30. Sonoma Baylands
31. Sears Point Tidal Marsh Restoration
32. San Pablo Bay NWR
33. Napa-Sonoma Marshes Wildlife Area
34. Vallejo Sanitation & Flood Control District
35. Hudeman Slough FA
36. Haire's Ranch
37. San Pablo Bay NWR
38. Ghisleta - South Wetlands
39. John F Kennedy Park
40. Riverfront Green
41. Bull Island
42. Fagan Marsh ER
43. Napa Airport Clear Zone
44. American Canyon Property
45. Gadwell Park
46. American Canyon / Fish and Game
47. Community Park I
48. American Canyon Property
49. Elliot Park
50. Kimberly Park
51. Henry Ranch Park
52. Rosa MP
53. Delta Meadows Park
54. Vallejo Holding I
55. Guadalcanal Village
56. Vallejo Fishing Pier
57. River Park
58. Marina Vista Park
59. Mare Island Historic Park
60. Independence Park
61. Mare Shoreline Heritage Preserve

# SEA LEVEL RISE





LEGEND

- - - - - STUDY BOUNDARY
- ROADS
- RAIL
- EXISTING WATER
- 6 FT SEA LEVEL RISE

SLR Map sourced showing 2100: 84'' SLR+100yr storm from: maps from ART (Adapting to rising tides) Bay Area Sea Level Rise and Shoreline Analysis Maps using

- California Shoreline Mapping Project (CSMP) (OPC 2016) by USGS, NOAA – for terrain data
- FEMA San Francisco Bay Area coastal study (DHI 2013) – for hydrodynamic modeling data

NAPA

AMERICAN CANYON

VALLEJO

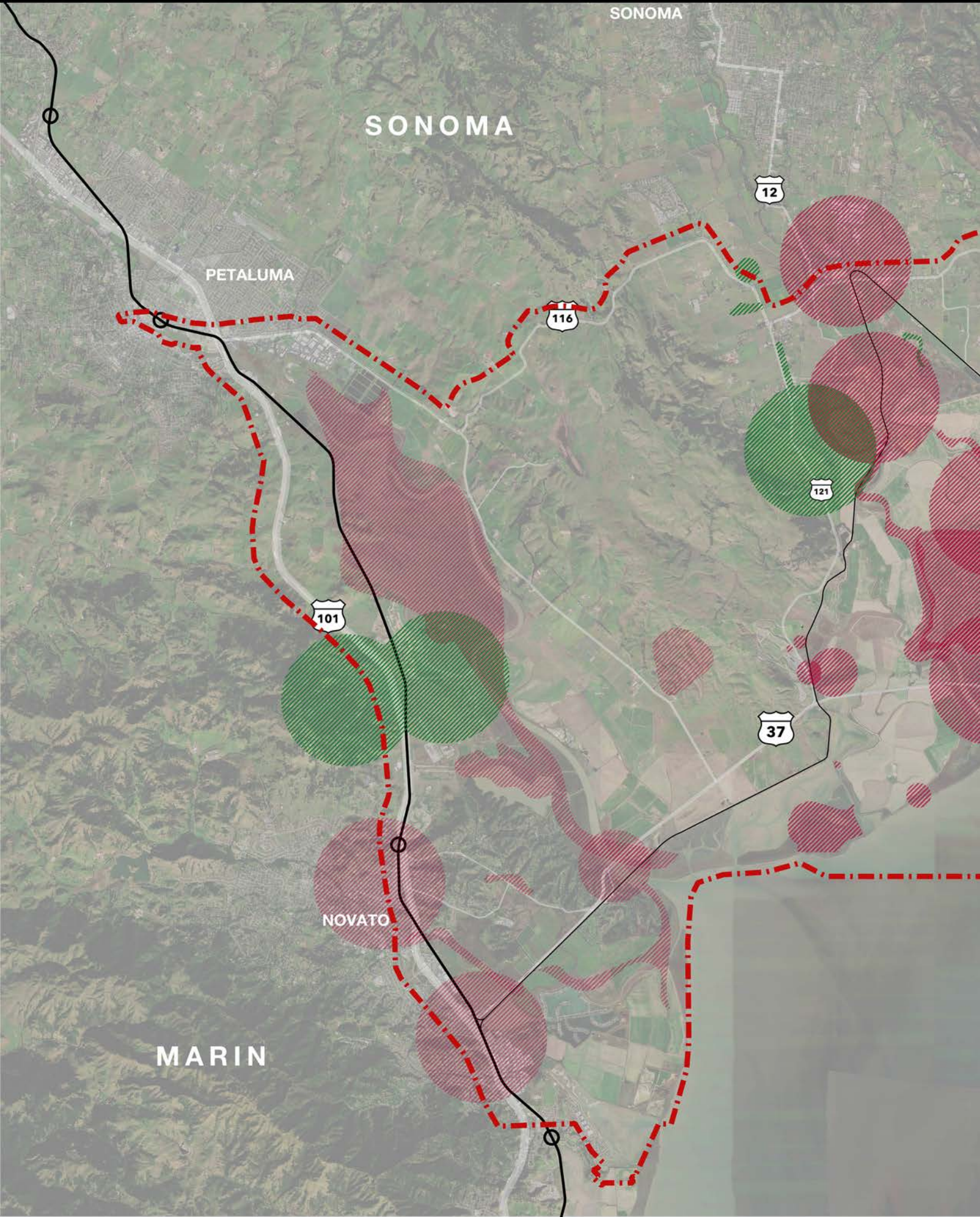
SOLANO

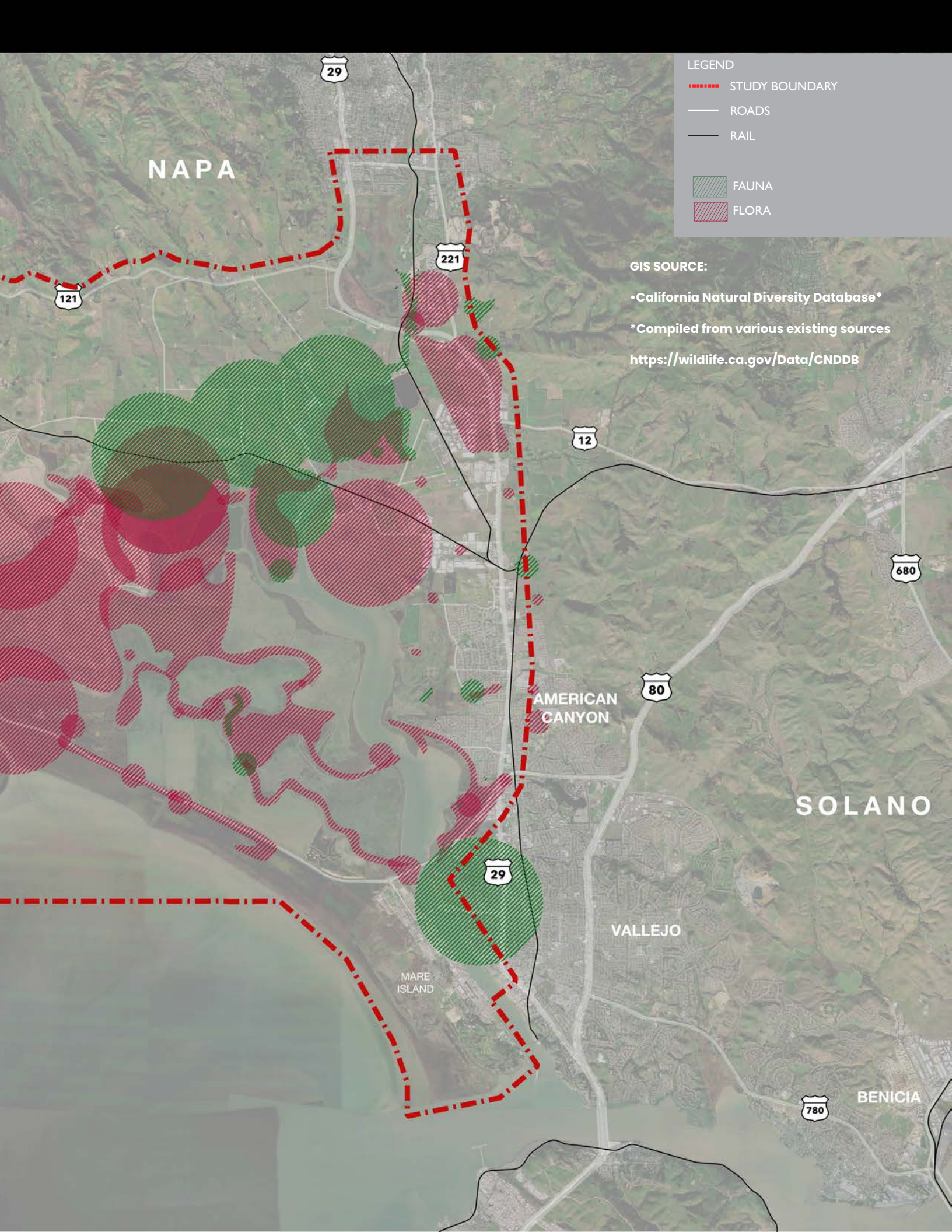
MARE ISLAND

BENICIA



# SENSITIVE HABITAT





LEGEND

- STUDY BOUNDARY
- ROADS
- RAIL
- FAUNA
- FLORA

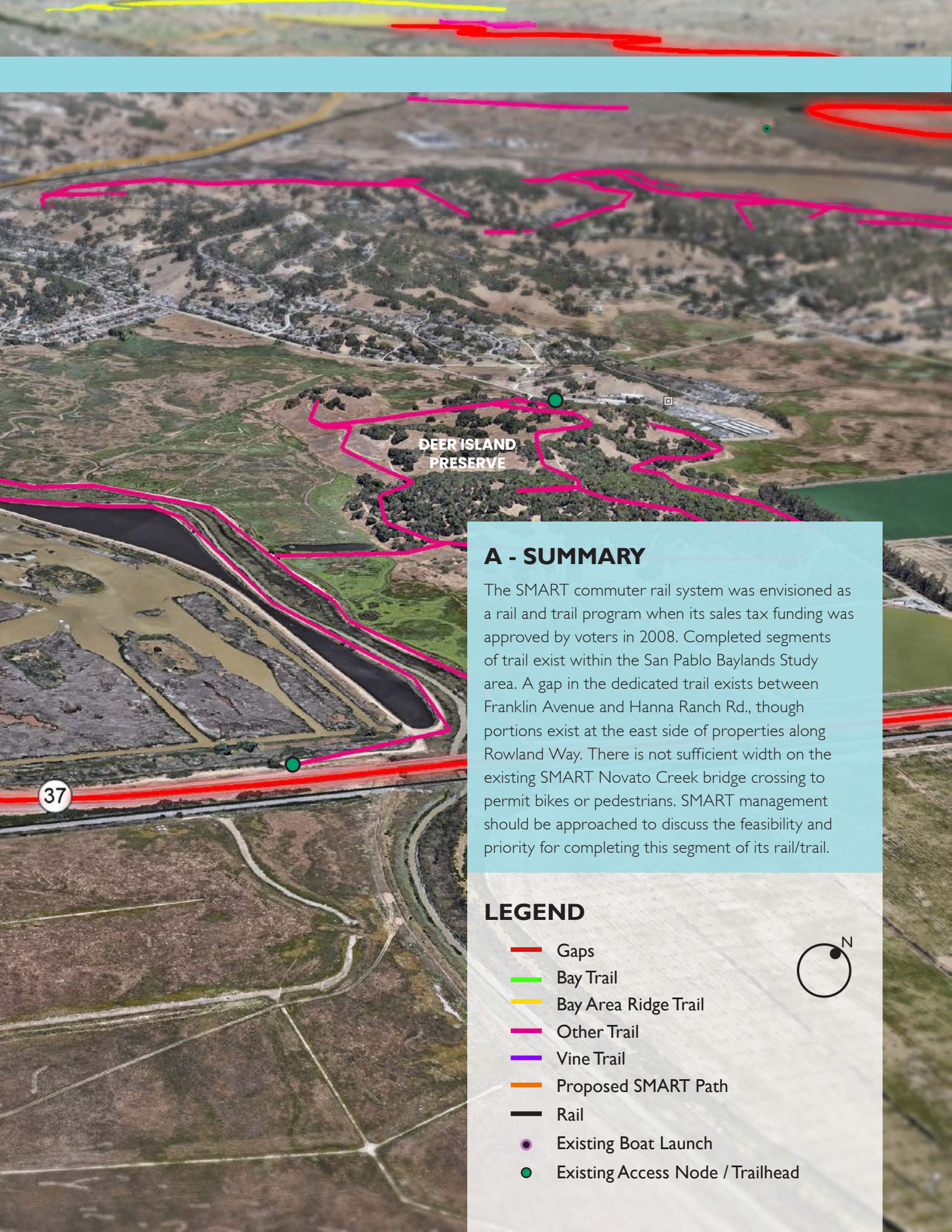
GIS SOURCE:

- California Natural Diversity Database\*
- \*Compiled from various existing sources

<https://wildlife.ca.gov/Data/CNDDDB>

# A TRAIL GAP, SR37 SEGMENT A1: SMART RAIL TRAIL














DEER ISLAND  
PRESERVE

### A - SUMMARY

The SMART commuter rail system was envisioned as a rail and trail program when its sales tax funding was approved by voters in 2008. Completed segments of trail exist within the San Pablo Baylands Study area. A gap in the dedicated trail exists between Franklin Avenue and Hanna Ranch Rd., though portions exist at the east side of properties along Rowland Way. There is not sufficient width on the existing SMART Novato Creek bridge crossing to permit bikes or pedestrians. SMART management should be approached to discuss the feasibility and priority for completing this segment of its rail/trail.

### LEGEND

-  Gaps
-  Bay Trail
-  Bay Area Ridge Trail
-  Other Trail
-  Vine Trail
-  Proposed SMART Path
-  Rail
-  Existing Boat Launch
-  Existing Access Node / Trailhead



**B TRAIL GAP SR37 SEGMENT A1: BEL MARIN KEYS / HAMILTON WETLAND**



**BEL MARIN KEYS**

Bel Marin Keys

Bel Marin Keys Blvd

Redwood Hwy

Callie

Hamilton Dr

Ignacio

Redwood Blvd



HAMILTON WETLANDS

+ SOUTH NOVATO LIBRARY

+ MARIN MUSEUM OF CONTEMPORARY ART

+ RESERVOIR HILL VISTA TRAIL

### B - SUMMARY

The California Coastal Conservancy (SCC) is managing a large-scale restoration of the Bel Marin Keys property, including some lands owned by the State Lands Commission. Final approval of a future setback levee has been environmentally approved and is preparing to be constructed. Currently, an existing, informal trail utilizes a levee to connect the Bay Trail terminus at Hamilton Wetlands with Bel Marin Keys Blvd. The SCC plan will accommodate a trail on the improved levee in a future phase of work.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



# C TRAIL GAP, SR37 SEGMENT A2: PETALUMA TO THE BAY TRAIL





**RALPH BENSON CENTER**

**BLACK POINT**

**+BAY TRAIL CONNECTOR**

### C - SUMMARY

Sonoma County's Integrated Parks Plan includes improving local connections to the San Francisco Bay Trail. An existing trail network beginning at the southern end of the Sheraton Sonoma County parking lot extends several miles, connecting with trails in Alman Marsh, Shollenberger Park and at the Ellis Water Recycling Facility. No route between this terminus and San Pablo Bay has been identified. The SF Bay Trail identifies a Bay Trail Connector along the Petaluma River but the alignment is understood to be a low priority or a challenged connector.

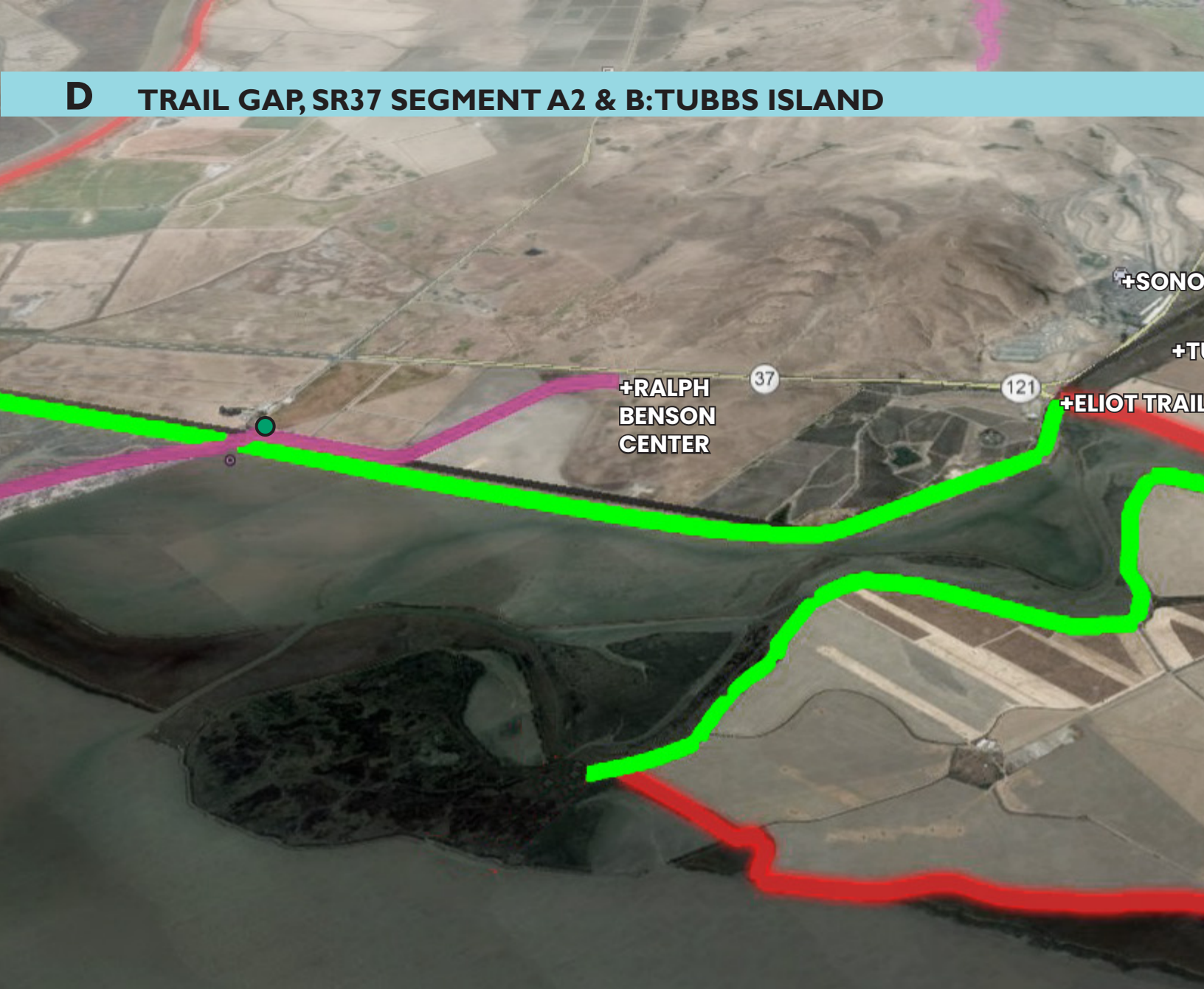
Sonoma Land Trust, Sonoma Resource Conservation District, San Francisco Estuary Institute, and Point Blue Conservation Science have received Wildlife Conservation Board funding to prepare an Adaptation and Resilience Implementation Plan for the Petaluma River Baylands. The study provides an opportunity to integrate trail routing with marshland restoration and levee modification planning.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



**D TRAIL GAP, SR37 SEGMENT A2 & B: TUBBS ISLAND**



*Tubbs Island*



*Tubbs Island*

SONOMA RACEWAY

SONOMA CREEK

TRAILHEAD

+Tolay Unit Parking Lot in NSMWA

SKAGGS ISLAND

+SONOMA CREEK

TUBBS ISLAND

## D - SUMMARY

This property is owned by the City of Vallejo and used as an agriculturally active wastewater biosolid disposal site. The Sanitation District should be engaged to discuss the potential for partnering in ongoing levee maintenance in return for public access on the top of the levee.

The Planned SF Bay Trail Line along Tubbs Island is sourced from current SF Bay Trail maps. It is located on land owned by the Vallejo Flood & Waterwater District (District). This report acknowledges that the District oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page XX). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

## LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



# E TRAIL GAP, SR37 SEGMENT B: TOLAY CREEK BAY TRAIL EXTENSION



+Tolay Unit Parking Lot in NSMWA

TOLAY LAGOON

TOLAY CREEK

37

SR 121

Sears Point

121












TUBBS ISLAND

+ELIOT  
TRAILHEAD

## E - SUMMARY

In 2018, the Sonoma County Regional Parks completed the Bay Trail Sears Point Connector Study. It evaluated a .65 mile extension of Bay Trail from the Wendy Eliot Trail eastern terminus at the SR 121 intersection with SR 37 to the Tolay Unit Parking Lot in NSMWA. The study evaluated several options. The SR 37 Interim Congestion Relief project has identified replacement of the existing Tolay Creek Bridge as a requirement. Planning for that work should integrate of the Bay Trail extension.

## LEGEND

-  Gaps
-  Bay Trail
-  Bay Area Ridge Trail
-  Other Trail
-  Vine Trail
-  Proposed SMART Path
-  Rail
-  Existing Boat Launch
-  Existing Access Node / Trailhead



**F TRAIL GAP, SR37 SEGMENT B: TOLAY LAKE REGIONAL PARK TO BAY TR**



AIL

TOLAY LAKE REGIONAL PARK

REEK

W PARKING










## F - SUMMARY

The Tolay Lake Regional Park Master Plan includes a trail system that was conceived after extensive public input, intensive consultation with a Tribe, consultation with the Sonoma Land Trust, Sonoma County Regional Parks and neighbors, and consideration of the site's many unique opportunities and prehistoric cultural and natural resource constraints. Approximately one third of the trails will be pedestrian only to provide space for a more peaceful interaction with the land.

The Master Plan includes over 7 miles of new multi-use trails, that when completed, will reach from the park entrance to SR 121 north of the Sonoma Raceway property. A route from there to the Bay Trail has not been identified.

The Sonoma Land Trust is managing a study of Lower Sonoma Creek to develop a strategy for landscape-scale restoration, flood protection and public access in the Lower Sonoma Creek portion of the San Pablo Baylands. The study provides an opportunity to integrate trail routing with marshland restoration planning.

## LEGEND

-  Gaps
-  Bay Trail
-  Bay Area Ridge Trail
-  Other Trail
-  Vine Trail
-  Proposed SMART Path
-  Rail
-  Existing Boat Launch
-  Existing Access Node / Trailhead



# G TRAIL GAP, SR37 SEGMENT B: SR 37 CORRIDOR



NAPA RIVER

VALLEJO

MARE ISLAND

CULLINAN RANCH

+CULLINAN RANCH BOAT LAUNCH

ing the Skaggs Island/Haire Ranch Unit is maps. It is located on land managed by the refuge. This report acknowledges that the Skaggs Unlimited and CDFW oppose designation or planned trail here (see letter on page XX). This is used only to understand the current state of adopted planning documents as of April 2020.

37

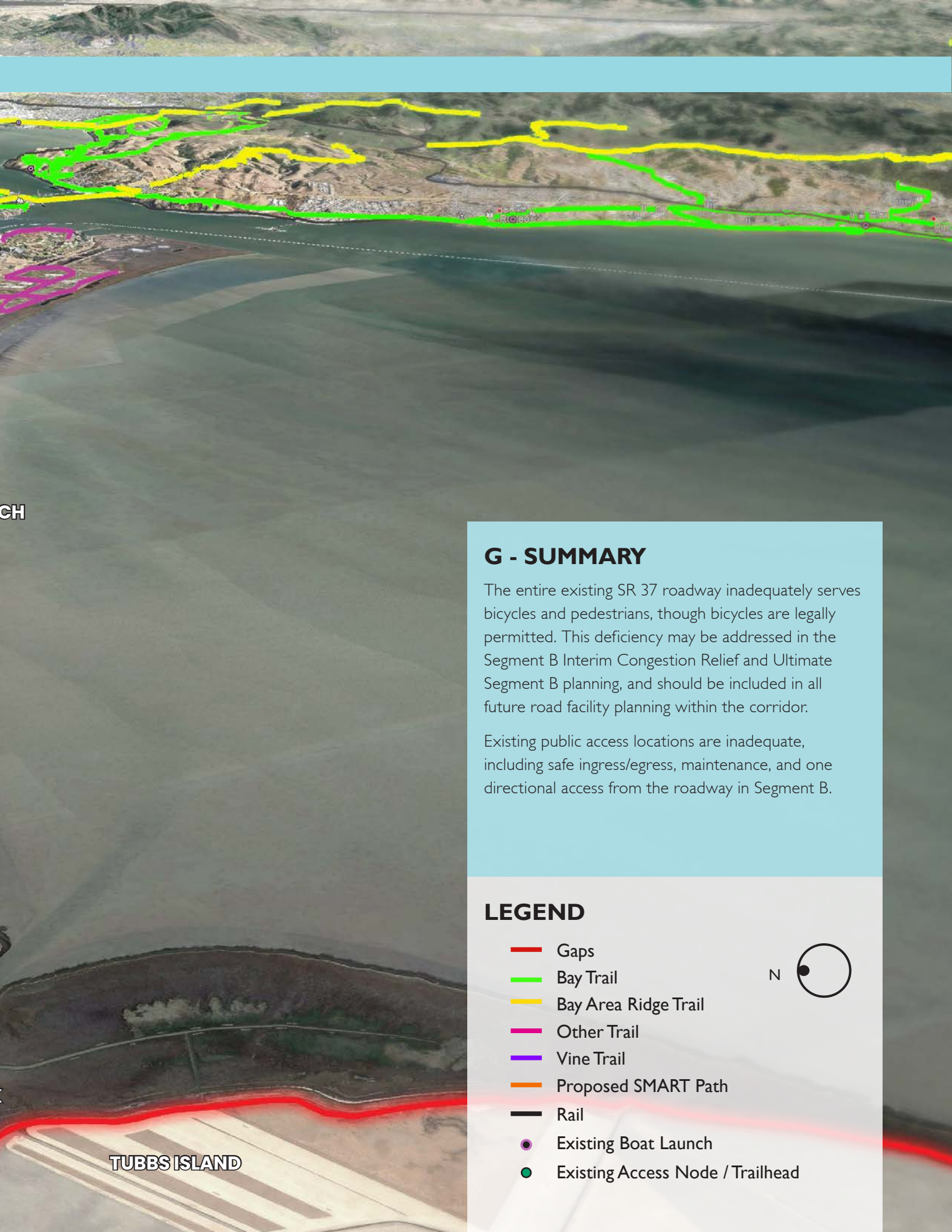
+SKAGGS ISLAND ROAD

SKAGGS ISLAND

+SKAGGS ISLAND BRIDGE

Sears Point Rd

SONOMA CREEK



CH










TUBBS ISLAND

### G - SUMMARY

The entire existing SR 37 roadway inadequately serves bicycles and pedestrians, though bicycles are legally permitted. This deficiency may be addressed in the Segment B Interim Congestion Relief and Ultimate Segment B planning, and should be included in all future road facility planning within the corridor.

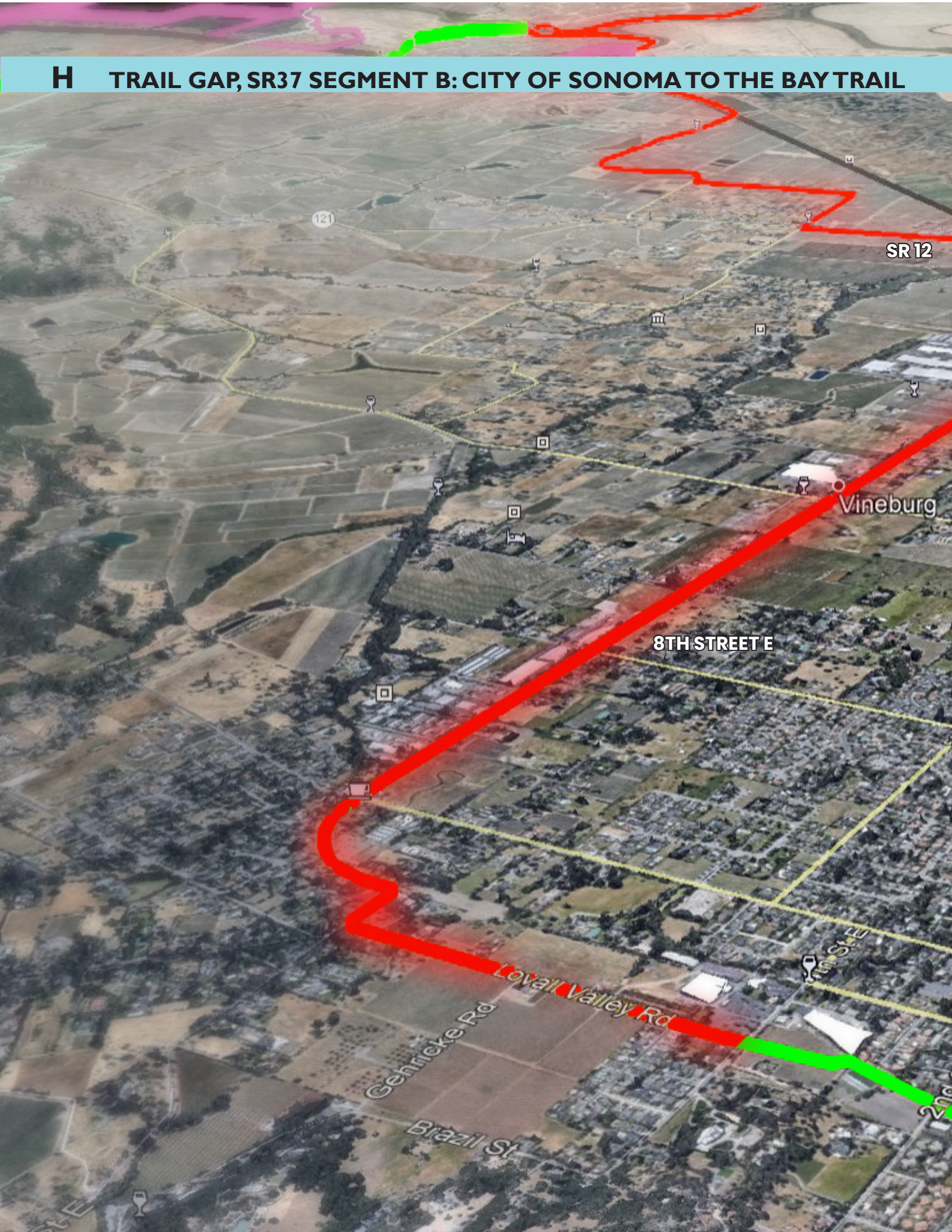
Existing public access locations are inadequate, including safe ingress/egress, maintenance, and one directional access from the roadway in Segment B.

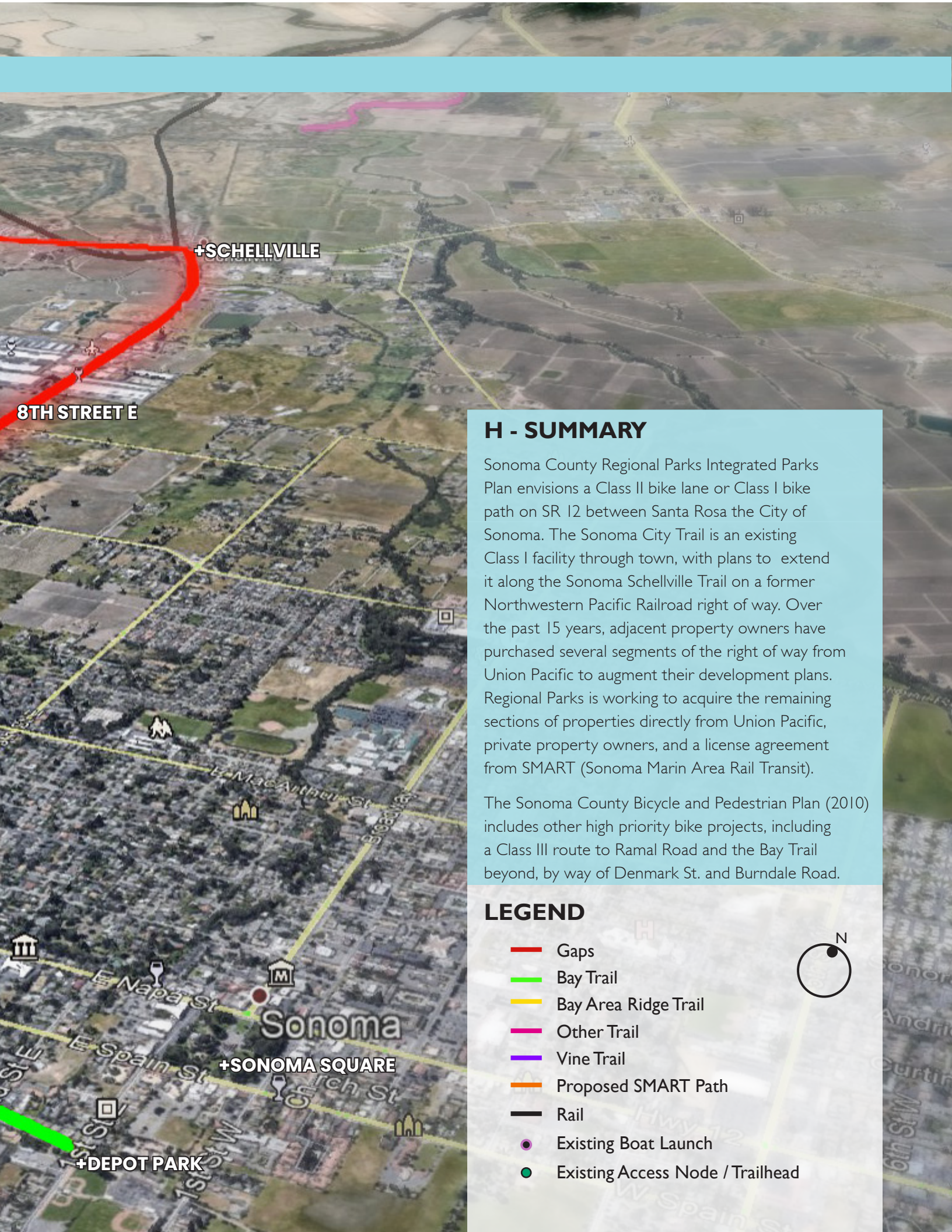
### LEGEND

-  Gaps
-  Bay Trail
-  Bay Area Ridge Trail
-  Other Trail
-  Vine Trail
-  Proposed SMART Path
-  Rail
-  Existing Boat Launch
-  Existing Access Node / Trailhead



# H TRAIL GAP, SR37 SEGMENT B: CITY OF SONOMA TO THE BAY TRAIL





+SCHELLVILLE

8TH STREET E

+SONOMA SQUARE

+DEPOT PARK

### H - SUMMARY

Sonoma County Regional Parks Integrated Parks Plan envisions a Class II bike lane or Class I bike path on SR 12 between Santa Rosa the City of Sonoma. The Sonoma City Trail is an existing Class I facility through town, with plans to extend it along the Sonoma Schellville Trail on a former Northwestern Pacific Railroad right of way. Over the past 15 years, adjacent property owners have purchased several segments of the right of way from Union Pacific to augment their development plans. Regional Parks is working to acquire the remaining sections of properties directly from Union Pacific, private property owners, and a license agreement from SMART (Sonoma Marin Area Rail Transit).

The Sonoma County Bicycle and Pedestrian Plan (2010) includes other high priority bike projects, including a Class III route to Ramal Road and the Bay Trail beyond, by way of Denmark St. and Burndale Road.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead





SKAGGS ISLAND

+HUDEMAN SLOUGH

## I - SUMMARY

Ramal road leads from SR 121 to Skaggs Island Road and the Bay Trail. The road surface is currently in poor condition, with no developed shoulders. The Sonoma Countywide 2014 Bicycle and Pedestrian Master Plan identifies improving the route to a Class III standard.

There is public parking, a covered picnic area, and a levee system pathway surrounding SCWA reservoirs on the south side of the road. The trail system could be extended to Skaggs Island Road across the water agency's Management Unit 3 lands and should be discussed as an off-road alternative.

## LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



Schellville

SR 121

# J TRAIL GAP, SR37 SEGMENT B: SKAGGS ISLAND



NAPA  
SONOMA  
MARSHES

HAIRE RANCH WETLAND  
PROJECT (IN-PROGRESS  
RESTORATION)

HUDEMAN  
SLOUGH

Merazo

RAMAL ROAD

The Planned SF Bay Trail Line along the Skaggs Island/Haire Ranch Unit is sourced from current SF Bay Trail maps. It is located on land managed by the San Pablo Bay National Wildlife Refuge. This report acknowledges that the USFWS, Sonoma Land Trust, Ducks Unlimited and CDFW oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page XX). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

SR-37

SKAGGS ISLAND  
ROAD AND BRIDGE

SKAGGS  
ISLAND

**NOTE: Skaggs Island is planned for restoration and compatible and appropriate access on the Island T.B.D.**










## J - SUMMARY

The proposed Bay Trail route follows the existing Skaggs Island Road from SR 37 to Hudeman Slough. The USFWS Comprehensive Conservation Management Plan identifies both bike access and self-guided trails for hiking, bicycling, and boating on Skaggs Island.

The USFWS is currently developing its marshland restoration strategy for the property, delaying dedication of the route.

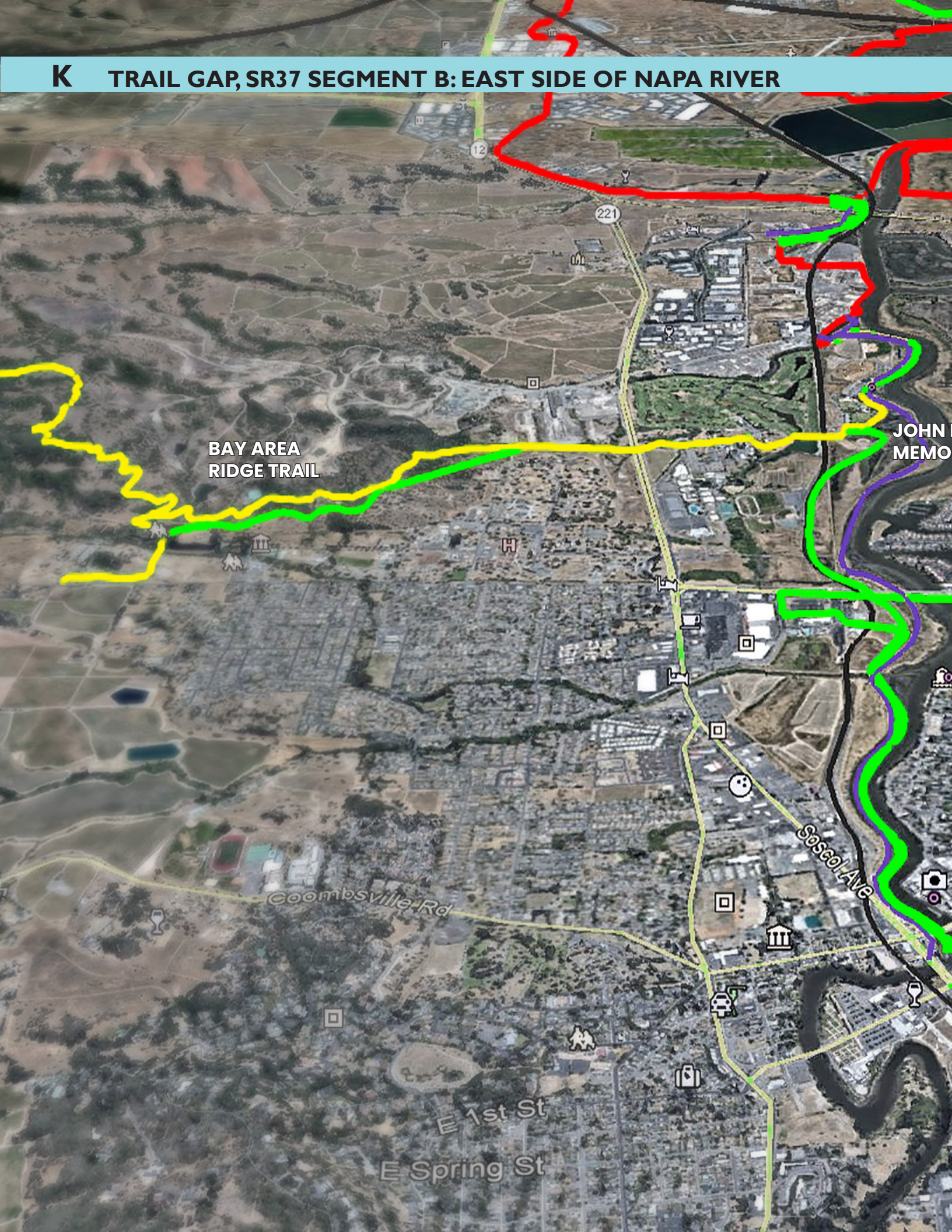
USFWS plans for restoration will require additional study including compatible and appropriate access.

## LEGEND

-  Gaps
-  Bay Trail
-  Bay Area Ridge Trail
-  Other Trail
-  Vine Trail
-  Proposed SMART Path
-  Rail
-  Existing Boat Launch
-  Existing Access Node / Trailhead



**K TRAIL GAP, SR37 SEGMENT B: EAST SIDE OF NAPA RIVER**



BAY AREA  
RIDGE TRAIL

JOHN  
MEMO

H

Coombsville Rd

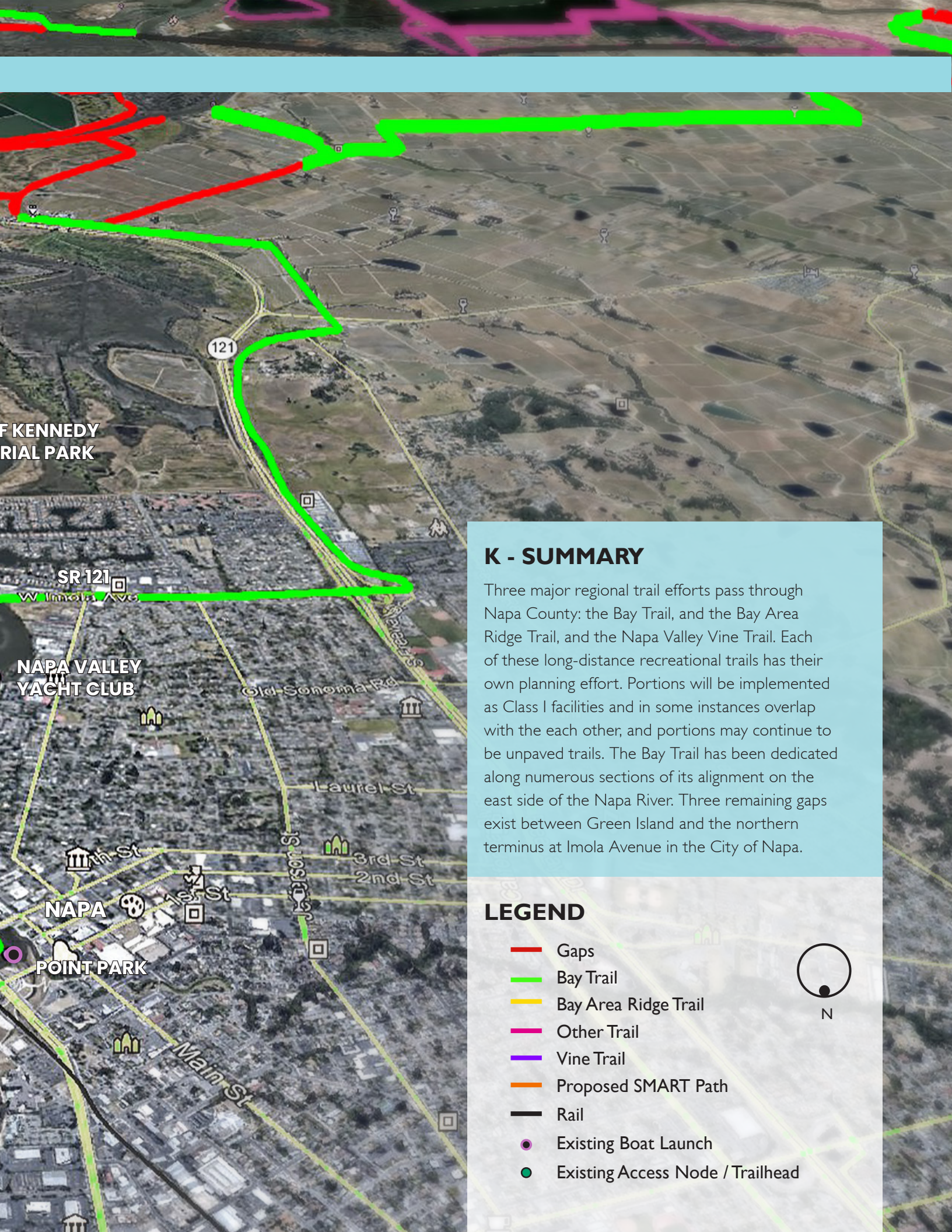
Goscol Ave

E 1st St

E Spring St

12

221



F KENNEDY  
RIAL PARK

SR 121  
W. Imola Ave

NAPA VALLEY  
YACHT CLUB

NAPA

POINT PARK

121

Old Sonoma Rd

Laurel St

3rd St  
2nd St

Main St

### K - SUMMARY

Three major regional trail efforts pass through Napa County: the Bay Trail, and the Bay Area Ridge Trail, and the Napa Valley Vine Trail. Each of these long-distance recreational trails has their own planning effort. Portions will be implemented as Class I facilities and in some instances overlap with the each other, and portions may continue to be unpaved trails. The Bay Trail has been dedicated along numerous sections of its alignment on the east side of the Napa River. Three remaining gaps exist between Green Island and the northern terminus at Imola Avenue in the City of Napa.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



**L TRAIL GAP, SR37 SEGMENT B: CONNECTIONS TO EAST SIDE OF SR29**



SKYLINE PARK

NAPA STATE HOSPITAL

SYAR QUARRY

RIVER TO RIDGE TRAIL

JOHN F KENNEDY MEMORIAL PARK



### L - SUMMARY

The River to Ridge Trail is part of the Bay Area Ridge Trail and is a 2.5-mile one-way connectivity trail connecting Kennedy Park with Skyline Park. Skyline is fee based and open to hikers, bikers and equestrians. There are trail threads between Syar Quarry and Napa State Hospital. Parking can be found at Kennedy Park or at Skyline.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



KENNEDY PARK

Skyline Park

221

**M TRAIL GAP, SR37 SEGMENT B: SOSCOL FERRY ROAD TO KENNEDY PARK**



**JOHN F KENNEDY  
MEMORIAL PARK**

Rocktram

SR 12



Soscol Ferry Road

ANSELMO COURT

SOSCOL FERRY ROAD

### M - SUMMARY

There is a Bay Trail access point on Soscol Ferry Road, with a section of dedicated trail passing beneath the SR 12 bridge over the Napa River. The trail section ends at private property on the corner of Napa Valley Corporate Drive and Anselmo Court. Upcoming development at the Napa Pipe site will build the Bay and Vine Trail connection between Anselmo Court and Kennedy Park.

### LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



# N TRAIL GAP, SR37 SEGMENT B: GREEN ISLAND ROAD TO SOSCOL FERRY



SOSCOL FERRY ROAD

Thompson

NAPA SANITATION DISTRICT

Cuttings Wharf

The Planned SF Bay Trail Line along the Fagan Marsh Ecological Reserve is sourced from current SF Bay Trail maps. It is located on owned and managed by the CDFW. This report acknowledges that the CDFW oppose designation or commitment to this SF Bay Trail planned trail here (see letter on page XX). This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

RAIL BRIDGE

MILTON ROAD

GREEN ISLAND BOAT RAMP

# ROAD



Green Island

## N - SUMMARY

Three major regional trail efforts pass through Napa County: the Bay Trail, Vine Trail and the Bay Area Ridge. This gap faces three challenges. The SMART rail line crosses this gap east-west and requires negotiation of a dedicated crossing, though a usable path exists today. The more challenging limitation is the FAA's Runway Safety Area (RSA) requirements. The Napa Sanitation District treatment facilities currently do not allow public access, though a levee trail does exist around the facility perimeter. Sanitation District management has been approached regarding a trail and is open to discussion.

## LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



# TRAIL GAP, SR37 SEGMENT B: VALLEJO-AMERICAN CANYON



LANDFILL LOOP ROAD

The Planned SF Bay Trail Line along Catalina Way is sourced from current SF Bay Trail maps. It is located on a wetland area with endangered species. This report acknowledges that the CDFW oppose designation or commitment to this SF Bay Trail planned trail here. This map and related designations are used only to understand the current state of planned improvements shown on adopted planning documents as of April 2020.

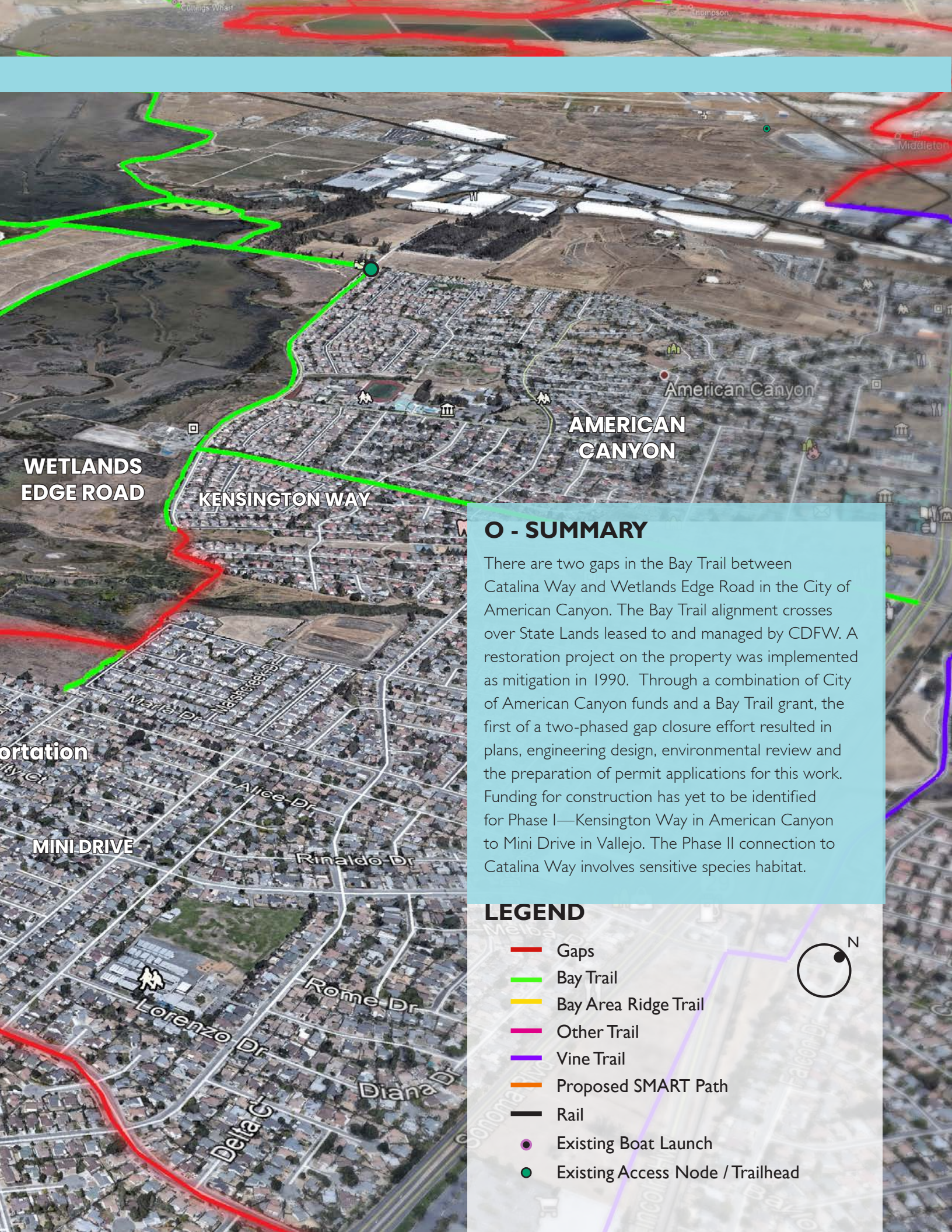
CATALINA CIRCLE

CATALINA WAY

+This gap in Vallejo is part of an Active Transportation Grant Project that will be constructed in 2022

DELTA MEADOWS PARK





**WETLANDS  
EDGE ROAD**

**KENSINGTON WAY**

**AMERICAN  
CANYON**

### **O - SUMMARY**

There are two gaps in the Bay Trail between Catalina Way and Wetlands Edge Road in the City of American Canyon. The Bay Trail alignment crosses over State Lands leased to and managed by CDFW. A restoration project on the property was implemented as mitigation in 1990. Through a combination of City of American Canyon funds and a Bay Trail grant, the first of a two-phased gap closure effort resulted in plans, engineering design, environmental review and the preparation of permit applications for this work. Funding for construction has yet to be identified for Phase I—Kensington Way in American Canyon to Mini Drive in Vallejo. The Phase II connection to Catalina Way involves sensitive species habitat.

### **LEGEND**

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead



**P TRAIL GAP, SR37 SEGMENT B: MARE ISLAND**



N RANCH

OVERPASS OVERLOOK

PARKING

37

RE ISLAND CAUSEWAY

## P - SUMMARY

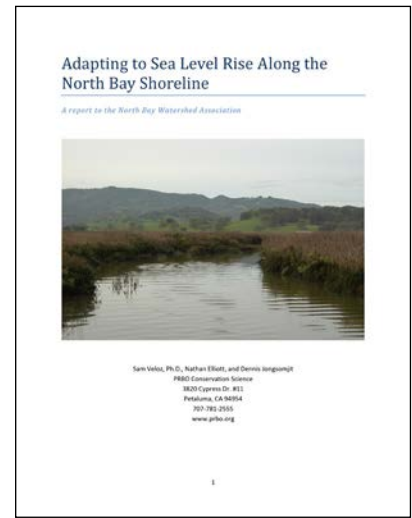
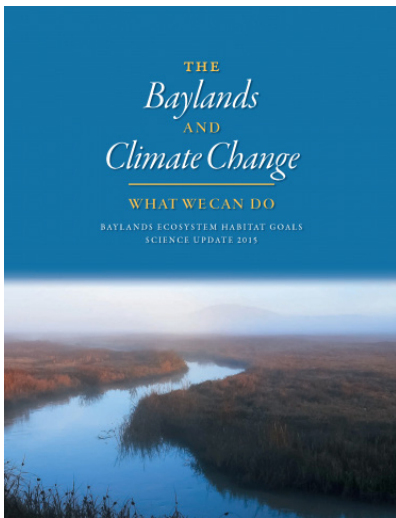
Mare Island was a 5200 acre Naval Shipyard until it was decommissioned in 1996. There are a series of existing trails, including the 1 mile long Mare Island Scenic Vista Trail in the Mare Island Shoreline Heritage Preserve, the currently closed Mare Island Preserve Historic Southshore Trail, and the four mile loop Mare Island San Pablo Bay Walking Trail. None of these trails are currently planned for connection to the Bay Trail.

As future redevelopment of the island is planned, a route connecting existing trails to the Bay Trail across the Mare Island Causeway Bridge should be developed.

## LEGEND

- Gaps
- Bay Trail
- Bay Area Ridge Trail
- Other Trail
- Vine Trail
- Proposed SMART Path
- Rail
- Existing Boat Launch
- Existing Access Node / Trailhead





## ENVIRONMENTAL STUDIES

### ***Baylands Ecosystem Habitat Goals (1999)***

This report is a comprehensive assessment of historical and current biological conditions of the San Francisco Baylands and provides recommendations for improving the ecological health of the area, including the kinds, amounts and distribution of wetlands and related habitats that are needed to sustain diverse and healthy communities of fish and wildlife resources in the San Francisco Bay Area. It defines a biological basis to guide a regional wetlands planning process for public and private interests seeking to preserve, enhance, and restore the ecological integrity of wetland communities. The report contains specific recommendations for the North Marin region. It identifies this segment as an opportunity area to restore marsh/upland transitions, expand and reintroduce populations of rare plant and animal species, expansion. Though largely focused on habitat it specifically calls out the opportunity for tidal marsh restoration projects to enhance flood protection in the Novato Creek area by expanding tidal prism to maintain and enhance the existing channel. It also identifies the opportunity for treated wastewater to be used to develop freshwater managed wetlands for waterfowl, and enhance stream and riparian habitat the opportunity for treated wastewater to be used to develop freshwater managed wetlands for waterfowl, and enhance stream and riparian habitat the develop freshwater managed wetlands for waterfowl, and enhance stream and riparian habitat.

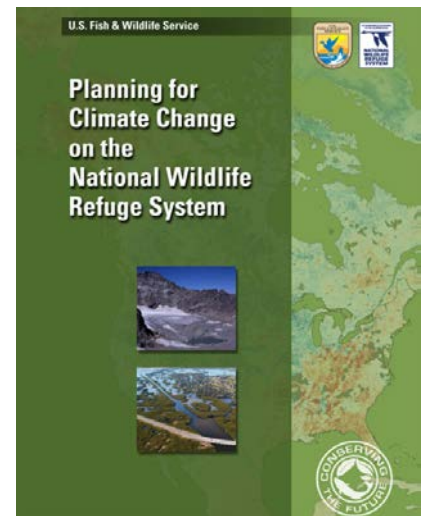
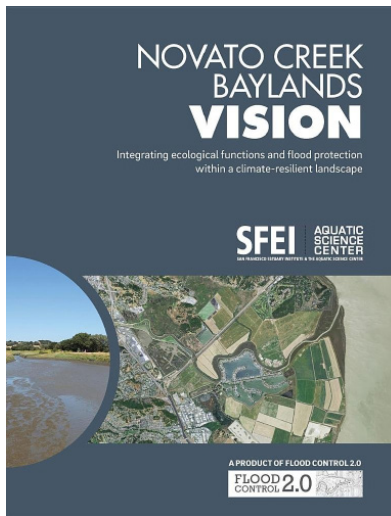
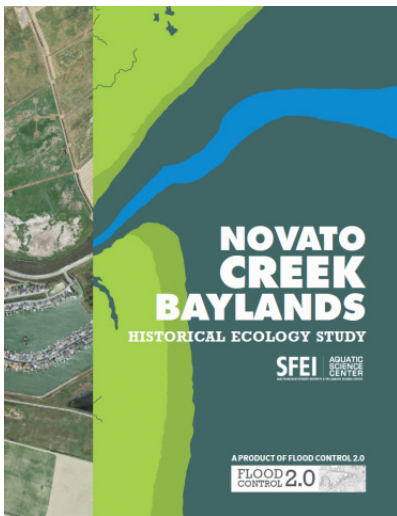
This report is a comprehensive assessment of

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### ***CDFW- Napa Sonoma Marshes Wildlife Area (NSMWA) Land Management Plan (2011)***

The NSMWA encompasses approximately 14,000 acres distributed among 12 Management Units acquired in more than 37 transactions between 1975 and 2004. Railroads pass through the NSMWA, but the CDFW does not own the land where the tracks lie.



The Napa-Sonoma Marshes Wildlife Area (NSMWA) Land Management Plan (LMP) prescribes an adaptive, science-based, ecosystem approach to conservation management for CDFW. It serves multiple purposes; an acquisition history, a description of the planning process, legal constraints, a listing of existing agreements, general rules and regulations, and an overview of the area’s operation and maintenance and personnel requirements. It also incorporates the commitment of CDFW to coordinate and cooperate with NSMWA neighbors, other local stakeholders, and other conservation entities that are active through the region.

**The California Wildlife Action Plan (2015)**

Congress created the State and Tribal Wildlife Grants (SWG) program in 2000, recognizing the need to fund programs for the conservation of wildlife diversity. Congress mandated each state and territory to develop by 2005 a State Wildlife Action Plan (SWAP) that provided a comprehensive wildlife conservation strategy to continue receiving federal funds through the SWG program. California’s first SWAP was completed by California Department of Fish and Game (now the California Department of Fish and Wildlife [CDFW]) and approved by the U.S. Fish and Wildlife Service (USFWS) in 2005. California’s SWAP 2005 identified and targeted Species of Greatest Conservation Need (SGCN) and the vital habitats on which they depend. CDFW has received approximately \$37 million in federal support for the state’s wildlife conservation activities through the SWG pro-

gram from 2005 through 2014. The SWG program requires SWAP updates at least every 10 years. CDFW has now prepared SWAP 2015, which is the first comprehensive update of SWAP 2005.

Three statewide goals to enhance California ecosystems have been identified for SWAP 2015.

These overarching goals, with their associated sub-goals, represent the desired ecological outcomes of SWAP 2015 implementation.

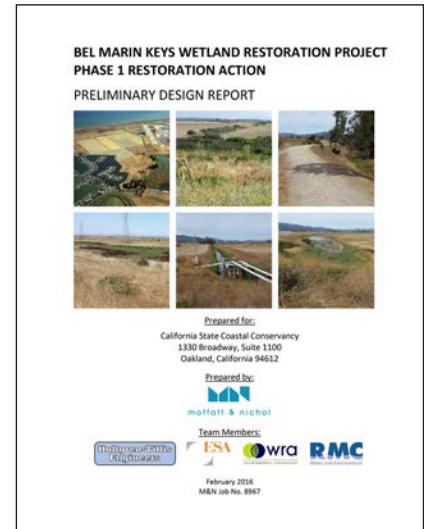
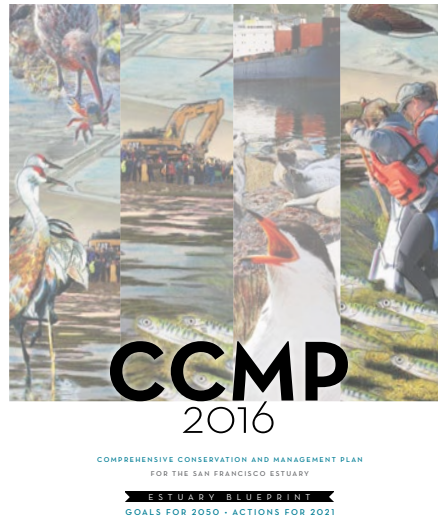
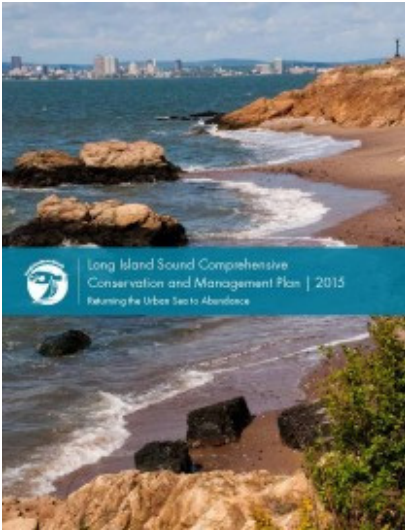
Goal 1 – Abundance and Richness: Maintain and increase ecosystem and native species distributions in California, while sustaining and enhancing species abundance and richness.

Goal 2 - Enhance Ecosystem Conditions: Maintain and improve ecological conditions vital for sustaining ecosystems in California.

Goal 3 - Enhance Ecosystem Functions and Processes: Maintain and improve ecosystem functions and processes vital for sustaining ecosystems in California.

**Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (2013)**

This recovery plan is an expansion and revision of The Ridgeway Rail and Salt Marsh Harvest Mouse Recovery Plan (U.S. Fish and Wildlife Service 1984). The Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California features five endangered species: two endangered animals, Ridgeway Rail and salt marsh harvest mouse and three endangered plants, Suisun thistle, soft bird’s-beak,



and California sea-blite. The biology of these species is at the core of the recovery plan, but the goal of this effort was the comprehensive restoration and management of tidal marsh ecosystems.

The recovery plan's ultimate goal is to recover all focal listed species so they can be delisted. The interim goal is to recover all endangered species to the point that they can be downlisted from endangered to threatened status.

It identified key Actions Needed:

- Acquire existing, historic, and restorable tidal marsh habitat to promote the recovery of listed species and the long-term conservation of species of concern and other tidal marsh species.
- Manage, restore, and monitor tidal marsh habitat to promote the recovery of listed species and the long-term conservation of species of concern and other tidal marsh species.
- Improve coordination, participation, and outreach activities to achieve recovery of listed species and long-term conservation of species of concern.

### ***Adapting to Sea Level Rise Along the Northbay Shoreline (2013)***

PRBO Conservation Science in coordination with the North Bay Watershed Association (NBWA) developed this report to demonstrate how the Future San Francisco Bay Tidal Marshes Climate Smart Planning Tool can be used by agencies responsible for coastal areas in North San Francisco

Bay to develop adaptive management plans. While not a regulatory agency, the North Bay Watershed Association (NBWA) is a membership group of 16 regional and local public agencies located throughout Marin, Sonoma, and Napa counties, including the City of Novato (Associate Member), the North Marin Water District, and the Novato Sanitary District. NBWA is committed to crafting a set of regional approaches to the problems and issues associated with managing the North Bay watersheds. The mission of NBWA is to facilitate partnerships across political boundaries that promote stewardship of the North Bay watershed resources.

### ***The Baylands and Climate Change (2015)***

This Coastal Conservancy follow up report recognizes that climate-change science has advanced greatly since the 1999 Baylands Ecosystem Habitat Goals were developed, spurring the need for a technical synthesis of climate-change projections and updated recommendations. This Science Update documents and celebrates the remarkable progress made toward achieving the 1999 report's goals. It advocates a nonregulatory, voluntary effort to point the Bay Area toward a more resilient future, with strategies that were developed over several years by several hundred experts and practitioners in the region. The findings of this Science Update indicate clearly that restoring a vibrant and functioning baylands ecosystem will make our future shorelines more resilient to climate change stresses. The following five highlights are the most critical overar-

**San Pablo Baylands: Ensuring a Resilient Shoreline**

October 26, 2017


State Route 37 — Baylands Group  
 Audubon California  
 Ducks Unlimited  
 Friends of San Pablo Bay Wildlife Refuge  
 Marin Audubon Society  
 Point Blue Conservation Science  
 Road Ecology Center, UC Davis  
 San Francisco Bay Joint Venture  
 San Francisco Bay Trail Project  
 San Francisco Estuary Institute  
 Sonoma Resource Conservation District  
 Sonoma Ecology Center  
 Sonoma Land Trust  
 State Coastal Conservancy



State Route 37 crosses the North Bay and is shown here from the Petaluma River to the Napa-Sonoma Marshes. (Photo: Stephen Josef, 2004)

**San Pablo Bay National Wildlife Refuge  
 Final Comprehensive Conservation Plan**

Prepared By  
 U.S. Fish and Wildlife Service  
 San Francisco Bay National Wildlife Refuge Complex  
 8500 Thornton Avenue  
 Newark, CA 94560

Approved:  Date: 10.5.2014  
 Acting Regional Director, Pacific Southwest Region

Implementation of this Comprehensive Conservation Plan and alternative management actions/strategies have been reviewed consistent with the requirements of the National Environmental Policy Act (42 USC 432, et seq.).

SAN FRANCISCO BAY RESTORATION AUTHORITY  
 Staff Recommendation  
 April 11, 2018

**DEER ISLAND TIDAL BASIN WETLANDS RESTORATION PROJECT**  
 Project No. RA-004  
 Project Manager: Avin Heller

**RECOMMENDED ACTION:** Authorization to disburse up to \$630,000 to the Marin County Flood Control District to prepare detailed designs, permit applications, and environmental documentation for the Deer Island Tidal Basin Wetlands Restoration Project, which will include restoration of approximately 194 acres of tidal baylands and creation of 4,500 linear feet of ecotone levees at Deer Island, Novato, Marin County.

**LOCATION:** Novato, Marin, Measure AA Region: North Bay

**MEASURE AA PROGRAM CATEGORY:** Vital Fish, Bird and Wildlife Habitat Program and the Integrated Flood Protection Program; Shoreline Public Access Program

**EXHIBITS**

Exhibit 1: [Project Location and Site Map](#)  
 Exhibit 2: [Project Photographs](#)  
 Exhibit 3: [Project Details](#)  
 Exhibit 4: [Project Letters](#)

**RESOLUTION AND FINDINGS:**  
 Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution pursuant to The San Francisco Bay Restoration Authority Act, Gov. Code § 66784.5:

“The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed six hundred thirty thousand dollars (\$630,000) to the Marin County Flood Control District (MCFCD) to prepare detailed designs, permit applications, and environmental documentation for the Deer Island Tidal Basin Wetlands Restoration Project, which will include restoration of approximately 194 acres of tidal baylands and creation of 4,500 linear feet of ecotone levees at Deer Island in the lower Novato Creek Watershed, Novato, Marin County. Prior to commencement of work, the grantee shall submit for the review and written approval of the Executive Officer of the Authority.

Page 1 of 10

ching ideas from the recommendations.

- Restore estuary–watershed connections that nourish the baylands with sediment and fresh-water.
- Design complexity and connectivity into the baylands landscape at various spatial scales.
- Increase coordination among baylands stakeholder organizations to promote the successful implementation of the recommendations in this report.
- Create plans that factor in ecological outcomes after extreme events and other disasters.
- Engage the citizenry in the baylands.

**Novato Creek Baylands Vision (2015)**

The Novato Creek Baylands Vision (2015) was developed by SFEI in collaboration with San Francisco Estuary Partnership (SFEP) and BCDC as part of Flood Control 2.0. In further complement to the hydraulics study that focused broadly on both the bayland and on the mid- and upper-reaches, the Vision document focuses solely on the baylands section of Novato Creek, the area between Highway 37 and San Pablo Bay. The Vision document takes a long-term approach when outlining the activities that could improve flood protection in lower Novato Creek (Exhibit 5). Although more generalized than the hydraulics and hydrology studies, the improvement concepts recommended would benefit both flood protection and related bayland

enhancements. Examples included nature-based changes to lower Novato Creek that would reconnect the creek to the baylands, such as the removal of levees and the construction of new tidal channels in order to disperse water and sediment flows into the baylands. This would have positive impacts on the tidal exchange and adaptation of the baylands to sea level rise due to the managed accumulation of sediment across the baylands.

**USFWS Climate Adaptation Plan (2016)**

The purpose of this climate adaptation project is to use the best available information to identify a suite of actions with the highest likelihood of achieving Refuge goals that are feasible and contribute to larger landscape conservation.

**Comprehensive Conservation and Management Plan (2016)**

This plan is the third in a series, updating the 1992 and 2007 plans. It was prepared by the San Francisco Estuary Partnership.

This update addresses current concerns and future uncertainties — ranging from rising sea levels to drought, habitat loss, and failing fish and wildlife — and provides restoration partners with the following priorities for 2016-2021:

- Sustain and improve the estuary’s habitats and living resources
- Bolster resilience of the estuary’s ecosystem,



- shorelines and communities to climate change
- Improve the quality and quantity of fresh water available to the estuary
- Champion the Estuary

**Bel Marin Keys Wetland Restoration Project- Preliminary Design Report (Ongoing)**

The Bel Marin Keys Unit V (BMKV) site is owned in fee by the California State Coastal Conservancy (SCC) and consists of diked historic tidelands that are currently either dominated by annual grassland or utilized to grow organic oat hay. The SCC is leading the effort to restore the 1600 acre property, plus 200 acres of adjacent State Lands Commission land to a mosaic of tidal, seasonal, and transitional habitat on the site by constructing flood control features, placing dredged material to elevate the diked, subsided baylands, and reintroducing tidal waters to bayside portions of the site. A seasonal wetland will provide valuable habitat for migratory waterfowl and shorebirds on the Pacific Flyway, as well as high tide refugia for listed tidal marsh species, including the endangered Ridgeway's Rail. The project will be resilient to sea level rise, as the overall project includes an extensive tidal marsh restoration made possible by the construction of a setback levee.



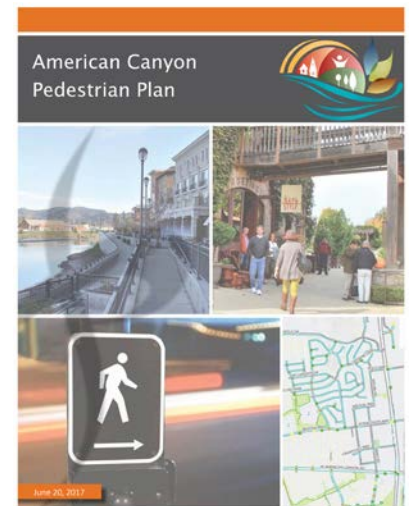
**San Pablo Baylands: Ensuring a Resilient Shoreline (2017)**

The SR 37 — Baylands Group is comprised of North Bay wetland land managers, ecological restoration practitioners, and other stakeholders who have a long-term interest in the conservation and restoration of the tidal wetlands at the edge of the San Pablo Baylands. This white paper was prepared in response to the State Route 37 (SR 37) redesign effort led by the Metropolitan Transportation Commission (MTC) and the transportation authorities of Marin, Sonoma, Napa, and Solano counties. It demonstrates the consensus around the critical importance of protecting, enhancing, and restoring the tidal wetlands, natural resources, ecosystem services, and habitats of the San Pablo Baylands.

The paper advocates that the redesign of SR 37 must be guided by principles that protect the values and services that the natural and agricultural lands provide and increase their resilience in the future.

**San Pablo National Wildlife Refuge Final Comprehensive Conservation Plan (CCP) (2011)**

The CCP provided a description of the desired future conditions and long-range guidance to accomplish the purposes for which the Refuge was established; preserving and restoring habitat for migratory birds on the Pacific Flyway and endangered species. It was prepared as required by the federal 1997 Improvement Act. The Improvement Act also established the formal process for deter-



mining compatibility of wildlife-dependent recreational use or any other public use of a refuge. It also identified key public access priorities in refuges, including, wildlife observation, photography, hunting, and fishing.

### ***Deer Island Basin Wetlands Restoration Project (Ongoing)***

The project will contribute to restoration of one of the most extensive remaining and important reaches of San Pablo Bay through helping connect a tidal wetlands habitat corridor that arcs across north three North Bay counties. Connecting these bay wetlands is critically important for biological diversity and will restore habitat connectivity for the many critically threatened and endangered species that use these areas. The lower Novato Creek baylands, which include the Deer Island Tidal Basin and Bel Marin Keys, are a keystone piece in this landscape scale wetland restoration both now and under sea level rise conditions since much of the lower watershed is still undeveloped.

### ***New Plan Summary for Inter-agency Visitor Use Management Plan***

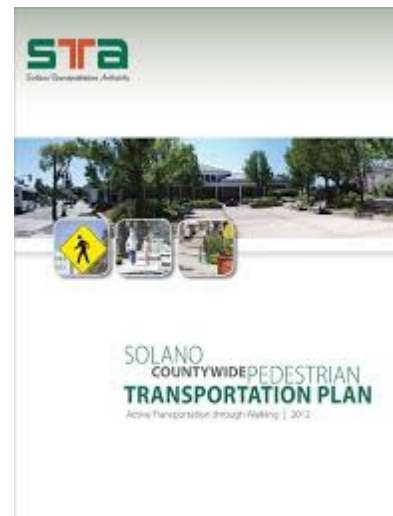
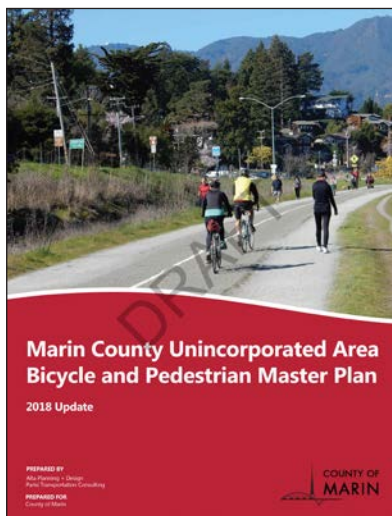
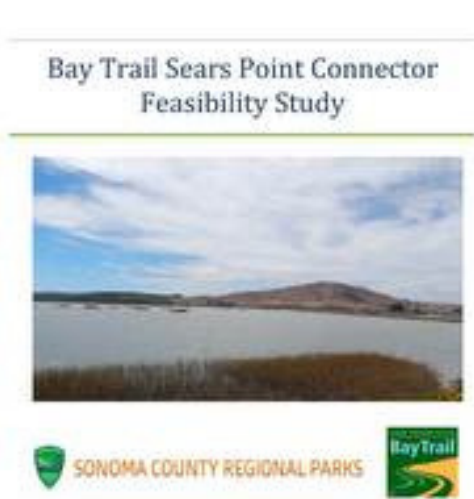
The purpose of the framework is to provide cohesive guidance for managing visitor use on federally managed lands and waters. The framework is a planning process for visitor use management and

can be incorporated into existing agency planning and decision-making processes. It is applicable to virtually all visitor use management situations and conditions on federally managed lands and waters

The American Canyon Bicycle Plan was developed as a component of the Napa County Transportation Authority’s County-wide Bicycle Plan Update. The overarching goal of the Bicycle Plan is to increase the number of persons who bicycle throughout American Canyon and Napa County for transportation to work, school, utilitarian purposes, and recreation.

This plan has been developed to address the needs of all types of bicyclists, including novice riders and children, the average bicyclist, and advanced riders and commuters, as well as shoppers, recreational riders, and tourists. This plan is designed to address the most common reasons why people do NOT use bicycles, including lack of convenience and perceived safety concerns.

The 2019 update identifies new funding strategies, priority projects and is a culmination of 1.5 years of public input paired with data-driven analysis of existing conditions



## TRANSPORTATION STUDIES

### ***American Canyon Pedestrian Plan (2017)***

The City of American Canyon is focused on updating and implementing their ADA Transition Plan, and they have recognized this moment as a key opportunity to enhance pedestrian safety and mobility in concert with the accessibility updates. The city's single-family residential subdivisions and the commercial corridor's orientation along SR 29 present unique challenges to the pedestrian environment. This plan expands on existing efforts by developing a list of proposed pedestrian facilities within key focus areas of the city and referencing those that have been developed by other plans.

### ***Bay Area Water Trail Design Guidelines (2019)***

This document is intended for facility and trail planners, designers and landscape architects, and park and recreation project leaders when planning, building, or updating access sites that are tailored to the needs of non-motorized small boats, including kayaks, stand-up paddleboards, rowing shells, dragon boats, and kiteboards. The types of amenities and site design are detailed with specific examples from the Bay Area, which are intended to assist during the planning and design phase of a water access project. Specific engineering, construction details, and ADA design requirements are largely beyond the scope of this document.

The Guidelines will help with:

- Understanding the Bay Area Water Trail program, including facility eligibility and accessibility criteria

- Understanding Site Selection Consideration by addressing shoreline characteristics along rivers, sloughs, and the Bay
- Addressing Users' Launch Needs by looking at the various types of users and watercraft, amount of traffic, and accessibility needs
- Understanding Launch Design Criteria that can be shared with a contractor, designer, or manager depending on the complexity of the site
- Promoting Your Water Trail Project by offering tips to help make decisions about appropriate launch design and construction and by helping to gain community support.

### ***New Plan Summary for Water Trail Plan 2011***

Enhanced San Francisco Bay Area Water Trail Plan (2011) is a guide to trail implementation for the agencies and organizations that will develop and manage water trail access points and programs, as well as trail proponents and other stakeholders also involved in implementation.

### ***Bay Trail Design Guidelines (2016)***

These guidelines offer direction and define goals to facilitate the design and development of a San Francisco Bay Trail system that is safe, connected and continuous; provides a positive user experience that encourages people to use the trail; and maximizes access to and use by the broadest spectrum of people possible. The guidelines are general in scope due to the varied conditions through which

the San Francisco Bay Trail passes and the variety of users and types of uses that occur along the trail. They are applicable to all development of the San Francisco Bay Trail and are intended to complement national, state, and local design standards and guidelines. Different segments of the San Francisco Bay Trail will likely need to address different site opportunities and constraints.

### **Bay Trail Gap Analysis Study (2005)**

The Bay Trail Project is a nonprofit organization administered by the Association of Bay Area Governments (ABAG) that plans, promotes and advocates for the implementation of a continuous 500-mile bicycling and hiking path around San Francisco Bay. When complete, the trail will pass through 47 cities, all nine Bay Area counties, and cross seven toll bridges. At the time this study was published, slightly more than half the length of the Bay Trail alignment has been developed. In reaching this significant milestone, there is increased interest in overcoming the remaining gaps in the trail system. This report was commissioned by the Association of Bay Area Governments (ABAG) Bay Trail Project and the California Coastal Conservancy to answer two of the most commonly asked questions regarding the Bay Trail: “When will it be done?” and “How much will it cost?” To this end, the Gap Analysis Study aims to:

- Identify the remaining gaps,
- Classify the gaps by phase, county and benefit ranking,
- Develop cost estimates for individual gap completion using a consistent methodology,
- Identify strategies and actions to overcome gaps,
- Identify long term funding needs, and
- Present an overall cost and timeframe for completion.

### **Bay Trail Plan (1989)**

The Plan was prepared by the Association of Bay Area Governments pursuant to Senate Bill 100, which mandated that the Bay Trail provide connections to existing park and recreation facilities, cre-

ate links to existing and proposed transportation facilities, and be planned in such a way as to avoid adverse effects on environmentally sensitive areas. Additional buffering/transition areas designed to protect wetland habitats should be provided where appropriate to protect wildlife. Local agencies should be sensitive to the natural environment not only in project planning to implement segments of the Bay Trail, but also in maintaining and managing the trail once built.

The Plan describes a region-wide hiking and bicycling trail system that takes advantage of opportunities for connections to other existing and proposed recreational systems. The spine trail is the main alignment, intended as a continuous recreational corridor encircling the Bay and linking the shoreline of all nine Bay Area counties. Where the spine trail does not follow the shoreline, spur trails provide access from the spine to points of natural, historic and cultural interest along the waterfront. Connector trails will link the Bay Trail to inland recreation sites, residential neighborhoods and employment centers, or provide restricted access to environmentally sensitive areas.

Levees will be an important component in the Bay Trail system. Where feasible and consistent with other policies of this plan, new trails may be routed along existing levees. Because levees represent existing bay fill, they are one of the few options for trails in natural areas near the shoreline.

Wherever possible, new trails should be physically separated from streets and roadways to ensure the safety of trail users. Plan guidelines identify minimum standards which meet Caltrans standards for bikeways and incorporate standards for accessibility. The Bay Trail should not be defined as a continuous asphalt loop at the Bay’s edge, but as a system of interconnecting trails, the nature of which will vary according to the locale and the nature of the terrain and resources in the vicinity of each particular trail segment.

Support facilities, such as parking lots, restrooms, water fountains, picnic tables and benches are important components of a trail system. Domestic pets should be prohibited on new trails if the managing agency determines that their presence would conflict with habitat values or other recreational users.



### ***Marin County Unincorporated Area Bike/Ped Plan (2018)***

This update to the Marin County Unincorporated Area Bicycle and Pedestrian Master Plan (Plan) was created through the coordinated efforts of the Transportation Authority of Marin (TAM), the Marin County Public Works Department, the Marin County Bicycle Advisory Committee, and citizens interested in improving the bicycling and pedestrian environment in unincorporated Marin County (County).

This plan was completed for the Marin County Department of Public Works between 2014 and 2018 as a part of a county-wide effort to update all local bicycle and pedestrian master plans and includes only the unincorporated areas of Marin County. While the plan serves as a coordinating and resource document for the entire county, its focus is on specific recommendations for the unincorporated areas which must be adopted by the Board of Supervisors.

### ***Napa Countywide Bicycle Plan (2019)***

The first countywide bicycle plan was adopted in 2003, and the most recent update was made in 2012. The 2019 Napa Countywide Bicycle Plan (referred to as the “Plan”) builds upon the bicycle recommendations presented in the 2012 Napa Countywide Bicycle Plan. The field of bicycle planning and design has changed significantly in the last seven years, and this Plan incorporates those current best practices. This Plan approaches the bicycling environment with an eye toward making

bicycling possible for a large part of the population, not only those who already ride or are already comfortable riding in most traffic conditions. Napa Pedestrian Plan (2016)

The Napa Countywide Pedestrian Plan is intended to guide and inform pedestrian infrastructure, policies, programs, and development standards to make walking in Napa County safe, comfortable, convenient and enjoyable for all pedestrians. It strives to improve accessibility for the disabled but does not intend to replace existing ADA Transition Plans.

The Napa Countywide Pedestrian Plan is being developed to complement existing planning documents for all Napa County jurisdictions, and ultimately be combined with the Countywide Bicycle Plan (NVTA, January 2012) to create a Countywide Active Transportation Plan that will allow and position the County to effectively compete for project funding.

### ***Novato Bicycle/Pedestrian Master Plan (2015)***

The Novato Bicycle / Pedestrian Plan provides for a recommended citywide network of sidewalks, bicycle paths, lanes and routes, along with pedestrian- and bicycle-related programs and support facilities, intended to ensure bicycling and walking become a more viable transportation option for people who live, work and recreate in Novato. Current bikeway and pedestrian network information was gathered from meetings with the Novato Bicycle/Pedestrian Advisory Committee (B/PAC) and City staff, and combined with information on proposed routes from the previously adopted City of Novato Bicycle Plan (2007). Relevant bikeway information was also gathered from the Marin County Unincorporated Area Bicycle and Pedestrian Master Plan (2008).

### ***Petaluma River Turning Basin Report Dec (2015)***

The Petaluma Small Craft Center (PSCC), a non-profit organization representing boating clubs, river organizations, businesses, and individuals interested in the Petaluma River, is partnering with the City of Petaluma to create a small craft rental center at this location. The plans for the small craft rental center include an additional 120-foot low freeboard dock, a floating office and boat rental center, restrooms and showers, a boat washing sta-

tion, and parking improvements. The PSCC would build the small craft rental center and manage its operation.

### ***Solano Bike Plan (2011)***

The main purpose of the Solano Countywide Bicycle Plan is to encourage the development of a unified regional bicycle system throughout Solano County. The system consists of the physical bikeway routes, wayfinding signage, and associated amenities such as bicycle lockers, showers, etc. The Plan focuses on a bikeway network that will provide origin and destination connections in Solano County as well as to surrounding counties. Additionally, it contains policies that are designed to support and encourage bicycle transportation; design standards for use in implementation efforts; and promotional strategies. This Plan strives to identify regional bikeway facilities that are consistent with the local facilities planned in each of the STA's member agency's jurisdiction, and regional facilities in neighboring counties.

### ***Solano Countywide Pedestrian Transportation Plan (2012)***

The main purpose of the Solano Countywide Pedestrian Plan is to encourage the development of a unified regional pedestrian system throughout Solano County. The system consists of physical walking routes, wayfinding signage, and associated amenities such as benches/rest areas, downtowns, grocery stores, activity centers, etc. The Plan focuses on a pedestrian system that will provide origin and destination connections in Solano County as well as to surrounding counties. Additionally, it contains policies that are designed to support and encourage pedestrian transportation, design standards for use in implementation efforts, and promotional strategies. This Plan strives to identify regional pedestrian facilities that are consistent with the local facilities planned in each of the STA's member agency's jurisdictions, and regional facilities in neighboring counties.

### ***Solano Trails Plan (2002)***

The Phase I Countywide Trails Plan is a status report on existing regional trails and existing plans for regional trails in Solano County. It is a compo-

nent of the Solano Transportation Authority's Comprehensive Transportation Plan. In 2002 and 2003 additional studies will be conducted and an expanded report will be prepared to comprehensively address opportunities for a complete regional trail system.

### ***Sonoma Bicycle and Pedestrian Plan (2014)***

Since adoption of the SCTA Countywide Bicycle and Pedestrian Master Plan in 2008, every jurisdiction in Sonoma County has a Bicycle and Pedestrian Master Plan. In 2013, SCTA and its jurisdictions embarked on a process to update this plan. Therefore, this is a Plan Update, which focuses on data, map and project list updates. The County vision, goal and objectives remain the same with a few minor alterations to include such concepts as "complete streets".

### ***Sonoma County Regional Parks-- Bay Trail Sears Point Connector Feasibility Study (2018)***

The Plan consists of two main sections: (1) Countywide Overview Section, and (2) the jurisdiction plans. The Countywide Overview Section sets the tone for the entire plan. The countywide vision, principal goal, and countywide objectives are introduced in this section, as are countywide planning efforts and background information. This Overview Section is an umbrella under which the rest of the plan falls. The Countywide Bicycle and Pedestrian Master Plan exists in its entirety with all jurisdiction plans connected; likewise, each jurisdiction's Bicycle and Pedestrian Master Plan also exists as their own stand-alone plan, which is formally adopted by each jurisdiction.

### ***STA Bay Vine Trail - Draft Feasibility and Preliminary Engineering Study (2014)***

This Bay Trail and Vine Trail Feasibility Study is an investigation to evaluate and identify a preferred alignment for two well-used, multi-use regional trails—the San Francisco Bay Trail and the Napa Valley Vine Trail—through the City of Vallejo with a low stress, convenient, and family friendly facility.

The community envisions a facility that will help connect areas of the City of Vallejo that are divided by SR 29 and SR 37; provide opportunity for active transportation and recreation; and extend the amenity and economic value of waterfront access to more of the City.



City of Napa General Plan  
Policy Document  
Adopted December 1, 1998  
Reprinted with Amendments to September 3, 2015

Park and Open Space District (“District”) was adopted by the Board of Directors in 2009. This Master Plan was intended to be updated every three years with a current discussion of District activities and administration. The purpose was to ensure the Master Plan retains its usefulness as a ‘living’ strategic document. This Master Plan Update; 2012 is the first such update to the Master Plan. Since adoption of the Master Plan, the District has made significant progress on many of the 61 projects identified in that Plan. This progress, and next steps for each project, is documented in Section II of this report. Section III prioritizes the project list. As a result of actions taken since formation of the District, the District has at this point committed to owning and/or managing the open space parks and regional trails.

### **Napa General Plan- Open Space Element (2008)**

Napa County is blessed with an extensive landscape of open spaces. These open spaces are integral to the quality of life and economic vitality of Napa County and its residents.

This Element of the General Plan defines what is meant by “open space” and focuses primarily on the recreational uses of open space. Other uses of open space are discussed in greater detail in the Agricultural Preservation and Land Use Element, the Conservation Element, the Community Character Element, and the Safety Element.

### **Novato General Plan Update (1998)**

The Novato General Plan is a statement of the community’s vision for the future. The Plan is a comprehensive, long-range plan and identifies Novato’s land use, transportation, environmental, economic, fiscal, and social goals and policies as they relate to the conservation and development of land in Novato. The Plan is the result of over five years of community participation, research, and preparation. The March 1996 Plan supersedes the City’s existing 1981 General Plan. This General Plan is one of the strongest, if not the strongest, environmental plans in the State of California assuring the quality, protection, and conservation of the natural

## **GENERAL PLANS**

### **American Canyon General Plan Parks & Recreation Element (1994)**

The policies found within this Element of American Canyon’s General Plan address the following topics:

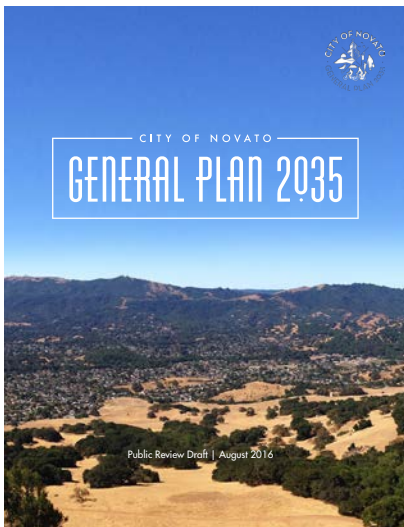
- Park standards
- The different types of parks that exist today, or will exist in the future.
- Parkland acquisition.
- Park improvements.
- Park operation and maintenance.
- Park programming

### **City of Sonoma 2020 Circulation and Transit Element (2008)**

The Circulation and Transit Element addresses the location and extent of planned transportation routes and facilities and includes goals, objectives, and policies affecting the mobility of future residents, businesses, and visitors. It is correlated with the Land Use Element to assure that the transportation system serves future travel demand and helps attain the desired land use plan, and helps achieve a sustainable circulation and transit system.

### **Napa County Parks Master Plan (2012)**

The first Master Plan for the Napa County Regional



and built environment. The Plan balances its responsibilities of meeting the needs of Novato’s residents with meeting the needs of Novato’s environs.

### **Sonoma Integrated Parks Plan (2015)**

The Sonoma Integrated Parks Plan (SCIPP) identifies opportunities to align Sonoma County’s parks, programs, and open spaces with regional economic, environmental, and community initiatives, while implementing Regional Parks’ mission.

SCIPP establishes a vision for the future and will guide the work of Regional Parks, helping the agency grow into a leading provider of world-class parks and recreation experiences, and a key partner supporting economic vitality in the North Bay.

### **The Napa Countywide Transportation Plan – Vision 2040 (2015)**

The Regional Transportation Plan (RTP) is a 25-year plan that serves as a framework for the regional planning process to establish consistent and sustainable planning goals throughout the nine-county Bay Area region. This long-range transportation and land use plan aim to link transportation and housing in future regional growth. The plan specifically addresses the requirements of SB 375 (the 2008 California Sustainable Communities and Climate Protection Act), to reduce greenhouse gas emissions implementing a Sustainable Community

Strategy and advancing compact and mixed-use development. Integrating transportation linkages with new development will foster walkable communities and provide more access to schools, local jobs and retail encouraging the use of alternative transportation modes.

To meet regional requirements and to be consistent with the regional process, a new countywide transportation plan should be completed every four years. Vision 2040: Moving Napa Forward has been completed in time to inform the next regional plan which is scheduled for adoption in 2017.

Vision 2040 Goals and Objectives adopted by the Board (goals are considered of equal importance):

- Serve the transportation needs of the entire community regardless of age, income or ability. Improve system safety in order to support all modes and serve all users.
- Use taxpayer dollars efficiently.
- Support Napa County’s economic vitality.
- Minimize the energy and other resources required to move people and goods.
- Prioritize the maintenance and rehabilitation of the existing system.

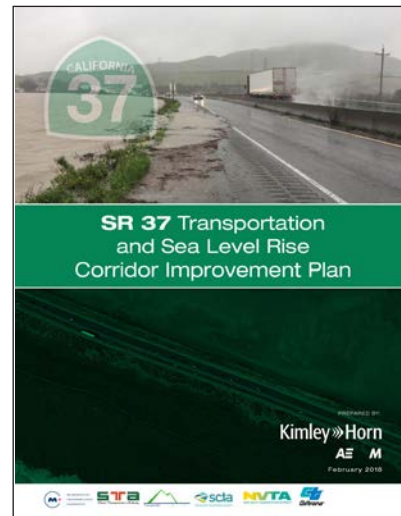
### **Vallejo General Plan (2017)**

The General Plan is the City’s primary land use regulatory tool and describes the means necessary

to achieve the community’s vision for the future. The General Plan is Vallejo’s constitution for future change and, together with the Development Code (Title 16 of the Municipal Code) and other related sections of the Municipal Code, will serve as the basis for planning-related decisions made by City staff, the Planning Commission, the City Council, and other City boards and commissions.

Based on the City Council direction and broad community input, the specific objectives of the General Plan Update include:

- Focusing future growth to foster a vibrant Downtown/Waterfront District, strong job centers, livable neighborhoods, thriving neighborhood corridors, and retail/entertainment clusters that draw visitors from the city and the region.
- Preserving and enhancing the natural, historic, and scenic resources that make Vallejo special.
- Establishing Vallejo as an attractive place to live, work, shop, and enjoy time off.
- Providing a balance of employment and housing opportunities locally.
- Attracting and supporting investment for rehabilitation and new development that builds the tax base and provides fiscal stability to fund municipal services.
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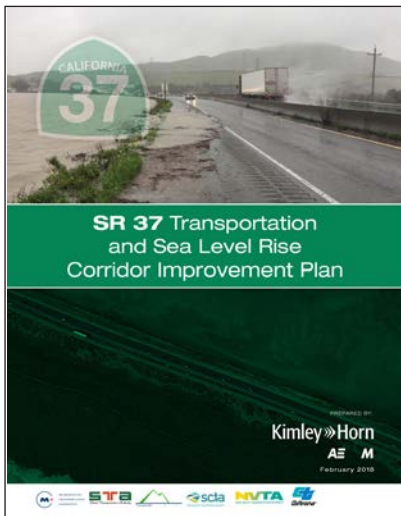
## ONGOING TRANSIT STUDIES

### *Caltrans- SR 37 State Highway Case Study (2013)*

This “Highway 37 Stewardship Study” was part of a larger research project sponsored by the Federal Highway Administration in cooperation with the American Association of State Highway and Transportation Officials; administered by the Transportation Research Board (TRB) of the National Academies. The planning region boundary included the study highway and portions of five counties and several other state highways and interstates that share traffic with the highway.

The “Highway 37 Stewardship Study” was a test-case for model evaluation tools developed by TRB to address ecological factors in transportation corridor planning. Five distinct alternative concepts were analyzed, though no new data was generated. In developing the scenarios, consideration was given to multi-modal travel, impacts to tidal and brackish marsh habitat in San Pablo Bay, adjacent land-uses, traffic flows, climate change-induced sea level rise, and what constitutes “sustainable transportation”. The study informed later development model behaviors that Caltrans incorporates into its corridor plans. It also provided a list of anticipated federal, state, and regional permitting agencies.

Several conclusions from the study include:



- Long timeframes for planning and project delivery do not suit stakeholder expectations for getting started on obvious problems.
- Providing project funds as an incentives to regulatory agencies will increase their early participation.
- The most significant data gaps identified related to uncertainty around the predicted rate of sea level rise and the lack of accurate and detailed levee and berm topographic and location data.
- The project team recommended that more values be included in the conceptual design framework, such as local economy, community identity, environmental justice, climate adaptation, carbon budget, and possibly greenhouse gas emissions, and/or life cycle analysis.
- Stewardship-conservation priorities may be more easily met in combined transportation and conservation planning.

**Caltrans State Route 37 Transportation Concept Report (2015)**

Caltrans sponsored this study, which evaluated SR 37 from 101 to Interstate 80. It identified SR 37 as an important regional connection linking the north, east and west San Francisco Bay sub- regions. The purpose of the Transportation Concept Report (TCR) was to evaluate current and projected

conditions along the route and communicate the vision for the development during a 25-year Planning horizon. The State Route (SR) 37 TCR utilized information and input from the Highway 37 Stewardship Study completed in 2012.

The TCR was developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

It included analysis of three improvement options: a roadway elevated on a levee, on a “monopod” concrete post causeway, and on wood or concrete “trellis”. Public multimodal access to the resources in the corridor and the potential for appropriate transit options were also identified for study in the following Project phases. This study formed the basis for other subsequent corridor planning documents.

**MTC- SR 37 Transportation and Sea Level Rise Corridor Plan (2018)**

The SR 37 Corridor Plan (Corridor Plan) is a high-level assessment of key current and anticipated issues on California State Route 37 (SR 37) and lays out some near-, mid-, and long-term improvements to help to address such issues. The study corridor extends from US 101 in Novato to I-80 in Vallejo. The roadway serves as a commute and recreational route and experiences traffic congestion both on weekdays and weekends. SR 37 also acts as a secondary and reliever route to the interstates and state highways it parallels and is a recovery route for the Richmond-San Rafael Bridge in the event of an emergency closure.

The most critical issues for the study corridor are recurrent traffic congestion, vulnerability to flooding, which will likely grow more frequent with SLR, and potential impacts of SLR on highly sensitive environmental resources adjacent to the corridor. Rising sea levels due to climate change will critically impact both the study corridor and surrounding



sensitive ecosystems.

The Corridor Plan represents an early step of many to proactively identify opportunities and solutions to the transportation, ecosystem and sea level rise for the SR 37 corridor.

This corridor plan encompasses three broad goals:

- Integrate transportation, ecosystem and sea level rise adaptation into one design
- Improve mobility across all modes and maintain public access
- Increase corridor resiliency to storm surges and sea level rise

The Plan recommends integration of ecological enhancements as part of any improvement project. It sets a goal of no net loss of wetlands habitat to mitigate for project widening by integrating restoration elements into the project design. It highlights the role that the Regional Advanced Mitigation Program (RAMP) could have to balance near-term and long-term transportation improvement impacts.

### **Caltrans Project Study Report- Project Development Support for SR37 (PSR-PDS) (2018)**

This Caltrans document is entirely focused on improvements for Segment B of the SR 37 corridor. The Project study limits for the traffic operations analysis model is the segment of SR 37 from US 101 to SR 29, including the impacted portion of SR

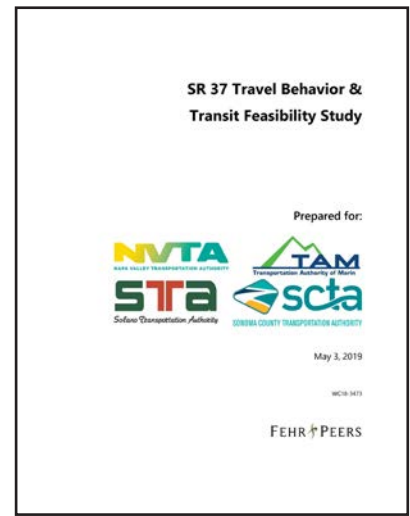
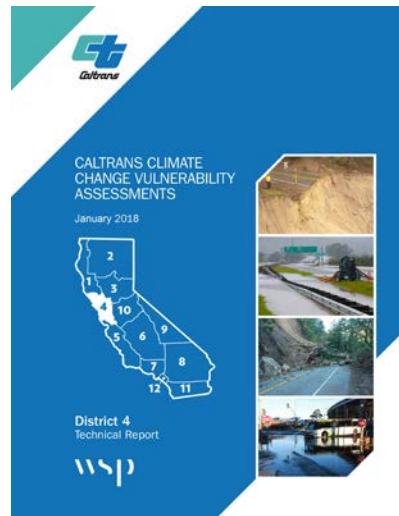
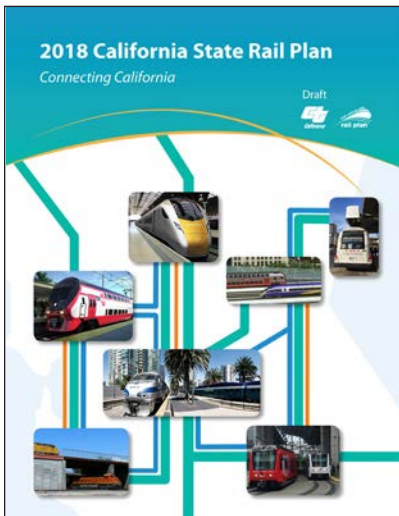
121. These limits may need to be adjusted during PA&ED to fully account for existing and expected future corridor congestion. The study began when Metropolitan Transportation Commission (MTC), Caltrans and its four North Bay partners - the Solano Transportation Authority (STA), the Sonoma County Transportation Authority (SCTA), the Transportation Authority of Marin (TAM) and the Napa Valley Transportation Authority (NVTA) undertook a Design Alternative Assessment (DAA) of Segment B to plan and expedite the delivery of improvements in the study corridor to address the threat of SLR and traffic congestion. With the support and input from a number of scientists, landowners, land managers, and environmental organizations, the DAA refined its original scope to integrate the transportation and sea level rise adaptation with the ecology of the corridor. The study was converted into a PSR-PDS document to expedite initiation of a PA/ED phase on an interim solution.

### **Caltrans- California State Rail Plan (2018)**

Caltrans' mission in developing the California State Rail Plan is to provide a framework for a safe, sustainable, integrated, and efficient California rail network that successfully moves people and goods while enhancing the State's economy and livability. Residents and workers in California's growing mega-regions face increasing vehicle congestion and crippling commute times due to pressures on the housing market and aging transportation infrastructure. Coordination between different modes of transportation and land use planning must drive priorities to ensure no one system is bearing undue burden to provide access and mobility to all of California's communities.

### **Caltrans- Dist. 4 Vulnerability Assessment Summary Report (2018)**

Caltrans is making a concerted effort to be a leader in identifying vulnerabilities and assessing the impacts of climate change on the State Highway System. This Summary Report is one of two documents prepared to outline climate change effects in the San Francisco Bay Area (District 4); the other



being the Technical Report. This document represents a general summary of identified impacts.

The Assessment's defined approach includes the following actions:

- Exposure – the identification of Caltrans assets exposed to damage or reduced service life from expected future conditions.
- Consequence – a determination of what might occur to system assets – in terms of loss of use or costs of repair.
- Prioritization – developing a method by which capital programming decisions will be made to address identified risks, including considerations of system use and/or timing of expected exposure.

The report also identifies other climate-related impacts that will affect transportation facilities, including increasing temperature impacts on paving, increased wildfires, increased storm precipitation

**Sonoma-Marin Area Rail Transit District Passenger Rail Service Novato to Suisun City ( 2019)**

The California State Rail Plan that published last year identified the possibility of creating an east-west connection that would greatly improve the travel options in one of the highest growth travel markets in the State, connecting between rail systems and providing an alternative transportation

choice in a corridor currently experiencing tremendous congestion.

The purpose of this report was identified as follows:

- Examine the technical feasibility of implementing passenger rail service between Novato and Suisun City;
- Document the existing physical condition of the corridor;
- Propose limited infrastructure options, and their corresponding operating characteristics;
- Identify potential infrastructure and environmental challenges;
- Prepare order of magnitude schedule and cost estimates; and
- Recommend next-steps.

The railroad corridor connecting the existing Sonoma Marin Area Rail Transportation agency (SMART) Novato-Hamilton station, near Novato, and the existing Capitol Corridor station at Suisun-Fairfield is approximately 41 miles long. SMART owns the right-of-way from Novato-Hamilton station eastward to approximately American Canyon, and Union Pacific Railroad (UPRR) owns from there to Suisun city. . SMART calls this east-west corridor the “Brazos Subdivision.” The SMART right-of-way for the proposed project consists of two distinct portions. The first, shorter section of SMART-

owned right-of-way is comprised of a 1.6-mile-long portion overlapping with the current SMART north-south operating route. This short section would provide the proposed passenger service with a connection from the rail junction at Novato to the existing SMART Novato-Hamilton station. The Novato-Hamilton station would serve the western terminus station for the Novato to Suisun trains; once trains arrive at Novato-Hamilton station, they would need time to “change direction” to be prepared to proceed eastward toward Suisun.

### ***NVTA Travel Behavior and Transit Feasibility Report (2019)***

State Route 37 (SR 37) is the most traveled east-west corridor in the North Bay. There is currently no east-west transit service along the corridor. The purpose of this study is to understand the demand and propensity to use transit and non-single occupant vehicle options on SR 37 to relieve congestion and address equity concerns. Fehr & Peers collected relevant baseline data for the entire SR 37 corridor from a variety of sources to gain a robust understanding of how the SR 37 corridor is currently being utilized by auto traffic. Data from the various sources were combined and analyzed to identify and quantify auto travel demands and the origin-destination and demographic characteristics of auto travelers along the corridor. The focus of the analysis was on establishing the size of the potential transit markets for five separate segments of SR 37.

Key findings from the travel markets assessment and transit options evaluation conducted as part of this study include:

- The SR 37 corridor primarily serves lower density, dispersed development patterns. A right-sized transit approach would classify the travel market as a many-to-many demand landscape with just a few trip centers. A majority of travelers are not going to a high-capacity rapid transit service.
- The corridor serves mostly long distance, work-related trips. The primary travel market is Solano residents accessing job centers in Marin/

Sonoma counties.

- A high percentage of corridor trips are made by those earning at or below the median Bay Area income of \$100,000. Tolling is proposed and currently being studied for Segment B, which would likely further incentivize transit and pooling options, especially for users who cannot afford the toll or do not wish to pay the toll.
- The travel markets assessment suggests on-demand and enhanced pooling services as opposed to fixed route service but that some express bus opportunities exist.
- 29 percent of daily users said they would be willing to use transit, indicating demand for non-highway infrastructure solutions for the corridor.
- The SR 37 corridor is very congested with roughly 19 percent carpooling, indicating there is a market for and an opportunity to bolster existing carpooling rather than providing new options
- HOV lanes are proposed and currently being studied for Segment B, which would likely incentivize transit and pooling options to bypass congestion.

In conclusion, the travel markets assessment suggests there are some fixed route opportunities between Vallejo, Fairfield, and Novato, but that other travel patterns are too dispersed and more efficiently and cost-effectively served by other transit options such as on-demand transit or enhanced pooling services. Two potential limited-stop express bus routes were developed to efficiently serve the Fairfield to Novato and Vallejo to Novato travel markets. Express Service operating costs are approximately \$3-5 million annually and would need approximately 5,000 riders per month to meet a 20% fare box recovery.



## MEETING NOTES

Project: Grand Bayway SR37 Public Access

Address: Baylands Center, 2100 Sears Point Rd, Sonoma, CA 95476

Date: April 24, 2019

Time: 11:30 am – 01:30pm

## ATTENDEES

Consultant Team:

Erik Prince (Atlas Lab)

Tom Leader (TLS)

Kushal Lachhwani (TLS)

Susan Schwartzberg (Exploratorium)

Steve Kinsey (Civicknit)

Breeze Kinsey (Civicknit)

Molly McNally (Alta Planning)

Local Working Group:

Ben Botkin (Water Trail)

Maureen Gaffney (Bay Trail, Napa Vine Trail)

Bjorn Gripenburg (Marin County Bicycle Coalition)

Eris Weaver (Sonoma County Bicycle Coalition)

Patrick Band (Napa County Bicycle Coalition)

Karen Taylor (CDFW)

Melisa Amato (USFWS)

Barbara Salzman (Marin Audubon)

Renee Spent (Ducks Unlimited)

Wendy Eliot (Sonoma Land Trust)

Kathleen Beistel (Vallejo Representative)

Karen Sims (Vallejo Representative)

## AGENDA

- Introductions / Personal Interests
- Review overall project purpose and Study Area. Goals and principles related to Grand Bayway
- Process, Schedule and Deliverables.
- Overview of project relationship to SR37 Transportation Planning effort.



- Introduction to Public Education Scope
- Review preliminary maps
- Identify Dream opportunities and most challenging constraints as a group.

## NOTES

- In general, Sea Level Rise (SLR) is a major concern for access planning in this region with most areas projected to be affected by SLR.
- Review publication list in detail to make sure it includes all the latest important studies done.
- Wendy Eliot:
  - noted that access from the edges of Marsh and the upland edge has some beneficial logic but present some challenges for marsh retreat with SLR.
  - SLT hosts summer camp for 3 weeks at the Baylands Center for underserved communities. SLT endorses access and bringing kids/school children out to the Baylands.
- Barbara Salzman:
  - noted that she is not against access in the region but stressed the importance of projecting 50 years into the future, the importance of the upland ecotone, viewing critical habitat from afar, and for communicating the importance of Bayland habitat.
  - A single solution should not be implemented for Bay trail in this region. Agrees that site specific design needs to be explored based on 'spectrum of accessibility'
  - Also mentioned that SLR brings need for upland habitat, ecotone levees
- Karen Taylor:
  - noted that with over 14,000 acres owned in the study area the CDFW is the major land owner.
  - Has interest in getting people out here to the baylands but is concerned about way to do that to while allowing the marshes to migrate with SLR.
  - Noted that O&M considerations should be built into the planning process – maintenance proves to be a very difficult challenge in this vast region.
  - Considers the SMART railway tracks to be impediment to SLR migration and response
- Maureen Gaffney:
  - stressed that there are many recent examples of access that deals with SLR when done in association with a restoration project.



- People need to see these restoration efforts to continue to vote to support restoration efforts.
- Supports a Class 1 fully separated trail around the entire Bay Area.
- She does not want to see another Yolo Causeway project. She envisions places where an elevated trail can “touch down” for more direct exploration
- Noted how the SMART Path and Vine trail can serve as bookend access trails to this study. She sees E-bikes as being part of transportation in the corridor.
- Ben Botkin:
  - noted that water access is the best way to see the Baylands.
  - Promotes a few strategic locations to get in and out of a boat – combining higher density use with more amenities with low-level access points like at Green Island. He mentioned that Mare Island and downtown Petaluma have high potential
  - Promotes programming to lead tours and rent boats for people that don't own one. Guides are “knowledgeable educators”
  - Noted that facilities are also used by hunters. Promoted facilities for overnight stays and noted 8 paddle-able miles between.
  - Has just released a new set of Design Guidelines for the Water Trail
- Melisa Amato:
  - Mission for USFW is for wildlife first and trails are not in their mission, but education is.
  - 2 endangered species in these Baylands.
  - Environmental education and interpretation are in their mission, Access is not
  - Access is important but needs to balance with the number of people.
  - Have had success with environmental education with limited number of high school students in past
- Bjorn Gripenburg:
  - N/S Greenway is being planned along the SMART pathway.
  - Connections to Great Redwood trail
  - Promotes seamless low stress trail environments.
  - People in the Petaluma region don't visit this area by bike but could be a great opportunity.
  - Yolo concept “doesn't work” - debris in path



- Kathleen Beistel:
  - Important to make known what's already there in areas like Vallejo. There is an untapped resource ready to take off with better connections.
- Karen Sims:
  - Best way to protect the Baylands is through education.
  - Vallejo has participation voting and many issues include bike improvements with any road ones.
  - Important to get more people involved.
- Patrick Band
  - Priority access not an option for people. Recognize the public voting future for measure like AA are often reliant on bike corridor access to get projects funded.
  - With SLR do we retreat here or buildup? Looking at the 121 corridor and the SMART E/W rail corridor can be an obstacle but also an opportunity.
- Jessica Davenport
  - Supports bay trail and water trail as a part of restoration projects.
  - Happy to see the scope includes SR37 segment A and B and see the region as the "San Pablo Baylands".  
"landscape scale"
  - Believes access builds public support.
  - Future funding possible through Prop 68/Water Bond.
- Renee Spent:
  - SLR is a big issue with complex projections.
  - Access is not a binary choice
  - All land in the scope area serve as critical habitat but there are some nuance understandings such as borrow ditches being less critical.
  - Need to review detail trail alternatives to get into discussions for areas that could be "no-go" zones.
- Tom Leader:
  - Create awareness of these baylands and an invitation to participate in them.

## ACTION ITEMS

1. Consultant team to send LWG list of publications, website link and maps for review and comment.



**Focus group Meeting at Sonoma Raceway – July 17<sup>th</sup>, 2019****Attendees:**

Larry Wyckoff- CDFW

Karen Taylor-CDFW

Barbara Salzman- Marin Audobon

Renee Spenst- Ducks Unlimited

Megan Marriot - USFWS

Melissa Amato- USFWS

Sandra Scoggin- SF bay joint venture

Julian Meisler – SLT

Sam Veloz – Point Blue Conservancy

**Team Members:**

Erik, Steve, Brian, Molly, Kushal, Katie

**SF Bay Joint Venture's role- Sandra**

- 27-member committee acting as primary convener of voluntary wetland habitat restoring organizations
- interested in building constituency aware on nature and wildlife by designing appropriate access
- Actively tracks climate change policies and incorporates guidelines in all their projects
- Participates in MTC's SR37 committee
- #1 goal – habitat, #2 public access and education

**CDFW- Karen and Larry**

- Currently involved in Post construction monitoring at 2 projects (Napa R salt marsh restorations and Napa Plant Site)
- They are concerned that our current outreach is only targeting bike advocate community. Interested in how we'll connect with others
- Have bought land for the last 30 years in this region only for wildlife restoration but accepts that not all of it was restored to adapt to SLR. Is aware that current levee system will not be able to hold ground as water level rises but no plans to invest money in raising levees.
- They do allow a lot of REGULATED public access for purpose of bird watching, hunting and other wildlife dependent activities. Article 14 prohibits camping, biking so they will never agree to put a paved trail in their land or allow using any of the levees for pedestrian/biking purpose. They rather allow people to wander freely in their regulated areas than put them on a designated trail. This is not harmful for any sensitive habitat, which is different from how bird habitats are structured in south bay restoration projects.
- In North Bay, Users (those birding, fishing, hunting, educating) need permits/licenses for entering and using the land. That is how/when they control which parking lots, areas, etc. are open to public access and ensure habitat sensitivity. Open to Green Island site for public amenities.
- Biggest challenge is maintenance. No manpower, no resources to keep track of the amenities and activities.

- Fine to consider their Green island facility to be developed as a hub. Duhig Road Field Headquarters at Buchli is only for admin purposes and staff housing
- Prefers spur trails over loop trails

## USFWS

- As soon as they buy the property, they restrict access. Only regulates it after wildlife habitat considerations.
- Maintenance is a big issue
- Considering SLR for migration of wetlands
- Suggested that the preferred location for trails would be along SR 37 and the SMART rail line- other participants concurred

## Sonoma Land Trust- Julian

- Sonoma Creek Study – Public access is indeed part of their study, but they do not know what element, scope of public access would be included yet. Due date for this study is pushed beyond this year.
- Describes the tension with BCDC policies. BCDC forces the land owners to maintain public access and all trails in place for eternity if they allow a trail to be built through their land. With some certainty of SLR, they are hesitant to promise maintenance and access as they wish freedom in adapting the trails in future.
- Recommends finding funding for maintenance. Example - He said Measure J- 1/8 cent sales tax for 10 years to be used for maintaining parks- passed in 2018 w/ 70% support

## Marin Audobon-Barbara

- They own about 400 acres, including 137-acre diked Bayland along Atherton Ave. in Novato
- Support viewing from the road shoulder there
- Believes that the 2011 map has errors, and is out-of-date based on continuing restoration work

## Point Blue

- Organization is science-based; works closely with the resource agencies, and Ducks Unlimited
- Almost done with **A Framework for Prioritizing Adaptation Strategies** that is focused on Marin, but applicable throughout the Baylands
- Companion tool to the Restoration Atlas

## Additional Comments

- As a group, they initially felt it was premature to fund this Scoping Report
- CDFW remains disappointed that a section of the Bay Trail was legislatively approved near Green Island
- Generally, preference for public access design is a point of access rather than a parallel route
- Habitat restoration is an adaptive process that requires time before considering where public access would be acceptable
- Recommended that no routes be shown on a map, because even if it has qualifying note, many will consider it to be a commitment to a location

- There is a concern on what lines are shown currently on various maps as trails (bay/water/ridge/smart/vine). These are not legally approved and everyone to send in their corrections to Bayway Team.

## Follow Up:

- Everyone to send in their corrections on existing and proposed access maps prepared by our team.

## CA 14 notes

**Bicycles** and bike riding are prohibited on department lands except where authorized and designated in subsection 551(j), Section 552, and subsection 630(g) of these regulations.

## CA title 14

550:

[https://govt.westlaw.com/calregs/Document/I8BF421FD792E449FBF3BAF02885C2BD8?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I8BF421FD792E449FBF3BAF02885C2BD8?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

551:

[https://govt.westlaw.com/calregs/Document/IC13E878A26E94A74B7DCDEF7460F4BEE?viewType=FullText&listSource=Search&originationContext=Search+Result&transitionType=SearchItem&contextData=\(sc.Search\)&navigationPath=Search%2fv1%2fresults%2fnavigation%2fi0ad62d330000016c07b001e7f421fac9%3fNav%3dREGULATION\\_PUBLICVIEW%26fragmentIdentifier%3dIC13E878A26E94A74B7DCDEF7460F4BEE%26startIndex%3d21%26transitionType%3dSearchItem%26contextData%3d%2528sc.Default%2529%26originationContext%3dSearch%2520Result&list=REGULATION\\_PUBLICVIEW&rank=23&t\\_querytext=bicycle+](https://govt.westlaw.com/calregs/Document/IC13E878A26E94A74B7DCDEF7460F4BEE?viewType=FullText&listSource=Search&originationContext=Search+Result&transitionType=SearchItem&contextData=(sc.Search)&navigationPath=Search%2fv1%2fresults%2fnavigation%2fi0ad62d330000016c07b001e7f421fac9%3fNav%3dREGULATION_PUBLICVIEW%26fragmentIdentifier%3dIC13E878A26E94A74B7DCDEF7460F4BEE%26startIndex%3d21%26transitionType%3dSearchItem%26contextData%3d%2528sc.Default%2529%26originationContext%3dSearch%2520Result&list=REGULATION_PUBLICVIEW&rank=23&t_querytext=bicycle+)

552:

[https://govt.westlaw.com/calregs/Document/I1F781B36E35842808248D5EB528781DC?viewType=FullText&listSource=Search&originationContext=Search+Result&transitionType=SearchItem&contextData=\(sc.Search\)&navigationPath=Search%2fv1%2fresults%2fnavigation%2fi0ad62d330000016c07b001e7f421fac9%3fNav%3dREGULATION\\_PUBLICVIEW%26fragmentIdentifier%3dI1F781B36E35842808248D5EB528781DC%26startIndex%3d21%26transitionType%3dSearchItem%26contextData%3d%2528sc.Default%2529%26originationContext%3dSearch%2520Result&list=REGULATION\\_PUBLICVIEW&rank=24&t\\_querytext=bicycle+](https://govt.westlaw.com/calregs/Document/I1F781B36E35842808248D5EB528781DC?viewType=FullText&listSource=Search&originationContext=Search+Result&transitionType=SearchItem&contextData=(sc.Search)&navigationPath=Search%2fv1%2fresults%2fnavigation%2fi0ad62d330000016c07b001e7f421fac9%3fNav%3dREGULATION_PUBLICVIEW%26fragmentIdentifier%3dI1F781B36E35842808248D5EB528781DC%26startIndex%3d21%26transitionType%3dSearchItem%26contextData%3d%2528sc.Default%2529%26originationContext%3dSearch%2520Result&list=REGULATION_PUBLICVIEW&rank=24&t_querytext=bicycle+)

## **Discussion on Regulatory Agencies in North Bay SR 37 Corridor Meeting – Sep 4, 2019**

### **Attendees:**

Allison Brooks-BARC  
Kevin Chen-MTC (SR 37)  
Laura Thompson-SF Bay Trail  
Maureen Gaffney-Sf Bay Trail  
Amy Hutzal-Coastal Conservancy  
Jessica Davenport- Coastal Conservancy  
Eric Buehmann-BCDC  
Andrea Gaffney-BCDC  
Moir McEnespy- Team Bayway, Coastal Conservancy  
Erik Prince-Team Bayway, Atlas Lab  
Steve Kinsey-Team Bayway, Civicknit  
Kushal Lachhwani- Team Bayway, TLS  
Tom Leader – Team Bayway, TLS (on phone)

### **Key Points/Takeaways:**

- **SR37/SHOPP Project Coordination**
  - Suggest the Bay Trail, Sonoma Parks and MTC and our management team send a letter to Caltrans requesting the two SHOPP projects at 121 intersection and Tolay Creek Bridge include considerations for complete streets, pedestrian and bike circulation to be considered with design and development of these 2 SHOPP projects. Currently, both the projects deliberately exclude on street improvement components. This area represents a significant near-term opportunity to improve public access in the region.
- **BCDC Policy**
  - Note Bay Plan Public Access Policies - BCDC does not require landowners to maintain public access in place for eternity or 2100 with SLR impacts. Needs to be "resilient" to mid century and adaptable for 2100 SLR not for every project - should have maximum public access consistent with the specific project. Projects or trails can flood and be resilient and that's ok/resilient.
  - The feedback from Erik Buehmann is that there is plenty of leeway to permit and maintain trails that doesn't require them to be maintained in place for eternity. And the permits have a scope of review/renew in perpetuity as conditions change over time.
- **CDFW Article 14**
  - Feedback from BCDC: not take the limitations and feedback as the letter of law. Understand the feedback from CDFW as real constraints that make public access in certain regions difficult but not impossible

- CDFW has significant limitations for access on levees, staff/maintenance. Work with constraints and understand most of their land doesn't limit the critical opportunities planned for increasing and connecting access.
- Many precedents were mentioned where CDFW land has allowed public access/trails such as Napa Plant Site, Eden Landing, Hill Slough, Suisun Marsh, Green Point. CDFW lands have sub categorization of their properties so a blanket ban using Article 14 should not be taken strictly
- We have been reviewing specific Article 14 Section 550/551- will provide for final report

- **Maintenance**

- All recognize this is a significant constraint for public access in the region. Bond measures that fund these projects can only fund capital improvements and not funding for annual maintenance.
- BCDC strongly recommended incorporating maintenance into the budget/trail planning for any projects. Suisun Marsh restoration with CDFW is a recent example of a permit that required funding for operations and maintenance (funding by BCDC & DWR?)

- **Criteria for Public Access Study**

- SCC cautioned against thinking of public access in this region as a holistic planning study for both restoration and transpiration efforts. I.E. the type of trails and level of access along SR37 likely looks different has different impacts compared to say public access/trail along Skaggs Island. Important to define the level and type of trails/public access for these different conditions so it's not all lumped together. If it's all lumped together and undefined it creates confusion and unnecessary conflicts.
- Recommend categories for public access that goes along SR37/SMART/existing roads versus public access within restoration lands. Develop a criterion for public access, a decision framework (reference Suisun Marsh Restoration).
- Also reference North Coast I-5 Corridor Plan in San Diego for public access criteria/framework, and design/development strategies
- Recommendations for Public Access integration in Sonoma Creek / Petaluma River restoration studies could be included in Bayway Public Access Study Report.

- **Lines on a Map**

- Discussed pro and cons to having public access planning lines clearly designated on a map - there is rationale for both showing clearly the lines/alignment (i.e. Bay Trail Maps) versus a desire from the environmental/restoration group to be more general allowing for minor alignment shifts/adaption as restoration science or modeling can inform the best location for trails. BCDC agrees and states there is flexibility in adapting trail alignments in future (if there is a need) after monitoring restoration
- Since the funding for our study is a government source, we cannot show lines on the map because the document will be public, and it will allow landowners to raise prices of their lands and alert them for other reasons.

- Agreed to show proposed trail alignments in restoration regions as more ambiguous connecting "corridors" - with the understanding that a trail will go in this general area but the exact alignment within a property is to be determined. Becomes a bit of a graphic exercise.
  - Examples of Corridors where this becomes important: Skaggs Island, Tubbs Island/Vallejo Sanitation
- **SR 37 updates**
    - Segment B is starting with PA & ED phase now
    - \$10 M for Seg A PA \$ ED is also approved and might have started the process already. Segment A is looking at both long-term and immediate flooding concerns not as independently as Segment B is looking at both interim and ultimate solutions.
    - \$500k SB1planning grant for Segment B is also approved to begin Environmental Outreach with all stakeholders involved to gather ideas for ecological enhancements. In addition, MTC has contributed \$100,000.
    - RM3 lawsuit nearing to conclusion and the money will be available soon to begin EIR process for preferred alignments.
- **SF BAY Trail**
    - All the alignments shown on SF Bay Trail Map (existing and planned) have been adopted and approved through multiple documents and happy to provide the sources in our existing map if needed. They should be shown on existing access map.
    - Have worked successfully in past for adapting Bay trail with SLR rise/restoration concerns and BCDC have helped. (Eg- Loop at the end of Tubbs Island Trail)

**Grand Bayway-Public Access Study  
Local Working Group Meeting-2****Sep 23 2019****Attendees:**

Melisa Amato – USFWS  
Bjorn Gripenburg – Marin County Bicycle Coalition  
Allison Brooks-BARC  
Maureen Gaffney-Sf Bay Trail  
Ben Botkin- Bay Area Water Trail  
Kathy Beistel-Vallejo/Napa Riverwalk  
Jessica Davenport- State Coastal Conservancy  
Ken Tam – Sonoma County Regional Parks  
Julian Meisler – Sonoma Land Trust  
Barbara Saltzman – Marin Audubon Society  
Erik Prince-Team Bayway, Atlas Lab  
Steve Kinsey-Team Bayway, Alta  
Molly McNally – Team Bayway, Alta  
Susan Schwartzenberg-Team Bayway, Exploratorium  
Kushal Lachhwani- Team Bayway, TLS

**Meeting Minutes:****Public Presentation**

- Public Presentation at Exploratorium is confirmed on Nov 13<sup>th</sup>, 2019 from 6:00-8:30
- The discussion including panelists will focus on Bay Wide public access
- Suggested to duplicate the event in Vallejo/North bay to include the local community with focus on local public access
- Suggested to make the panel diverse and timely announcements to ensure good, diverse turnout. Save the date announcements will be distributed the first week of October.

**SHOPP Project**

- These projects are happening in ROW owned and managed by Caltrans. The two projects include intersection between SR37-121 AND the 2 lane EB merger at east of the same intersection. Both these projects currently do not include any public access planning and considerations for widening the Tolay Creek Bridge.
- Team has identified this as a big opportunity for public access/interchange hub and would be missed if SHOPP projects move towards CEQA with their current designs.
- SHOPP projects need to look at options for public access and joint letters from SF Bay Trail, Sonoma Rec and Park will be submitted to Caltrans.

- Alison Brooks reported that Governor Newsom has signed legislation requiring Caltrans to consider climate change adaptation in all SHOPP projects.

## SR37 Segment B

- Two alternatives will be evaluated before a final design is selected. One option would use peak direction shoulders for traffic during commute hours and provide a bike shuttle service. The other option would include a moveable median barrier (MMB) and allow for existing bike use to continue a five-foot-wide shoulder in each direction. The Interim Congestion Relief project PA/ED phase has been funded with AECOM designated as the lead consultant.
- The ultimate solution for SR37 has been identified as a 4-lane facility (2 each direction) with 12' wide Class I path to be designed as a causeway or a combination of higher berm and causeway. Managed lanes will be considered in both the interim and ultimate project. No contract has been awarded for the PA/ED phase.

## BCDC Permits on Public Access

- Several speakers pointed out that flexibility in adapting public access once permitted has not been as straightforward as mentioned earlier by BCDC members-in a Sept 4 BARC meeting with Team Bayway, MTC, Coastal Conservancy, BCDC, and Bay Trail staff.
- Local Working Group Members were encouraged to pass on example projects to discuss with BCDC.
- Team Bayway will follow up with BCDC to clarify what flexibility of maintaining/adapting public access trails is legally available.
- Bay Trail staff stated that they worked with BCDC to mitigate the loss of Tubbs Island loop trail by designating a small trail section adjacent to it.
- In addition to mitigation measures, Team Bayway will discuss-policies with BCDC that would allow modification or inundation of trails to achieve diverse restoration/SLR outcomes. Time based maintenance monitoring is preferred by all LWG members.
- It is also suggested to have different permits/expectation for maintenance of public access trail systems based on usage, location and habitat sensitivity. SR 37 Bay Trail should have higher standards and expected maintenance compared to connecting trails in Baylands/ Bay Trail staff mentioned that in this area, most Bay Trail sections are not expected to be paved.

## Focus Areas, Regional Connectors and SR 37 Bay Trail

- An LWG member suggested including Mare Island as one of the focus areas. She invited participation in a hike around the Island on Saturday, September 28<sup>th</sup> where connections could be considered.
- A few members expressed interest in understanding a relative level of anticipated hierarchy in use for each focus area. It should be understood that included in the study is a base-line Project Demand Analysis to outline improvements as part of the SR 37 efforts only.
- All trails and amenities (local + regional) to be strategized in least impactful zones to preserve habitat and restoration efforts. Precedent examples would be beneficial to see the designation of core areas, buffer areas and active areas in similar wildlife zones.

- Team Bayway clarified that the regional connector analysis is not an attempt to complete the ‘SF Bay Trail’ before SR37 Ultimate Facility is completed but to improve public access for the communities around the baylands. Parts of this regional connector are already existing, and the intention is to identify where these existing facilities can serve the communities sooner than waiting for SR37-Ultimate Facility. Team Bayway will illustrate trail routes in the least impactful zones to preserve existing habitat.
- Skaggs Island Connector – Team Bayway identified this as a critical connection in the region and stated that the existing USFWS Comprehensive Conservation Management Plan (CCMP) authorizes a Bay Trail alignment through Skaggs Island. Just north of the Refuge, Sonoma County has identified Hudeman Slough as a preferred location for expanded public access, including a boat launch and camping facilities. USFWS mentioned that its plan is from 2011 and anticipates revisions in the coming years with a goal of wildlife preservation. Team Bayway recommends using the outcome of this study to inform future public access opportunities through Skaggs Island, in either a revised CCMP or in a Visitor Management Plan as called for in the current CCMP.
- Staff from the SF Bay Water Trail expressed interest in adding more launch sites and other facilities in support of water access. Improved access into Sonoma Creek was identified as an example. Staff also stated that it is recognized that SLR will eventually eliminate some existing facilities.
- Lower Sonoma Creek Study, funded by Measure AA, is also mentioned as an example where Public Access opportunities along creek corridor will be identified, subject to acceptance by regulatory agencies and landowners. Sonoma Land Trust seeks to work in good spirit with all stakeholders, to continue the discussion on integration of public access in current/future restoration projects.

## MEETING NOTES (Updated 12/13/19)

Project: Grand Bayway SR37 Public Access

Address: Baylands Center, 2100 Sears Point Rd, Sonoma, CA 95476

Date: December 4<sup>th</sup>, 2019

Time: 11:30 am – 01:30pm

## ATTENDEES

Consultant Team:

Erik Prince (Atlas Lab)

Tom Leader (TLS)

Susan Schwartzberg (Exploratorium)

Steve Kinsey (Civicknit)

Brian Burchfield (Alta Planning)

Molly McNally (Alta Planning)

Allison Brooks (Bay Area Regional Collaborative)

Local Working Group in attendance:

Ben Botkin (Water Trail)

Maureen Gaffney (Bay Trail, Napa Vine Trail)

Bjorn Gripenburg, on Phone (Marin County Bicycle Coalition)

Patrick Band (Napa County Bicycle Coalition)

Jessica Davenport (State Coastal Conservancy)

Karen Taylor (CDFW)

Melisa Amato (USFWS)

Barbara Salzman (Marin Audubon)

Kendall Webster (Sonoma Land Trust)

Kathleen Beistel (Vallejo Representative)

Gabe Lanusse (Greater Vallejo Recreation District)

Local Working Group (CC'd)

Karen Sims (Vallejo Representative)

Renee Spenst (Ducks Unlimited)

Julian Meisler (Sonoma Land Trust)

Ken Tam (Sonoma Regional Parks)



## AGENDA

- Introduction, updates to schedule
- Updates and interests from Local Working Group
- Zone Management Concept/Design Guidelines & Guiding Principles for Descriptions
- Guiding Principles, Feedback on Evaluation Matrix
- SR37/121/Tolay Creek Focus Area
- Mare Island Focus Area
- Questions/Comments

## MEETING OBJECTIVES

- Review and feedback on the Bicycle and Pedestrian Purpose and Need Statement.
- Consideration and feedback for developing a regional Zone Management Plan in a future planning effort - to aid in future decision making that balances public access and the project of sensitive habitats.
- Review and feedback on Guiding Principles, including associated metrics and relative weights.
- Confirmation of two priority near-term projects to and general scope of their opportunities.

## NOTES

### FRAMEWORK (SHORT, MID, LONG TERM SOLUTION) DIAGRAMS:

- Suggestions to separate different connecting corridors to explain timescale, especially as it might relate to stages of flooding/SLR.
- Note number of years for 'mid, short, and long term'
- Concern that moving forward, after the document is finished, the maps will stand alone without disclaimer. Consider ways to include notes/legends on the maps related to limitations and/or intent of use.
- Skaggs island
  - Discussed email request from Anne Morkill Refuge Complex Manager from the San Francisco Bay National Wildlife Refuge Complex USFWS (dated 12/03/2019) regarding opposition to showing any access routes through the Skaggs Island Unit of the San Pablo Bay National Wildlife Refuge.
  - Disagreement remains regarding the removal of reference to public access at Skaggs Island. The current Comprehensive Management Plan for this area specifically references both



the SF Bay Trail and the Bay Area Water Trail. While there may be a desire to modify the plan, that process has not occurred, must involve all relevant stakeholders when it does, and until such time, the existing plan is the relevant guidance document.

- Request that the consultant team revise the Framework Map to not show the route through Skaggs Island as a “Mid-Term Regional Connector” line at the request of USFWS, Sonoma Land Trust and Marin Audubon.
  - Graphic for the Framework map and Focus Area map will be revised to address the request by taking the Skaggs Island connector line out of recommendations in this report as a near or midterm access opportunity.
- Noted that “compatible and appropriate” public access on Skaggs Island will require additional planning in coordination with restoration efforts.

## ZONE MANAGEMENT CONCEPT

- General support of idea and how it could help guide decisions in the future. Most discussion centered around “Core Wildlife Area” concept and how this could aid restoration effort. Concerns were also expressed from Bay Trail/Water Trail that this should not be used to holistically exclude all access but help guide the appropriate kinds of access in various areas.
- Consultant team confirmed that does not fit into timeframe of the scoping report and as a suggested as a ‘Next Step’ of the document.
  - Opportunity to use Denver or a different location as an example of how this process is done.
  - Important that this potential process be done as a transparent, public planning process.

## BICYCLE AND PEDESTRIAN PURPOSE AND NEED

- Feedback will be given per email after meeting.

## GUIDING PRINCIPLES

- Suggestion for the LWG to provide any edit recommendations per email after meeting.
- Protection and Adaptability



- Include language such as 'adaptable and appropriate' related to access in wildlife and sensitive habitat
- Metric to be adjusted or changed to something similar to Zone Management Concept given this map or process has yet to be determined.
  - 'Potential restoration area' or per 'private vs. public land'
- Design Excellence
  - Adding improve signage and awareness to existing access facilities could provide very valuable and needed.
- Prioritization and Rating process
  - Consider ranking as a 'filter process' to evaluate a few projects together that have greater applicability to each other.
  - Suggestion to screen projects on the criteria matrix that might not meet a prioritization threshold, so that a hierarchy projects area envaulted together.
  - Potential to add '0' as a metric
  - Ensure that ranking and evaluation process describes the overall needs, demand, and feasibility of the projects and may not be based on a total 'number' .

## PRIORITY PROJECTS

Overall in support of two areas to carry forward as near-term projects.

- Mare Island
  - Opportunity to bring more people and less cars to the island.
  - Connect to Cullinan Ranch
    - Further study on water access with tidal and currents in the channel
    - Current informal trail on levee
      - Private ownership and Caltrans mitigation
  - Bridge safety is a concern from Vallejo to Mare Island for pedestrians and bicyclists.
  - Bay/Vine Trail is 65% and this is an opportunity to capitalize on that adjacent project.
- Sears Point/121
  - Complete 4300' gap would allow for 9+ miles of continuous bay trail.
  - Opportunity to coordinate complete streets principles at future roundabout.
  - Concern for wetland along current SR-37 route.



- Concern was noted that routing pedestrians and bikes adjacent to this stretch of SR37 could be dangerous.
- Opportunity for Programs including camps, passive education, 'Exploratorium' .
  - Consider temporary, pop-up or moveable education 'van' rather than a static, large building





May 13, 2020

Erik Prince, Principal  
Atlas Lab Inc.  
2523 J Street, Suite 201  
Sacramento, CA 95816

Dear Mr. Prince:

We are grateful for the work your team has put into preparing the *Draft SR 37 Public Access Scoping Report* and we appreciate the opportunity to provide you with comments. This letter represents a collective response from U.S. Fish and Wildlife Service San Pablo Bay National Wildlife Refuge, California Department of Fish and Wildlife, Ducks Unlimited and Sonoma Land Trust. General comments as well as our guiding principles to public access in the Sonoma Creek Baylands are included in this letter. Additional comments are attached.

First and foremost, we want to commend you for taking on this challenge and moving forward public access planning in San Pablo Bay. Today, perhaps more than ever, the importance of the public health benefits of access to nature is evident and we support appropriately located and designed public access. We also recognize that defining what is appropriate when it comes to public access can be difficult. While there is no way around that, this inclusive process helps promote agreement.

Following our review, we have three overarching comments.

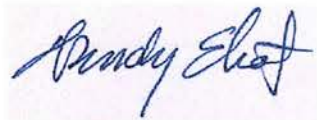
1. While stakeholder engagement has improved significantly since the original *Grand Bayway* report, please contact and meet with all private landowners whose properties are targeted for public access facilities. Trails crossing private land should not be shown on maps without the explicit consent of the owners due to the inevitability of those maps being taken out of context, even if caveats are given in the text of the report.
2. Similar to above, it is essential to contact landholding resource agencies (e.g. California Department of Fish and Wildlife, San Pablo Bay National Wildlife Refuge) directly before showing trails, even conceptually, across their lands.
3. All trails should be in locations where they will have the least impact to sensitive resources.
4. While feasibility and resiliency of trail placement is called out in the report, some trail alignments are not consistent with principles of resiliency.

The *Sonoma Creek Baylands Strategy*, a document prepared with the assistance of the organizations and agencies listed here and reviewed by a scientific advisory panel, provides the following guiding principles for public access, which we urge you to adopt in your report.

- Options for public access should be considered during every restoration project phase.
- Before access is included in site design, ensure that resources, including funding and the entity responsible for the design, construction, maintenance, law enforcement and ownership of the access facility have been identified.
- Build trails from soft, natural materials that may deteriorate with sea-level rise, flooding, and inundation without harm to surrounding habitat.
- All access should be adaptable to ensure on-going facility safety and maintenance. Facility safety and maintenance needs may change with anticipated changing landscape conditions.
- Improve signage at existing access facilities (e.g. Eliot Trail) to increase awareness of existing public access opportunities.

We look forward to continuing to work with you in the future as the San Pablo baylands continue to play a vital role in our region's ability to adapt to the changing climate.

Sincerely,



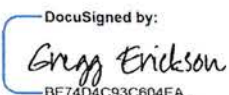
Wendy Eliot  
Conservation Director, Sonoma Land Trust



Chris Barr  
Deputy Complex Manager, United States Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex



Mark E. Biddlecomb  
Director, Western Region, Ducks Unlimited

DocuSigned by:  
  
BE74D4C93C604EA...

Gregg Erickson  
Regional Manager, Bay Delta Region, California Department of Fish and Wildlife

Attachments:

- Sonoma Land Trust comments
- Letter from US Fish and Wildlife Service

## General Comments, Sonoma Land Trust

Sonoma Land Trust appreciates the opportunity to continue participating in this planning process. We were happy to attend and provide input at all three of your Local Working Group sessions. Your report represents an impressive mixture of creativity, inclusivity, and hard work. While many of our comments are captured in the global comments given in our joint comment letter with USFWS, CDFW and DU, our comments below reflect both an emphasis on our past points and expression of new ones based on the document.

Importantly, we want to emphasize that we are proponents of appropriate public access. It is why we built the 2.5-mile segment of the Bay Trail and the 1.25-mile Sears Point Trail at Sears Point, and provide summer Bay Camp. However, determining appropriate public access points requires knowing how the planning areas are shaped by climate change (currently and in the future). While restoration can make these lands more resilient to climate change, premature designation of trail locations likely limits our ability to maximize resilience.

***Sonoma Creek Baylands Strategy.*** This plan has been developed over the past 18 months and will be available to the public in June 2020. It incorporates input from current landowners and managers on current flooding issues, which will worsen with sea level rise and increased storm frequency and intensity. We heard about the increasing cost and regulatory obstacles to maintaining the levee system that is essential to prevent flooding. We discussed saltwater intrusion, habitat loss and species extinction. We spoke with highway and railroad officials about the risks of sea level rise to current transportation infrastructure. Our goal is to provide scientifically based ideas for ecological restoration that may ameliorate these issues.

While we discussed appropriate public access, we believe project restoration designs must come first. Placing trails on maps now limits our ability to maximize climate resiliency in restoration design. Restoration design should be adaptable to the dynamic changes that climate change brings. Once trails are established, they become fixed features in the landscape and create the expectation of permanence. The underlying assumption in our restoration design is that nothing is permanent. Therefore, we cannot provide for fixed public access features. Further, placing trails on private property is generally not well received by landowners. The *Sonoma Creek Baylands Strategy* provides guiding principles for public access that will be used to develop future projects as they emerge.

***Adaptation and Resilience Plan for the Petaluma River Baylands.*** This plan is in development and will be finished in March 2021. The “planned Petaluma River to Bay Trail Connector” shown on your maps which traverses levee tops on eastern Petaluma River shoreline sounds beautiful in concept. But this land is private and it is vulnerable to tidal and stormwater flooding, a condition that will worsen with time. Building a trail in this location would thwart efforts by willing landowners to restore tidal wetlands or to engage in other efforts to increase resilience on their properties. We do not support including this trail on the map.



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
San Francisco Bay National Wildlife Refuge Complex  
1 Marshlands Road  
Fremont, California 94555



May 12, 2020

Mr. Erik Prince, Principal  
Atlas Lab Inc.  
2523 J Street, Suite 201  
Sacramento, CA 95816

Dear Mr. Prince,

On behalf of the U.S. Fish and Wildlife Service (Service), San Pablo Bay National Wildlife Refuge (Refuge), I am writing to express my appreciation of the work your team has done to prepare the *Draft SR 37 Public Access Scoping Report*. This letter represents the Service's comments on the report.

The Comprehensive Conservation Plan for the San Pablo Bay National Wildlife Refuge (CCP 2011) outlines the general goals and objectives for the Refuge including our goals to provide visitors and the local communities with access to high quality, wildlife-oriented outdoor recreational opportunities to enjoy, understand, and appreciate the wildlife resources on the Refuge, where appropriate. While we wholly support the MTC broad regional vision of improving the resilience of existing transportation systems, tidal marsh restoration and enhancing public recreational access in the North Bay, we must state our opposition to any maps in the scoping report that include planned or proposed land-based trails through San Pablo Bay National Wildlife Refuge. The Refuge was established to provide wildlife habitat for migratory birds and endangered species, therefore, the Service considers public access opportunities during our habitat restoration planning and design in areas where recreational opportunities will have the least impact on sensitive wildlife habitat. My staff has been consistent in sharing these views throughout the various recent planning processes for this region, including input into the original Resilient By Design Grand Bayway Project, MTC's SR37 Transportation and Sea Level Rise Corridor Improvement Plan, SR37 Baylands Group discussions, and the Lower Sonoma Creek Baylands Strategy.

The Service looks forward to continuing to work with MTC and other transportation planning agencies and continue to provide our input on various design plans for segments of SR37 as they are further developed. The access scoping report should not denote any proposed trails across lands managed as part of the San Pablo Bay National Wildlife Refuge. We cannot commit to any future planned or proposed access routes through our lands identified in the SR37 scoping report.

Currently, the entire Skaggs Island/Haire Ranch Unit is closed to public access and may remain closed for the foreseeable future (except for limited Refuge special events). Our planning vision is to restore the entire island to tidally influenced habitats for the benefit of fish and wildlife, including endangered species, and provide functional habitat connections to other current and future tidally restored areas adjacent to this property. Many of the existing levees on Skaggs Island/Haire Ranch Unit may need to be lowered or removed entirely to meet future restoration objectives.


The report also identifies the Dickson Trail extending almost to the Dickson Unit breach. That trail is only 1,400 feet long since the restoration plans are to connect Dickson and Sonoma Baylands Units by breaching a separator levee in the future. We suggest that the maps in the report only shows trails that the USFWS has currently available for public recreation and eliminate any proposed planned trails on USFWS lands. Should MTC and/or other transportation agency seek to propose a specific project on USFWS lands we are happy to discuss a particular project in furtherance of any mutually shared transportation goals.

Our staff continues to participate with the community-based Sonoma Creek Baylands Restoration Strategy team and planning for a restoration projects for baylands from Tolay Creek east to the Napa River, with a shared goals of a single, connected tidal restoration area. We respectfully recommend all land-based public access connectors/connections/trails be located on the outer periphery along existing public transportation corridors (e.g. 37>121>12>29) and local roadways.

Thank you for the opportunity for us to provide these comments on the scoping report and we will continue to provide any input helpful to MTC and partners on various public transportation projects in various planning phases for SR37.

Sincerely,

CHRISTOPHER  
BARR

 Digitally signed by CHRISTOPHER  
BARR  
Date: 2020.05.12 15:31:13 -07'00'

Christopher J. Barr  
Acting Refuge Complex Manager



State of California – Natural Resources Agency  
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 Bay Delta Region  
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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



May 20, 2020

Mr. Erik Prince, Principal  
 Atlas Lab, Inc.  
 2523 J Street, Suite 201  
 Sacramento, CA 95816  
[erik@atlaslab.com](mailto:erik@atlaslab.com)

Subject: Grand Bayway – State Route 37 Public Access, Draft Scoping Report

Dear Mr. Prince:

The California Department of Fish and Wildlife (CDFW) is submitting specific comments in addition to the collective letter for the Grand Bayway-SR 37 Public Access Draft Scoping Report (Draft Scoping Report). The Draft Scoping Report identifies the current state of public access within the San Pablo Baylands, including: facilities for trails, developed park and open space, hunting and water recreation, and recommends alternatives that could lead to a comprehensive, interconnected and resilient system over time. The objective of the report is to identify opportunities and constraints for land- and water-based trails and recreation and to identify a phased approach to regional connectivity with key next step opportunities. We appreciate the opportunity to review and comment on the Draft Scoping Report.

CDFW's Specific Comments to the Draft Grand Bayway-SR 37 Public Access Scoping Report:

- Page 14, Map. The map looks underestimated and does not appear to depict accurate current high tides or three feet sea level rise (SLR) in some places. It would be helpful to include what model is being used.
- Page 20, 2<sup>nd</sup> Paragraph. The following statement is inaccurate "...Ca has tasked its Dept of Fish and Wildlife with developing a similarly structured program to manage the San Pablo Baylands 7,000 acres..." It appears this paragraph is misinterpreting statements in the Land Management Plan (LMP). CDFW created the LMP and was not tasked by California to develop "a structured program" similar to the San Francisco Bay Conservation and Development Commission (BCDC) policies stated in the previous paragraph.
- Page 20, 2<sup>nd</sup> Paragraph. There is no mention of the extensive habitat restoration that has been completed by CDFW. Other paragraphs outline other's restoration efforts. CDFW has managed two major restorations that comprise over 10,000 acres of restored habitat within their study footprint. Also, the LMP is taken out of context pertaining to structured program comment.
- Page 22, 4<sup>th</sup> Paragraph. False assumption: "In the absence of action, this large-scale marsh, one of the last of its kind, will be inundated by sea level rise." While this is possible, various factors will play a role in the outcome. Weather conditions,

Mr. Erik Prince  
Atlas Lab, Inc.  
May 20, 2020  
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sedimentation rates, space for the marsh to migrate, among other factors can influence how much sea level rise will impact the marsh.

- Page 26, 1<sup>st</sup> Paragraph. Please delete sentence: “The water in the San Pablo Bay can be almost entirely fresh, while prolonged drought will cause the salinity to rise and promote the growth of amphipod beds.” San Pablo Bay has such direct connectivity to the ocean that it is not possible for the bay to be “almost entirely freshwater”. “Almost entirely fresh water” applies to rivers and sloughs during extreme winter run off events.
- Page 26, 3<sup>rd</sup> Paragraph. Please delete sentence: “As less and less sediment enters the bay, the edge of this strip marsh is beginning to recede northward, back toward the highway.” The southern boundary continues accrete southward, not erode northward. A USGS topographic map can be used to compare with today’s shoreline.
- Page 29, Summary Bullet 2. “The San Pablo Baylands offer numerous upland and transitional habitat zones adjacent to marshes that include agricultural lands, vineyards and protected regional greenbelts.” Sloughs and levees already butt up against the railroad and vineyard properties. There are very few areas for additional upland expansion of tidal waters without ramifications.
- Pages 30-31, Map. The map appears to be underestimated and does not depict accurate current high tides or six feet SLR. It would be helpful to include what model is being used.
- Page 40, 1<sup>st</sup> Paragraph. The NSMWA’s primary purpose is for wildlife habitat and not for public use. Wildlife dependent activities are a permitted secondary use.
- Page 40, 2<sup>nd</sup> Paragraph. Referring to temporary trail closures, many will still try to access. Without staff or blockades available/present to enforce the temporary trail closure, the closure may be ignored despite educating the public.
- Page 40, 2<sup>nd</sup> Paragraph. Please revise the following statement to include the bold/underlined text below: “While it’s clear that access should be limited for safety and for wildlife protection **and marsh migration**, clearer guidelines could be established by wildlife professionals working more closely with educators to advance a way for visitors to think ecologically toward a resilient future.” CDFW is not only concerned with current habitat conditions, but also the new habitat landscape and available space for the marsh to migrate in the future.
- Pages 44-45, Map. The map appears to be inaccurate in many ways. In particular, NSMWA lines have several errors. Also, important to mention, nearly all of NSWMA is open to public even if a trail system is not present. The various levels of public access is mentioned in the document but is not captured at all in the maps.
- Page 47, 1<sup>st</sup> Paragraph. CDFW properties do not fall within City or County Planning.

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- Page 51, Map Segments in American Canyon. Many of these trail sections are located in the transition zone of marshes and within fully protected species habitat. Trail segments severing habitat connection between marsh to upland cannot be built in order to allow the marsh to migrate into these transition zones.
- Page 53, 1<sup>st</sup> Paragraph. Pond 8 is owned by CDFW and the road is County. The Boat launch is hand launch only (kayaks). Also, CDFW owns and manages the section on the Green Island Unit. There is an expired Memorandum of Understanding with Napa County Open Space District which was set up to help with minor maintenance/clean up on this area.
- Page 55, Green Island Parking/Trailhead Picture. Please use a picture of the actual parking lot. Only one out of the six cars in the included picture is parked in a designated parking lot.
- Page 56, 2<sup>nd</sup> Paragraph. CDFW, not U.S. Fish and Wildlife Service (USFWS), has parking at Wingo and Tolay Creek North. Also, CDFW lands are designated as Wildlife Areas, not refuges... should be described as NSMWA. There are no portable toilets at either area.
- Page 58, Bottom Right Photo Caption. Please rename “Tubbs Island Trailhead” to “Tolay Unit Parking Lot” in NSMWA. Please correct throughout document. The “trail” is on private property (Vallejo Sanitation).
- Page 59, 1<sup>st</sup> Paragraph. Day Island Unit of the Petaluma Marsh Wildlife Area is owned by CDFW, not CA State Parks. Day Island Wildlife Area does not exist, it is a Unit of the Petaluma Marsh Wildlife Area.
- Pages 68-69, 1<sup>st</sup> and 7<sup>th</sup> Bullets. Since USFWS and CDFW are also landowners, it is important to mention there is another layer of authority involved with these entities.
- Page 69, 1<sup>st</sup> Bullet. CDFW information bullet is inaccurate pertaining to CDFW’s regulatory authority. Please consult with CDFW.
- Page 70, 4<sup>th</sup> Paragraph. Listed species should include state and federally listed species. It appears only federally listed species are mentioned. Ex. “the nearly threatened black rail”. California black rail has been state listed since 1971 but is not federally listed. It is also a state fully protected species. The document should identify state listing as well as state fully protected species (e.g. salt marsh harvest mouse, California black rail, California Ridgway’s rail, etc.). Many of these species also need upland connectivity to survive.
- Page 70, 6<sup>th</sup> Paragraph (Sentence in bold). The challenge facing resource agency managers is where and how to provide public access in proximity to sensitive habitats.

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The challenge is also how to address this to allow for climate change and space for marsh to migrate.

- Page 76, 5<sup>th</sup> Paragraph. Please ensure CDFW acronym is updated; DFG is used multiple times in report.
- Page 76, 6<sup>th</sup> Paragraph. Important to note that “Fagan Marsh” is not within NSMWA, Fagan Marsh Ecological Reserve falls under different regulations sections in Title 14.
- Page 76, 7<sup>th</sup> Paragraph. The primary purpose of NSMWA is for wildlife habitat and conservation and not for public use. Wildlife dependent activity is a secondary use.
- Page 77, 7<sup>th</sup> Bullet. Seems the last bullet is underdeveloped. As far as O&M, yes, those are concerns, but protecting/enhancing wildlife habitat seems to not be pulled from LMP like the public access focus.
- Page 78, Environmental Bullet List. LMP and California Wildlife Action Plan should be listed in the environmental section as these plans pertain and were identified in past meetings. Also, if the environmental list is including not just plans, but restoration projects, incorporating the goals of recently completed projects (e.g. Cullinan Ranch Restoration, Napa River Salt Marsh Restoration, Napa Plant Site Restoration, etc.) should be built into the Draft Scoping Report to ensure the restoration efforts achieve their original purpose and need.
- Page 82, Trail Gap Map. A small section of Green Island trail is built and accessible, this should not be labeled in red. Also, a section of trail from the railroad south along the river to the barge channel is not highlighted green.
- Page 86, Management Process Outline Flow Chart. Landowners are not depicted in the management process. It is especially important to include and coordinate early and more extensively with largest landowners such as CDFW and USFWS.
- Page 94, 2<sup>nd</sup> Column, 4<sup>th</sup> Bullet. Misspelled word: breach, not breech
- Page 100, Grand Bayway Public Access Mission Statement. Please revise the following mission statement to include the bold text below: “... and abilities that enhances awareness of the Baylands, the protection of **current and future** sensitive wildlife areas, enhance regional connectivity...”.
- Pages 106-109, Sensitive Species and Habitat Maps. Protected flora and fauna shading is significantly underestimated, especially in the habitat map. Habitat is there and being used in many places the shading is not.
- Page 112, Management Process Outline Flow Chart. Comment same as before on page 86. Should include all landowners (including CDFW) early and throughout process.

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- Page 115, Colorado Glenwood Canyon Photo. There is a difference between sea level rise versus 100-foot walls of flood water.
- Pages 138-151, All Facility Typologies. Typologies consider phasing, resiliency, and habitat sensitivity, but not O&M implications for landowner. Are these considerations only for on Caltrans' Right-of-Way? For example, power tower alternatives should consult Pacific Gas and Electric Company. There are significant potential security, safety, and vandalism issues with providing public access to high power lines.
- Pages 160-161, Water Trail. Conceptually too simplistic and unrealistic. Report does not address the serious fact that this is a dynamic, tidal system and consider the safety of water trail users. Boaters/kayakers get stranded annually by tide.
- Pages 188-192, Maps. Please remove the CDFW Headquarters label. The public will see this and think that it is a visiting center. It is a work facility with residence for NSMWA staff and not open to the general public.
- Page 189, #3 Description and Page 190, Letter A Description. State of California owns Hudeman Slough boat ramp and parking lot facility. Referencing Sonoma County plan gives reader the impression it is Sonoma County-owned property. Also, there is no campground.
- Pages 193-195, #2. Description and map sections of trail within Fagan Marsh Ecological Reserve cannot be built. This should be removed from the map. Also, the trail could easily be moved east of airport to avoid impacts to multiple threatened and endangered species and Ecological Reserve regulatory issues.
- Pages 194-195, Map. Green Island Unit has more existing trail than shown. Also, Pond 8 trail not shown.
- Page 196, 1<sup>st</sup> Recommendation. "Improve the educational and interpretive facilities at Green Island as a potential hub". Improving educational and interpretive facilities at Green Island does not consider the feasibility and cost of O&M and staffing. In general, it is mentioned on page 218; however, this is a critical path to resolve before public access plans move forward.
- Page 199, Map. There is no parking area at the south end of Pond 8. Just county road cul-de-sac at dead end.
- Page 205, Approach. Please address land ownership (public and private) in the planning process.
- Page 219, Summary of Next Steps. Please add coordinating with CDFW to this list considering most of the land identified for public access improvements include lands managed/owned by CDFW.

Mr. Erik Prince  
Atlas Lab, Inc.  
May 20, 2020  
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- Pages 260-261, Photo. Unrealistic drawing of conditions and potential use. This is a large tidal river, not a lazy recreational river. In addition, large boats travel at high speed through this location. It is deep enough for large commercial vessels with channel markers. People squatting at the waters edge, a fisherman dangling his legs off the dock, and smooth water to kayak does not portray a true depiction of the conditions or realistic uses of recreation at this site.
- Pages 266-267, Map. Please remove the section west of the airport runway through Fagan Marsh Ecological Reserve. This section will not be built due to endangered species on the Ecological Reserve. The trail should be moved inland around the east side of airport or to the new corporate park roads.
- Pages 268-269, Existing Levee Map. This map is inaccurate. At a minimum, within NSMWA, several levees identified were lowered and no longer exist. Map should have been reviewed by at minimum the large-scale landowners in the region for accuracy.
- Pages 270-271, Ownership Map. This map is inaccurate. Many of the legend colors or access/no access depictions are incorrect. Also, should indicate who the specific owners are and not just the name of the parcel/land. State, Federal, Local Agency Land, etc. is too general. It would be more helpful to include the owner name next to the land name.
- Pages 272-273, SLR Map. This map seems inaccurate. Is the railroad high enough to hold back 6 feet SLR? Even so, the model does not appear to take into consideration the many open box culverts lining the tracks where no water control structures exist.
- Pages 274-275, Sensitive Species and Habitat Maps. Protected flora and fauna shading is significantly underestimated, especially in the habitat map. Habitat is there and being used in many places the shading is not.
- Pages 276-305, Trail Gap Maps. Overall, some of the maps are inaccurate and/or confusing. As a result, can be easily taken out of context.
- Pages 284-285, Trail Gap Map E (referring to Tubbs Island Trailhead). Please rename "Tubbs Island Trailhead" to "Tolay Unit Parking Lot" in NSMWA. Please correct throughout document. The "trail" is on private property (Vallejo Sanitation).
- Pages 292-293, Trail Gap Map I. Are the red trail gaps not considered designated trails and that is why they are not green? If it is currently accessible to the public, it would seem these segments should be green, therefore making the gap map misleading.
- Pages 302-303, Trail Gap Map N. This map is inaccurate. For example, map sections of trail within Fagan Marsh Ecological Reserve cannot be built and should be removed from the map. Also, the trail could easily be moved east of airport to avoid impacts to multiple threatened and endangered species and Ecological Reserve regulatory issues.

Mr. Erik Prince  
Atlas Lab, Inc.  
May 20, 2020  
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- Pages 304-305, Trail Gap Map O. The trail section to the east of Catalina Way and Wetlands Edge Road (where trail segment in red leads through the wetland area with endangered species) will need to be removed from the map. The trail will need to go out onto the road.
- Pages 304-305, Trail Gap Map O, Last sentence in Summary. Please remove the word “may”. The project does involve sensitive species habitat and is also on CDFW property.
- Page 309, 1<sup>st</sup> Paragraph. Please ensure CDFW acronym is updated; DFG is used multiple times in report.
- Pages 308-309, Environmental Studies Section. The California Wildlife Action Plan should be used as a reference plan.

As one of the largest landowners and potentially most impacted by this report, coordination with CDFW should be incorporated throughout the Grand Bayway process. The Draft Scoping Reports' next steps did not identify coordination with CDFW. We request additional coordination with CDFW, USFWS, and other landowners where potential or planned trails/access are not already on the ground.

Preserving and enhancing the current habitat to improve and expand with sea level rise should be top priority over implementation of new public access features. This mindset should be integrated through all concepts in the report.

Lastly, any trail segments overlaying Fagan Marsh Ecological Reserve should be removed from maps within the report. It is deemed an Ecological Reserve specifically for the protection and preservation of threatened and endangered species.

If you have any questions regarding these comments, please contact Mr. Larry Wyckoff, Senior Environmental Scientist (Supervisory), at (707) 944-5542 or [Larry.Wyckoff@wildlife.ca.gov](mailto:Larry.Wyckoff@wildlife.ca.gov); or Mr. Greg Martinelli, Wildlife and Lands Program Manager, at (707) 576-2849 or [Greg.Martinelli@wildlife.ca.gov](mailto:Greg.Martinelli@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
BE74D4C93C604EA...  
Gregg ERICKSON  
Regional Manager  
Bay Delta Region



May 1, 2020

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**District Manager**

Melissa Morton

Atlas Lab Inc.  
2523 J Street, Ste. 201  
Sacramento, CA 95816

**Attention:** Erik Prince, Principal

**Re: GRAND BAYWAY – SR37 PUBLIC ACCESS DRAFT SCOPING REPORT FOR LWG**

Dear Mr. Prince,

Vallejo Flood & Wastewater District (District) is located in Vallejo, California. The District’s boundary covers 28 square miles, providing wastewater and flood control services for approximately 116,000 people within the City of Vallejo and parts of Solano County. The District has been recognized for operational excellence at the local, state and national level.

The District would like to comment on the Grand Bayway – SR37 Public Access Draft Scoping Report, dated April 2020. The Report proposes that a portion of the Bay Trail be located on Tubbs Island along the levees bordering the San Pablo Bay and Sonoma Creek (page 23 of the pdf), which is private property owned by the District.

Tubbs Island is used by the District for operation of our Beneficial Biosolids Utilization Program which involves the stockpiling and application of nutrient rich biosolids generated during the wastewater process. Due to the nature of this activity, access to the site must be restricted per regulations. Allowing the public access to the Island would therefore jeopardize the District’s operations. Consequently, the District strongly opposes your proposal to designate any portion of this property as part of the Bay Trail and is not willing to grant any kind of public access easement across its property to facilitate such a designation.

Questions regarding this matter may be directed to Jennifer Harrington, Environmental Services Director at [jharrington@vallejowastewater.org](mailto:jharrington@vallejowastewater.org) or 707-652-7806 during regular business hours.

**VALLEJO FLOOD & WASTEWATER DISTRICT**

MELISSA A. MORTON  
District Manager

JH  
cc: Environmental Services  
San Pablo Bay National Wildlife Services

# GRAND BAYWAY



## SR 37 PUBLIC ACCESS SCOPING REPORT